

# COMING TO TERMS WITH INFORMATIONAL STRATIFICATION IN THE PEOPLE'S REPUBLIC OF CHINA

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## INTRODUCTION

Elusive as it is, the catchphrase “digital divide” has become a central component of the global lingua franca for discussions of the Internet’s social consequences and the public responses that they entail. In the People’s Republic of China, the phrase is translated literally into “digital gap” (*shuzi honggou*)<sup>1</sup> or “information discrepancy” (*xinxi chaju*).<sup>2</sup> Like elsewhere, the phrase has become increasingly prevalent among national leaders, journalists, policy analysts, and Information Technology (IT) entrepreneurs in China. Yet, is there anything missing from its transplanted terms that captures the peculiarities of information inequality in this country? Does the distinct nature of China’s “digital divide” suggest that a new conceptualization is in order? This author’s tentative answer to both questions, as will be laid out in this paper, is yes.

This paper shall first discuss how the catchphrase is being introduced in China. Then Part II will elaborate on the patterns of uneven access to information in China by providing a synthesis of recent documents, statistics, and research findings. This introduction will lead to the new conceptualization that connects the current inquiry with: classic social theory;<sup>3</sup> traditional media; equality research;<sup>4</sup> recent literature on informationalism;<sup>5</sup> and the communication infrastructure approach currently being developed by San-

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<sup>1</sup> Zhong Xiubin, *Digital Gap Entering the Horizon of High-Level Officials*, INTERNET WKLY., Feb. 27, 2001, available at <http://tech.sina.com.cn/r/m/55412.shtml>.

<sup>2</sup> E.g., Hu Angang & Zhou Shaojie, *China’s Informationalization Strategy: Reducing Information Discrepancy*, China Industrial Economy, Nov. 1, 2001, at 25-29.

<sup>3</sup> Among classic analyses, the most pertinent are the Marxian class theory and Weberian analyses of classes, status groups, and parties, which serve as the foundation of contemporary stratification studies. See generally PETER SAUNDERS, *SOCIAL CLASS AND STRATIFICATION* (London Routledge 1990).

<sup>4</sup> See generally EVERETT M. RODGERS, *DIFFUSION OF INNOVATIONS* (3d ed. 1983); CURRENT PERSPECTIVES IN MASS COMMUNICATION RESEARCH (F. Gerald Kline & Phillip J. Tichenor eds., 1972).

<sup>5</sup> See Manuel Castells, *Materials for an Exploratory Theory of the Network Society*, BRIT. J. SOC., January/March 2000, at 5. See generally MANUEL CASTELLS, *THE RISE OF NETWORK SOCIETY* (2d ed. 2000).

dra Ball-Rokeach and her colleagues.<sup>6</sup> The notion of *informational stratification*<sup>7</sup> provides a more fertile theoretical ground than what the “digital divide” concept is built upon. The stratificational, rather than divisional, mode of understanding is also conducive to fresh policy alternatives that have yet to be brought into sight. This concept will be illustrated through an example that fuses this paper’s practical and epistemological arguments, and shows unexpected challenges *and* opportunities in the communication environment of a needy rural community in the village of Dichangkeng in Zhejiang Province.

### I. TRANSLATING THE CATCHPHRASE

How is the “digital divide” problem interpreted and confronted among policymakers, analysts, and IT industry leaders in China? The answer to this question is probed in this section. In official discourse, the “digital divide” is often interpreted as the technological discrepancy between China and other developing countries on the one hand, and more advanced countries on the other. This interpretation was discussed by President Jiang Zemin in a speech at the Millennium Summit of the United Nations on September 6, 2000, in which he said:

The widening “digital divide” indicates that there exists a huge gap between the developed and the developing countries in terms of the level of science and technology. This will inevitably further widen the gap in wealth between the North and the South. Advanced science and technology, which embody man’s wisdom and creative spirit, should be used and applied globally to promote peace and development in the interests of all peoples.<sup>8</sup>

This call to enhance China’s national capacity in communication technology has been echoed on numerous occasions in the talks of high-profile officials<sup>9</sup> and in articles from China’s leading press outlets.<sup>10</sup> These articles have been instrumental in enhanc-

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<sup>6</sup> See generally Sandra Ball-Rokeach et al., *Storytelling Neighborhood: Paths to Belonging in Diverse Urban Environments*, 28 COMM. RES. 392 (2001).

<sup>7</sup> People’s Republic of China President Jiang Zemin, Statement at the Millennium Summit of the United Nations (Sept. 6, 2000), available at <http://www.un.org/millennium/webcast/statements/china.htm>.

<sup>8</sup> *Id.*

<sup>9</sup> See, e.g., Foreign Affairs Minister Tang Jiaxuan, Speech at APEC Ministerial Conference (Nov. 12, 2000); Lu Xinkui, Vice Minister of the Ministry of Information Industry (MII), Speech at the Second Globalization Forum (Jan. 12, 2001); Foreign Trade Minister Shi Guangshen & MII Minister Wu Jichuan, Speech at the APEC E-Commerce and Paperless Trade Seminar (February, 2001).

<sup>10</sup> See Zhu Lilan, *Create New Advantage, Seek New Breakthrough: On the Process of Accelerating*

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ing awareness of the international “digital divide” problem. As a result, leaders of the Chinese Communist Party (CCP) and China’s central government have further stressed high-tech development, especially Internet-related projects. For example, it was emphasized in the “Recommendations from CCP Party Center on the Tenth Five-Year Plan for National Economic and Social Development” that:

Informationalization is an important tendency in today’s global economy and social development. It is also a key link for enterprise upgrading, industrialization, and modernization in our country. We should prioritize the informationalization of the national economy and society, comply to the development trend of global information technology, meet the terms of market demands, and move forward with institutional innovations, trying to leap-frog in our information industry.<sup>11</sup>

Narrowing the international “digital divide,” however, does not necessarily speak to the reduction of information inequalities *within* China. Comparatively speaking, there is less official rhetoric linking the “digital divide” directly with questions of internal inequity. However, there is still a growing concern among state policymakers, most remarkably demonstrated under the auspices of the “Western-Region Development Project” (*xibu dakaiifa*) proposed by the CCP in fall 1999 and in the central government’s adaptation of the Project in January 2000, which entails plans to reduce economic disparities between China’s rich coastal areas in the east and its poor inland western regions.<sup>12</sup> Being one of the most important policy priorities of the CCP and the state, the Western-Regional Development (WRD) Project was initiated *before* officials adopted the phrase “digital divide.” Although informational inequality is among the problems to be tackled, the Project as a whole was designated to be a multi-faceted, poverty alleviation effort in line with the egalitarian tradition of the official socialistic ideology.<sup>13</sup> This is

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*the New High-tech Industrialization in our Country*, PEOPLE’S DAILY, Nov. 16, 2000, at 9. Zhu Lilan is China’s Minister of Science and Technology. An August 24, 2001 search for news articles containing the keywords “digital divide” yields fifty-four results from *China Daily*, the nation’s most influential English language newspaper.

<sup>11</sup> Recommendations from CCP Party Center on the Tenth Five Year Plan for National Economic and Social Development, *available at* <http://www.china.org.cn/ch-15/plan2.htm> (last visited Oct. 22, 2001).

<sup>12</sup> See *Premier’s Report on Outline of New Five-Year Plan at the Fourth Session of the Ninth National People’s Congress*, CHINA DAILY, Mar. 5, 2001, at 1; see also XIAOMIN PANG & BECKY LOO, CHINA’S REGIONAL DISPARITIES 106 (Victor Sit & Da-dao Lu eds., 2001).

<sup>13</sup> In this case, the recognition of the “digital divide” adds to policymakers’ rhetorical arsenal for equality deliberation, although whether there are similar notions of “universal

a unique symbolic resource for inequality concerns to be recognized and prioritized in the People's Republic of China.

There is also a growing consensus among scholars about the gravity of China's domestic "digital divide." Most notable is Hu Angang, the Director of the Center for China Study at the Chinese Academy of Sciences at Tsinghua University, who proposed the idea of "one China, four worlds" in a recent book.<sup>14</sup> Hu argues that the income dispersion among different regions within the country is comparable to the degree of uneven distribution among developed and developing nations around the globe, and that knowledge discrepancy is "the most confining bottleneck" for economic growth in western regions of China.<sup>15</sup> This paper will revisit the analyses of Hu and other domestic researchers in the next section since their findings not only reflect inter-regional disparities in a most concrete way, both statistically and in terms of their implications to policy formation processes, but they also reverberate closely with related findings from outside mainland China.

Policy analyses, together with calls from political leaders, have created a social atmosphere conducive to "digital divide" discussions in China. In November 2000, merely three months after President Jiang's United Nations speech, a conference entitled "Crossing the 'Digital Divide'" was held in Beijing, where state officials, think tanks, and e-commerce entrepreneurs exchanged ideas about reducing access inequalities between China and advanced nations, as well as within China.<sup>16</sup> In March 2001, another conference, this one entitled "Digital Economy and Ecology," included fully-loaded themes such as "understanding digital economy, improving digital ecology, crossing 'digital divide,' resolving digital

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service" and "public broadcasting" in Chinese socialism and how comparable these notions are to those in American policy discourse are analyses that are overdue.

<sup>14</sup> HU ANGANG, *REGIONS AND DEVELOPMENT: NEW STRATEGIES FOR WESTERN-REGION DEVELOPMENT* (China Planning Publications 2001).

<sup>15</sup> *Id.* at 2. Hu has also co-authored several influential publications dealing with China's inequality problem. See, e.g., WANG SHAOGUANG & HU ANGANG, *THE POLITICAL ECONOMY OF UNEVEN DEVELOPMENT: THE CASE OF CHINA* (M.E. Sharp 1999); Hu Angang & Xiong Yizhi, *An Analysis of Regional Disparity in China's Knowledge Development*, MGMT. WORLD, at 5; Hu, *supra* note 2, at 25. His concern regarding the widening of the regional "digital divide" was also reflected in the "Year 2000 Science Development Report" by the Chinese Academy of Sciences. The report emphasized fostering additional investment in education, telecommunication, and science and technology development, as the key for poor regions to catch up in the knowledge-based economy. See Hu Angang, *Year 2000 Science Development Report*, CHINA ECON. TIMES, Mar. 3, 2000, available at <http://www.cet.com.cn/20000303/yaowen/200003033.htm>.

<sup>16</sup> See Haiguang Xin, *Conference Began in Beijing on Digital Divide*, YESKY NEWS, Nov. 4, 2000, available at <http://www1.yesky.com/33554432/36700160/130065.htm>; Lusha Liu, *Macro Conference Began on 'Crossing the Digital Divide'*, GUANGMING DAILY, Nov. 10, 2000, at 8.

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conflict, and seizing digital opportunities.”<sup>17</sup> Among the attendants at the second event were representatives from MII and other relevant ministries, domestic firms including Legend and Sina, as well as global players such as Microsoft and Hewlett-Packard.<sup>18</sup> The organizations jointly announced the “Beijing Manifesto on Crossing the ‘Digital Divide,’ ”<sup>19</sup> which is most indicative of how the issue is interpreted among the nation’s IT industry leaders by stating:

China is in the historical period of advancing industrialization. We must seize the opportunities while facing the waves of informationalization. We should use informationalization to promote industrialization, make the most of the advantage as latecomers, in order to achieve the dual impetuses to economic growth via industrialization and informationalization . . . . We regard the “digital divide” as a problem, not an academic theory or a concept to be overlooked. It is a problem emerging from the global digitalization process, when new forms of collective differentiation and rich-poor distinction come into being due to different levels of utilizing information network technologies among countries, regions, industries, enterprises, and groups.<sup>20</sup>

A “Digital Alliance” was also founded to carry the mission of crossing the “digital divide” into actual practice:

Crossing the “digital divide” is a response with full support to the Tenth Five Year Plan (of the Chinese government) . . . . We will continue inviting enterprises with foresight and sagacity to join the Digital Alliance. The Alliance will integrate resources from all parties involved. It will provide knowledge and facilities for companies going online, technical supports for community technology centers, and information network for high-tech occupational needs, including consultation as well as applied solutions.<sup>21</sup>

The plan is to host a “large-scale public welfare activity” spreading “from Beijing to Shanghai, Shenzhen, Chengdu, Wuhan, Xi’an, and other places with support from top officials, guidance from global concepts, active participation of multiple enterprises, and opinion influence of the media.”<sup>22</sup> Unsurpris-

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<sup>17</sup> *Macro Conference Held on Digital Economy and Ecology*, NETEASE NEWS, Mar. 23, 2001, at [http://it.163.com/tm/010323/010323\\_17357.html](http://it.163.com/tm/010323/010323_17357.html).

<sup>18</sup> *See id.*

<sup>19</sup> *Beijing Manifesto on Crossing the ‘Digital Divide’*, CHINABYTE NEWS, Mar. 26, 2001, at <http://www.yesky.com/20010326/166851.shtml>.

<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

<sup>22</sup> *Id.*

ingly, commercial sponsorship adds a conspicuous twist of corporate interests behind the high-flown rhetoric of this Manifesto. The Manifesto's scope of implementation significantly overlaps with the major metropolitan centers that already claim a disproportionate share of China's Internet resources,<sup>23</sup> however, concrete steps to help low-income residents in small towns and the vast countryside remain to be seen.<sup>24</sup> Despite these drawbacks, efforts to reduce China's information inequality have already taken off, at least as a most salient issue in IT policy discussions on the national level.

## II. PATTERNS OF DISPARITIES

The question then is: what are the actual patterns of uneven informational distribution in China and how have they evolved in recent years? According to the official Survey Reports on Internet Development in China from the China Internet Network Information Center (CNNIC), the country had 26.5 million Internet users by July 1, 2001,<sup>25</sup> indicating an extraordinary growth by the factor of twenty since three years ago. In the meantime, the number of online computers has increased eighteen times, domain names thirteen times, and the bandwidth for international access thirty-eight times.<sup>26</sup> While the new medium develops rapidly, significant demographic differences persist between an average user and a regular Chinese citizen.<sup>27</sup> As in most other parts of the world, Internet access remains a privilege for those who are richer, younger, better educated, and, more often than not, male.<sup>28</sup> There are vast differences, especially in terms of income and education, between the demographic profile of Internet users and that of the national population.<sup>29</sup> A user earns approximately twice as much as an aver-

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<sup>23</sup> See *infra* Tables 1–4.

<sup>24</sup> “Concrete steps” refers to projects that are already under way and producing assessable outcomes, such as India's simputer, Bangladesh's Village Internet Project, and the Linkos access center in Costa Rica. There are other noteworthy projects with important implications for universal information provision in China such as the “Village to Village Telephone (*cuncun tong dianhua*) Project” and “Village to Village Radio and Television (*cuncun tong guangbo dianshi*) Project.” If there is an initiative of similar scale for the promotion of Internet access in disadvantaged regions and groups, it can be considered one of the concrete steps.

<sup>25</sup> See China Internet Network Information Center, *Semi-Annual Survey Report on the Development of China's Internet* (July 2001), available at <http://cnnic.net.cn/develst/e-about.shtml> [hereinafter CNNIC].

<sup>26</sup> See *id.*

<sup>27</sup> See *infra* Table 1.

<sup>28</sup> See CNNIC, *supra* note 25.

<sup>29</sup> See *id.*

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age Chinese worker,<sup>30</sup> and the likelihood for a user to obtain a college education is eighteen times higher than most Chinese.<sup>31</sup> However, the demographic discrepancy has indeed narrowed since early 2000. Internet users and ordinary nationals are gradually becoming more similar. The most obvious change occurred in gender composition. While the percentage of male users peaked in July 1998 to 93% of all users, it has been dropping constantly.<sup>32</sup> Thus, for example, in July of 2001, only 61% of users were male.<sup>33</sup> Similar trends can be observed for income, education, and age, though to different degrees.<sup>34</sup>

TABLE 1: DEMOGRAPHIC PROFILE OF INTERNET USERS IN CHINA

	Average monthly income (US\$)	Percentage with college education	Percentage no older than thirty	Percentage male
October 1997	116	—*	71	88
July 1998	177	—*	77	93
January 1999	152	88	79	86
July 1999	183	86	78	85
January 2000	221	84	78	79
July 2000	211	85	78	75
January 2001	176	70	75	70
July 2001	146	63	68	61
Figures for all Chinese nationals (2000)	84	3.6	—*	51

Sources: See generally CNNIC, *supra* note 25; P.R.C. NAT'L BUREAU OF STAT., 19 CHINA STAT. YEARBOOK (2000).

\* Data not available

The general demographic data serves as an initial signal for information disparities in China. Yet where are these privileged users located? In addition to sheer Internet usage, what are other indicia of the uneven distribution among regions and social groups, in terms of both available content and alternate channels of communication? These questions present much more than a technological problem. They occur instead in a social, historical

<sup>30</sup> See *infra* Table 1.

<sup>31</sup> See *id.*

<sup>32</sup> See *id.*

<sup>33</sup> See *id.* The decreases in demographic disparities should be understood, first of all, as a consequence from significant price cuts in Internet access fees. Since 1999, average dial-up cost per hour has been lowered from approximately US \$2.00 to US \$0.10 due to heightening market competition. It is worthwhile to note that the "Crossing 'Digital Divide'" conference and the "Digital Alliance" conference *per se* have contributed little to the reduction of demographic inequity, which was already occurring before the conferences took place in November 2000 and March 2001, respectively. See Haiguang, *supra* note 16.

<sup>34</sup> See *supra* Table 1.

environment where the “digital divide” is not an isolated phenomenon, but the tip of an iceberg whose main part includes non-digital media and older forms of informational imbalance in a social “ecology”<sup>35</sup> of inequalities that are closely connected with the uneven distribution of other scarce resources for economic, cultural, or political activities.

In a book on telecommunication and development in China, Paul Lee summarizes that the country’s uneven telecommunication development follows two lines of demarcation.<sup>36</sup> Lee identifies the “core-peripheral disparity” between coastal and inland regions on the one hand, and “rural-urban disparity” on the other.<sup>37</sup> Although Internet data was not available when Lee proposed these two distinctions,<sup>38</sup> analyses of more recent technology diffusion patterns by Hu, his colleagues, and other researchers confirm these patterns.<sup>39</sup> By “core-peripheral disparity” Lee understands that there is an economic core in China’s coastal area whose telecommunication development far outstrips inland regions, which are only marginally important to the national market as a whole. In *An Analysis of Regional Disparity in China’s Knowledge Development*,<sup>40</sup> Hu also characterizes a similar pattern by proposing the notion of “one China, four worlds.”<sup>41</sup> In line with the categorization frameworks of Lee and Hu, four categories of core-peripheral distinction are employed in this paper, namely: the core, coastal,

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<sup>35</sup> “Ecology” means much more than a mechanically consolidated social structure. It is a structure of political, cultural, or commercial interactions that are also at once informational. It includes not only structures of power and resource allocation that reflect and reify the hierarchical status quo, but also spheres of agency for social change toward pluralism and horizontal equality.

<sup>36</sup> See generally PAUL LEE, TELECOMMUNICATION AND DEVELOPMENT IN CHINA (Hampton Press Comm. Series 1997).

<sup>37</sup> See *id.* at 114-19.

<sup>38</sup> See *id.* (discussing mostly telecommunications services such as telephony and paging).

<sup>39</sup> See generally Hu, *supra* note 14; Lin Rong, Seizing the Opportunity to Cross “Digital Divide” Address at the Asia Society (Mar. 13, 2000), available at <http://asiasociety.org/speeches/rong.html>; KHORSHED CHOWDHURY ET AL., CONTEMPORARY DEVELOPMENTS AND ISSUES IN CHINA’S ECONOMIC TRANSITION (Charles Harvie ed., 2000); YEHUA DENNIS WEI, REGIONAL DEVELOPMENT IN CHINA: STATES, GLOBALIZATION, AND INEQUALITY (2000).

<sup>40</sup> See Hu, *supra* note 15, at 5.

<sup>41</sup> *Id.* at 4. Hu maintains that China’s high-income regions like Beijing, Shanghai, and certain cities in the Guangdong province have significantly surpassed the average GDP level of higher-middle income countries (US \$8,320), constituting the nation’s “first world,” whose economy is comparable to that of developed countries. China’s “second world” includes other coastal regions like Liaoning, Zhejiang, and Fujian, where GDP per capita is higher than the US \$3,960 level of lower-middle income countries. The “third world” in China locates in the central regions, whose average GDP is significantly less than lower-middle income nations. These GDP levels rank in approximately the 100th to 139th positions among all countries. Finally, there is China’s “fourth world” in the western region, where rural and minority population concentrates, whose GDP ranking falls to the bottom of all nations worldwide. See *id.* at 28.

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central, and western regions. Notably, while Hu excludes China's "first world" (Beijing, Shanghai, and rich cities in Guangdong) from its "second world,"<sup>42</sup> this paper's classification of the coastal area does not leave out the economic core of Beijing, Shanghai, and Guangdong. This classification is to facilitate inter-regional comparisons among the coastal, central, and western regions that comprise the totality of the nation, which is also an established way in which official statistics are organized. There are twelve provincial administrative units along the coast, nine in the central region, and ten in the west.<sup>43</sup>

TABLE 2: DISTRIBUTION OF BASIC RESOURCES IN CORE, COASTAL, CENTRAL, AND WESTERN REGIONS

	Core*	Coastal	Central	Western
Share of national resources (%)				
Land	2	21	19	60
Population	8	40	35	23
GDP	17	59	27	14
GDP per capita (US\$)	1768	1216	651	508

Source: See generally P.R.C. NAT'L BUREAU OF STAT., 19 CHINA STAT. YEARBOOK (2000).

\*Core region: Beijing, Shanghai, and Guangdong Province

The distribution of basic resources in the core, coastal, central, and western regions is summarized in Table 2. Table 2 shows that the country's population and social productivity are skewed toward the core and coastal areas, whereas the central and western regions are populated much more sparsely and by people with less economic resources.<sup>44</sup> This phenomenon has profound implications for providing communication services. For instance, in the rich, coastal city of Shenzhen in Guangdong Province, the average number of telephone lines per 100 households exceeded 130 in 2000,<sup>45</sup> while national teledensity was approximately 20%.<sup>46</sup> In Guizhou, an inland province of southwestern China, national

<sup>42</sup> See *id.* at 23.

<sup>43</sup> These include provinces and municipalities directly under the central government, and minority nationality autonomous regions.

<sup>44</sup> See *supra* Table 2.

<sup>45</sup> Zhiqiang Zhen, *Shenzhen: The City with the Highest Telephone Penetration Rate*, SHENZHEN SPECIAL ECONOMIC ZONE DAILY, Aug. 24, 2000, available at <http://www.7cworld.com/tqb/200008/0824/newsfile/n1-4.htm> (last visited Oct. 30, 2001).

<sup>46</sup> See Jichuan Wu, *Speech on the News Conference Held by the Information Office of the State Council*, XINHUA GEN. NEWS SERVICE, Sept. 25, 2000, available at <http://tech.sina.com.cn/it/telecom/2000-09-26/37728.shtml> (noting that by September 2000 national teledensity had reached 17.7%).

teledensity was merely 6.5%.<sup>47</sup> Additionally, Shenzhen has finished constructing several “broadband villages” in its suburbs where computer penetration surpasses 80% and residents are able to afford the monthly access charge of US \$24.00.<sup>48</sup> In contrast, most of the eighteen provincial branches of China Telecom with budget deficits are located in the west,<sup>49</sup> and all except one province in the western region failed to implement the “Village to Village Telephone (*cuncun tong dianhua*) Project” by the end of 2000.

October	July	January	July	January	July	January
1997	1998	1999	1999	2000	2000	2001

Given the disparity of telephone access, which is still the primary mode of Internet access in China,<sup>50</sup> it is not surprising to find that most users are concentrated in the economic core of Beijing, Shanghai, and Guangdong, as well as the coastal region at large.<sup>51</sup> Although the core region has only 2% of the nation’s land and 8% of total population, it accommodated more than 31% of China’s Internet users as of January 2001.<sup>52</sup> This percentage is close to the sum amount of the central and western regions whose shares of Internet users are 21.7% and 14.3%, respectively. Yet, the disproportionate concentration of Internet users in the core region has actually declined since October 1997, when 52.3% of users were in Beijing, Shanghai, and Guangdong.<sup>53</sup> During the same period, the share of users in the coastal region decreased from 77.3% to 64% and there was a relative increase of user proportion in the central region, from 16.5% to 21.7%, and in the western region, from 6.2% to 14.3%.<sup>54</sup> These numbers demonstrate a palpable tendency towards more equality despite the overall inter-regional disparity.

The decreasing discrepancy in terms of user distribution, however, is only one aspect. From a producer/distributor viewpoint, Internet domain names continue to be highly concentrated.<sup>55</sup> The coastal region persistently hosts 85% of the nation’s domain

<sup>47</sup> See Yi Zhang, *Three Difficulties to be Overcome in the Telecommunications Industry*, XINHUA NEWS AGENCY, available at <http://211.100.18.189/hgzc/xx154.htm> (Oct. 30, 2001).

<sup>48</sup> See China Cable Broadcasting Information Network, February 21, 2001, at <http://www.jlink.com.cn/jx/new007.htm>.

<sup>49</sup> See Yi, *supra* note 47.

<sup>50</sup> See CNNIC, *supra* note 25. According to the CNNIC, 68% of users access the Internet via dial-up telephone networks. *See id.*

<sup>51</sup> *See infra* Figure 1.

<sup>52</sup> *See id.*

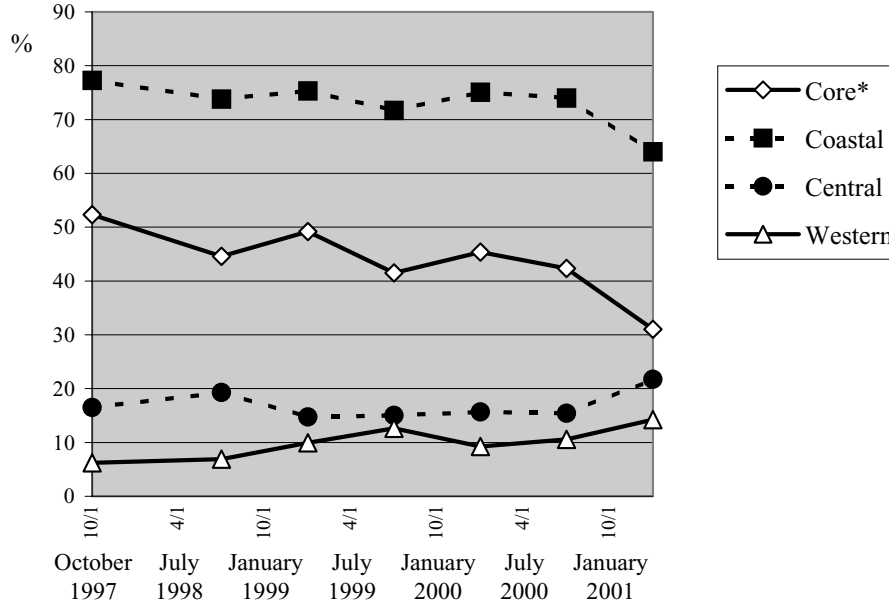
<sup>53</sup> *See id.*

<sup>54</sup> *See id.*

<sup>55</sup> *See supra* Figure 2.

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FIGURE 1: PERCENTAGES OF INTERNET USERS IN CORE, COASTAL, CENTRAL AND WESTERN REGIONS



names, with the economic core alone constantly possessing approximately 60% of the total resource.<sup>56</sup> Meanwhile, the shares for central and western regions remain below 10%.<sup>57</sup> Not only is there a lack of trend towards inter-regional equality, but the core-peripheral difference in domain-name distribution is also much higher than that in user distribution. While the standard deviation for different proportions of Internet users in coastal, central, and western areas was 38.2% in October 1997 and 26.9% in January 2001, the figure for domain names remain at the high level of 44.5% throughout those years surveyed.<sup>58</sup> Uneven Internet development should also be conceived of within the larger picture of unequal allocation of communication resources in general, as illustrated in Table 3, which includes indicators for Internet, telephone, mass media, as well as basic communication venues that serve educational and entertainment purposes at the grassroots level.<sup>59</sup>

By the end of 1999, there were 2,905 cultural centers<sup>60</sup> and

<sup>56</sup> See *id.*

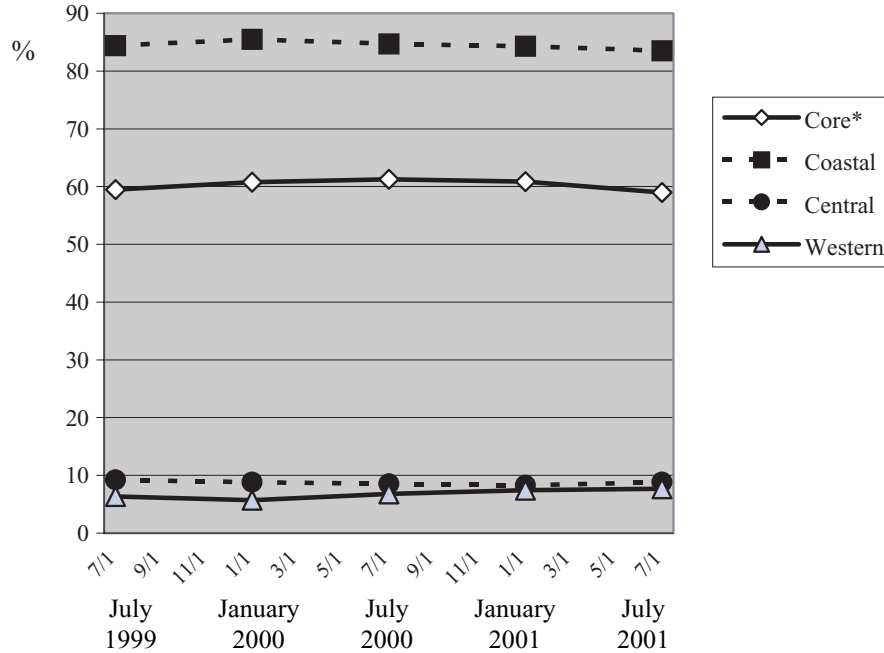
<sup>57</sup> See *id.*

<sup>58</sup> See *id.*

<sup>59</sup> See *infra* Table 3.

<sup>60</sup> Cultural centers (*wenhuaquan*) are a major form of state-sponsored community centers where local residents engage in various cultural activities such as painting and local

FIGURE 2: PERCENTAGES OF DOMAIN NAMES IN CORE, COASTAL, CENTRAL & WESTERN REGIONS



2,767 public libraries nationwide.<sup>61</sup> Since these basic communication venues are maintained by low-level administrative units, such as urban districts or rural townships, their allocation reflects the dispersion of population among the regions; the coastal-central-western ratio is approximately 4:3:3.<sup>62</sup> The degree of inter-regional balance becomes more questionable when mass media outlets are concerned. Significantly more products of the printing press are circulated in the coastal region, especially at the economic core, probably because of higher literacy rates in these areas.<sup>63</sup> Meanwhile, in 1999, China's 502 radio stations and 466 television stations were distributed among the coastal, central and western regions following the proportions of 5:4:1 and 4:4:2, respectively.<sup>64</sup>

opera performance. They may also host evening schools. P.R.C. NAT'L BUREAU OF STAT., 19 CHINA STAT. YEARBOOK (2000), available at <http://www.stats.gov.cn/sjjw/ndsj/zgnj/mulu.html> [hereinafter CHINA STAT. YEARBOOK].

<sup>61</sup> See *id.*

<sup>62</sup> See *infra* Table 3.

<sup>63</sup> See CHINA STAT. YEARBOOK, *supra* note 60. The percentage of illiterate adults in the core region is 9%; 14% in the coastal region; 14% in the central region; 20% in the western region. See *id.*

<sup>64</sup> See CNNIC, *supra* note 25.

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TABLE 3: SHARE OF NATIONAL COMMUNICATION RESOURCES IN CORE, COASTAL, CENTRAL AND WESTERN REGIONS

	Core*	Coastal	Central	Western
<i>Basic Communication Venues</i>				
Cultural centers	6%	34%	37%	29%
Public libraries	6%	40%	33%	27%
<i>Mass Media</i>				
Newspaper and magazine Circulation	11%	45%	35%	20%
Radio stations	20%	46%	41%	13%
Television stations	15%	40%	38%	22%
<i>Telephone</i>				
Fixed-line telephone subscribers	25%	63%	26%	11%
Cellular phone subscribers	28%	60%	23%	16%
<i>Internet</i>				
Internet users	31%	83%	10%	7%
Internet domain names	60%	84%	9%	8%

Sources: See generally CNNIC, *supra* note 25; P.R.C. NAT'L BUREAU OF STAT., 19 CHINA STAT. YEARBOOK (2000).

\*Core region: Beijing, Shanghai, and Guangdong Province.

Compared to the allocation of public venues, the degree of concentration is much higher for broadcasting media, caused in part by higher operational costs and greater reliance on the purchasing power of the audiences.<sup>65</sup> Such a scheme of inequality, on the other hand, is less serious in comparison to telephone subscriber distribution, which is at proportions of 6:3:1, with the economic core possessing 25% of fixed-line subscribers and 28% of cellular phone subscribers.<sup>66</sup> Finally, when the Internet is brought in, the inter-regional disparity indicators for both user and domain-name distribution climbs up to the neighborhood of 8:1:1.<sup>67</sup> The core region alone seizes 31% of users and 60% of all Internet domain names in the country.<sup>68</sup>

The most interesting pattern displayed in Table 3 is the linear relationship between inter-regional inequality and the nature of the communication resources. From the low-tech public venues to the print and broadcasting media, and from fixed-line and cellular

<sup>65</sup> Advertising revenue has become the most important financial resource for China's broadcasting media during the market-oriented reform era since the late 1970s. While party propaganda remains a basic requirement for licensing, profitability as an overarching goal characterizes all mass media including the printing press as well as the telecommunications and Internet sectors. See Joseph Man Chan & Jack Linchuan Qiu, *Media Liberalisation in the Absence of Democratisation in China*, in MONROE PRICE, BEATA ROZUMILOWICZ, & STEFAAN VERHULST, *DEMOCRATISING THE MEDIA, DEMOCRATISING THE STATE* 27-46 (Routledge 2001).

<sup>66</sup> See *supra* Table 3.

<sup>67</sup> See *id.*

<sup>68</sup> See *id.*

telephony to the Internet, the portion for the economic core rises sharply from 6% to 60% and the coastal region as a whole increases from 34% to 84%.<sup>69</sup> Concomitantly, the share for the central region falls from 37% to 9%, while the proportion for the western region declines from 29% to 7%.<sup>70</sup> It is still premature to surmise the causality between the media's nature and the degree of inter-regional imbalance, which may involve several other factors, such as geography, economic status, and the social and historical legacies of each sector in the regions. But the observable media-region association is clearly reverberant with the core-peripheral distinction framework of both Lee and Hu as well as this paper's earlier thought that the so-called "digital divide" is merely the tip of an iceberg, under which inequalities in connections to all channels of communication should be revealed.

In addition to core-periphery disparity, there is also a tremendous information gap between urban and rural areas. According to the *China Statistical Yearbook*, there were 870 million rural residents in China by the end of 1999, accounting for 69% of the country's total population of 1.26 billion people.<sup>71</sup> However, the combined output value of agriculture, forestry, husbandry and fishery was only 29.9% of the national GDP.<sup>72</sup> Similarly, while an average city dweller had an overall consumption capacity of US \$813.00 in 1999, an ordinary resident in the countryside was only able to put up with US \$231.00. These statistics show an urban/rural disparity of 3.5:1, respectively. This is 6% higher than the inequality level of the previous year and 21% higher than that of 1978 when China started its marketization reform.<sup>73</sup> Of the limited disposable income of a rural resident, only the equivalent of US \$8.30 was used for transportation and telecommunication purposes in 1999, whereas members of urban communities spent an average of US \$37.40.<sup>74</sup> With this knowledge of the economic discrepancy between urban and rural areas, it is unsurprising to find that, in 2000, only 36.6% of China's fix-line telephone subscribers were rural residents.<sup>75</sup> Additionally, only 7.6% of the national telecommunication consumption was from the countryside and 20% of all administrative villages, *i.e.* 200,000 villages comprising 150 million

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<sup>69</sup> *See id.*

<sup>70</sup> *See id.*

<sup>71</sup> *See* CHINA STAT. YEARBOOK, *supra* note 60.

<sup>72</sup> *See id.*

<sup>73</sup> *See id.*

<sup>74</sup> *See id.*

<sup>75</sup> *See id.*

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people still did not have access to a telephone.<sup>76</sup>

The semi-annual CNNIC reports did not include information about rural residents until July 1999.<sup>77</sup> Since then, the proportion of farmers among all Internet users increased from 0.2% in July 1999 to 0.3% in January 2000.<sup>78</sup> In July 2000, CNNIC changed the category from “farmers” to “agriculture, forestry, husbandry and fishery occupations,” which accounted for 0.62% of all users in July 2000, 0.76% in January 2001, and 1.2% in July 2001.<sup>79</sup> Given that 69% of China’s population lives in the countryside, the figure for July 2001 means that the likelihood for a normal rural resident to go online is roughly 183 times smaller than an urban dweller.<sup>80</sup>

TABLE 4: UNEVEN DISTRIBUTIONS OF COMMUNICATION GADGETS AMONG URBAN AND RURAL HOUSEHOLDS IN 1995, 1997, AND 1999 (AVERAGE NUMBER OF GADGETS PER 100 HOUSEHOLDS)\*

	<i>Urban residents</i>		<i>Urban disparity**</i>	Rural residents	<i>Urban/rural disparity***</i>
	Lowest income (first decile)	Highest income (tenth decile)			
1995					
Radio cassette recorders	60	79	1.3%	28	2.6%
Color televisions	72	102	1.4%	17	5.3%
Cameras	17	45	2.7%	1.4	21.5%
1997					
Radio cassette recorders	47	61	1.3%	32	1.8%
Color televisions	84	116	1.4%	27	3.7%
Cameras	16	51	3.2%	2.1	16.3%
Cellular phones	.34	3.9	11.5%	—	—
1999					
Radio cassette recorders	49	62	1.3%	32	1.8%
Color televisions	93	130	1.4%	38	2.9%
Cameras	20	57	2.9%	2.7	14.2%
Cellular phones	1.5	17	11.3%	—	—

Source: See generally P.R.C. NAT’L BUREAU OF STAT., 19 CHINA STAT. YEARBOOK (2000).

\*Cellular phone data was not available for rural residents or for urban residents in 1995.

\*\*Urban disparity: The average gadgetry number for highest income residents was divided by that for lowest income residents.

\*\*\*Urban/rural disparity: The average gadgetry number for urban residents was divided by that for rural residents.

While comparable data about users and media outlets in ur-

<sup>76</sup> See Yi, *supra* note 47.

<sup>77</sup> See CNNIC, *supra* note 25.

<sup>78</sup> See *id.*

<sup>79</sup> See *id.*

<sup>80</sup> See *id.*

ban and rural areas are difficult to find, the *China Statistical Yearbook* does provide certain household-based comparisons in this regard.<sup>81</sup> The general pattern is that urban/rural disparity far exceeds inequalities among urban residents. There is greater disparity when the gadget requires higher media literacy (*e.g.* cameras) and/or greater financial investment (*e.g.* cellular phones). Following the similar trend of slight increases in rural Internet users as shown in the CNNIC reports, the urban/rural gap in communication gadgetry ownership has also been narrowing from 1995 to 1999 as demonstrated by the disparity indicator regarding color television sets.<sup>82</sup> It is indispensable to note that gadgetry ownership is a very crude indicator of a person's connection to the larger communication environment, which is only acceptable due to the lack of alternatives to official statistics.<sup>83</sup>

Hence new data needs to be collected to enrich our understanding of China's information inequalities, which remains sketchy despite the previous synthetic introduction. This new data should include more specific items for computer ownership, Internet access methods, time online, and people's attachment to other channels of communication, as well as more in-depth measurements such as the Internet Connectedness Index.<sup>84</sup> The Internet Connectedness Index also takes into account the historical dimension of Internet connection, the goals people pursue, and the centrality of the new medium in people's everyday life.<sup>85</sup> In addition, more systematic examination for the urban/rural allocation of national communication resources (public venues, mass media, etc.) is needed to map out the different opportunity structures that both facilitate and constrain individuals' access to information.

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<sup>81</sup> See *supra* Table 4.

<sup>82</sup> See *id.*

<sup>83</sup> The validity of official statistics in China have been questioned in various analyses, which lays further emphasis on the need for independent empirical studies in the country. See, *e.g.*, REN RUOEN, CHINA'S ECONOMIC PERFORMANCE IN AN INTERNATIONAL PERSPECTIVE (Brookings Institution 1997); Azizur R. Khan & Carl Riskin, *Income and Inequality in China: Composition, Distribution and Growth of Household Income, 1988 to 1995*, in ROSS GARNAUT & YIPING HUANG, GROWTH WITHOUT MIRACLES 378 (Oxford University Press 2001); CNNIC, *supra* note 25.

<sup>84</sup> See Joo-Young Jung et al., *Internet Connectedness and Inequality: Beyond the "Divide,"* 28 COMM. RES. 507, 507 (2001) (defining the Internet Connectedness Index as "a measure for monitoring long-term inequalities in the quality of Internet Connections among users, especially in terms of whether Internet connections will enhance the chances of people's upward mobility").

<sup>85</sup> See *id.* at 508.

### III. A TENTATIVE DEFINITION

The previous section introduced three general patterns of informational disparities in China:<sup>86</sup> (1) the discrepancy between the coastal economic core and western inland regions at the market “periphery,” (2) the urban-rural split, and (3) the tendency towards more severe inequalities in terms of both core-peripheral and urban-rural dimensions when more advanced communication technologies are involved, which require more commitments (training, financial investment, system upgrading, etc) on the part of individual users as well as communications service providers. In the above discussion, the term “digital divide” was deliberately avoided to take into account several non-digital forms of communication such as the public library, traditional mass media, and the conventional telephone, which are of no less importance than the digital media *per se* in bridging the gap between the information rich and the information poor. The patterns of disparities are also much more complicated than a single divide or the aggregation of several dualistic categories. Instead, there are spectrums of differentiation along multiple dimensions in the allocation of various kinds of communication resources. It is the initial recognition of the limited capacity of the “digital divide” notion within the Chinese context that has prompted a consideration of a better analytical concept, *i.e.*, “informational stratification.”

The concept of informational stratification embodies several epistemological principles underlying the previous introduction that need to be explicitly addressed. First, the ultimate inequality concern pertains to the distribution of *information* rather than any specific technology—the Internet included. Although several of the disparities under examination are in of themselves patterns of technological diffusion, they are only relevant as conveyors of information and subsequently magnifiers/alleviators of informational inequality. Second, there are many layers of unevenness among geographical regions, media types, and social groups, which the “digital divide” notion, by suggesting an oversimplified

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<sup>86</sup> These are indeed general patterns with exceptions. On the one hand, information disparity within cities is not to be overlooked, particularly for the new urban proletariat including those who were laid off during recent economic reforms. See GREG O’LEARY, *ADJUSTING TO CAPITALISM: CHINESE WORKERS AND THE STATE* 48-74 (M.E. Sharpe 1998). Meanwhile, although urban areas normally have access to richer information with more diversity, certain rural regions with less stringent state control may also enjoy varieties of content (especially those formally banned) that are usually unavailable to ordinary city dwellers. For example, several years after China’s ban of private satellite receptors, which was very effective in urban areas, the rural village of Henan in central China had a satellite dish in almost every household.

dichotomy between information “haves” and “have-nots,” is unable to capture. It is, therefore, necessary to employ conceptions of social stratification, whose roots can be traced back to the dawn of modern social sciences.<sup>87</sup> This will offer a more nuanced picture for the distribution of inequalities throughout the society.

Stratification research studies both the hierarchical dimension of society, *i.e.* the social “strata” as in vertical social mobility studies, and “lateral mobility” as in geographical movement between areas or occupations. The previous introduction has been mostly formulated along the vertical stratificational lines, whereas divergent modes of information access and utilization among various social groups (such as those of different genders, religious beliefs and occupations) deserve further research under the Chinese circumstances. It is worthwhile to note that unequal access to information controlled through administrative measures is a central legacy of the Chinese communist communication system that remains powerful despite the adoption of market economy and new technology,<sup>88</sup> thus adding an unusual caveat to current concerns for informational equality in the country.

Another important dimension is the concept’s affiliation with “informationalism,” a development paradigm defined by Manuel Castells as the socially constructed “recognitions” of information and knowledge. This is the central driving force for economy and society, which sets the tones of major discussions in the policymaking and strategizing processes of global competition and national high-tech development.<sup>89</sup> Such a vision is evident in the speeches of Chinese leaders on both the “digital divide” and the aforementioned “Beijing Manifesto.” It is not only a most dominant discourse in China and elsewhere, but should also be subject to critical examination in a larger socio-historical context since “[t]he rise of informationalism is inseparable from a new social structure.”<sup>90</sup> The notion that informationalism should be a target of critical study is also parallel to critiques on general media moderni-

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<sup>87</sup> See SAUNDERS, *supra* note 3, at 2; see also ROBERT ERIKSON & JOHN GOLDTHORPE, *THE CONSTANT FLUX* (Clarendon Press 1992); DANIEL BERTAUX, *PATHWAYS TO SOCIAL CLASS* (Oxford University Press 1997).

<sup>88</sup> See CHIN-CHUAN LEE, *CHINA’S MEDIA, MEDIA’S CHINA* 75-88 (Westview Press 1994). See generally Joseph Chan, *The Double-Edged Effects of Information Technology on the Right to Communicate*, 14 *NEW ASIA ACAD. BULL.* (1995); YUEZHI ZHAO, *MEDIA, MARKET, AND DEMOCRACY IN CHINA* (University of Illinois Press 1998); CHIN-CHUAN LEE, *POWER, MONEY, AND MEDIA: COMMUNICATION PATTERNS AND BUREAUCRATIC CONTROL IN CULTURAL CHINA* (Northwestern University Press 2000).

<sup>89</sup> See CASTELLS, *supra* note 5, at 196-97.

<sup>90</sup> *Id.* at 8-9.

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zation discourse,<sup>91</sup> of which China's latest penchant for digital technology is but another variation. Labeling the stratification phenomena "informational" indicates that the social transformation process cannot be fully understood within a technology-determinist model of linear progression.<sup>92</sup> For instance, the belief in information as the center of economic competitiveness may disguise the political economy of IT industry policy formulation, which, if solely cast in the interests of the urban elite, will ultimately increase economic inequality by further disadvantaging the disenfranchised who already suffer from a lack of access to older forms of information.<sup>93</sup> In this last regard, China's socialist legacy may serve as a powerful discursive foundation upon which full-fledged policies can be formulated for informational poverty alleviation, which is, however, only a hypothesized possibility at present. Meanwhile, even if top Chinese officials seriously commit themselves to reducing inequality in line with the socialist ideology, whether these efforts at the national level can succeed at the grassroots remains murky, given tremendous core-peripheral and urban-rural disparities, especially in the milieu of communications industry privatization since late 1990s. There may also be another discrepancy between official discourse and actual practice since, as Khan and Riskin argue, "[w]hile professing aversion to the threat of social and economic polarization, China has encouraged or tolerated policies that contributed to the rapid growth of inequality."<sup>94</sup>

The concept of informational stratification is also built upon

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<sup>91</sup> See Everett Rodgers, *Communication and Development: The Passing of the Dominant Paradigm*, 3 COMM. RES. 121-33 (1976) (noting the alternatives to the modernization paradigm); see also Arvind Singhal & Parichart Sthapitanonda, *The Role of Communication in Development: Lessons From a Critique of the Dominant, Dependency, and Alternative Paradigms*, 7 J. DEV. COMM. 10, 25 (1996).

<sup>92</sup> A linear progressive view would suggest that every new medium be treated with new strategies and the fit between technology and policy would enhance the performance of the system as a whole. The author does not deny the potential usefulness of this conception but rejects the belief in its applicability in all occasions. Moreover, the argument that older forms of communication play no less significant role than new ones holds water if the issue at stake is informational equality because traditional channels are usually better integrated in the lives of the disadvantaged.

<sup>93</sup> See, e.g., Yuezhi Zhao, *Caught in the Web: The Public Interest and the Battle for Control of China's Information Superhighway*, 2 INFO 5, 30 (1999) The author points out that a "[m]assive build-up in telecommunications has been in sharp contrast with severe underinvestment in primary education and a steady decline of the state's education budget as percentage of GDP from 1991-1996." *Id.* at 30. The author concludes that "[t]he WTO deal and the entry of foreign capital into the telecommunications sector will undoubtedly intensify the tensions between the basic needs of the majority of Chinese population and the special interests of the elite." *Id.*

<sup>94</sup> ROSS GARNAUT & YIPING HUANG, *GROWTH WITHOUT MIRACLES* 380 (Oxford University Press 2001).

an ecological perspective on media systems and the “communication infrastructure.”<sup>95</sup> This infrastructure is defined by Sandra Ball-Rokeach and colleagues as “a storytelling system set in its communication action context,” where interpersonal and mediated forms of social interaction are connected along “[p]hysical, psychological, sociocultural, economic, and technological dimensions.”<sup>96</sup> Based on this approach, the diffusion of the Internet and the concomitant inequality problems it incurs should be construed as deeply rooted in the overall information environment of a society where players in large institutions, small organizations, and interpersonal networks all act with their distinct agency and, at the same time, react to each other under contextual constraints. This explains from another angle why this paper’s discussions of China’s informational stratification are not confined to the Internet, but are also related to both general economic disparities and the distribution of traditional media outlets. Exclusive attention to new media is incongruent with the way in which the communication infrastructure actually operates.

It is necessary to note that, due to restrictions in available data, the previous discussions of informational stratification in China are limited to the macro national and inter-regional level. However, in its full sense, the communication infrastructure conception also contains intermediate agents or “meso-level” storytellers (*e.g.* locally based organizations, urban neighborhoods, rural villages) and micro agents situated in interpersonal networks. The results of interplay among agents at the same level and across levels can be either functional or dysfunctional. The informational stratification phenomena can then be held as a natural consequence of an already imbalanced communication environment absorbing new media. Ultimately, however, the unmitigated outcomes of information disparity will undoubtedly be detrimental to the storytelling ecology as a whole due to the intensification of disconnections among components of the system.

At this point, a linkage can be made to William Dutton’s “ecology of games” approach to information policy analyses at the institutional level, in which each policy issue is regarded as operating in “an arena of competition and cooperation structured by a set of rules and assumptions about how to act in order to achieve a particular set of objectives” within “a larger system of action composed

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<sup>95</sup> Sandra Ball-Rokeach, *The Origins of Individual Media System Dependency: A Sociological Framework*, 12 COMM. RES. 485-510 (2001); *see also* E.F. BORGATTA & K.S. COOK, *THE FUTURE OF SOCIOLOGY* 317-32 (Sage 1988).

<sup>96</sup> Ball-Rokeach, *supra* note 6, at 396.

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of two or more separate but interdependent games.”<sup>97</sup> In the case of China, such a gaming process is explicitly observed in the juxtaposition of multiple agendas that are not necessarily consistent with each other as expressed, for example, in line with market competitiveness, public interests, social equality, and communist party leadership. The most fundamental tension in this process is between the forces of globalization and the internal frictions among regions and groups. This tension is clearly articulated by Zhao’s “problematization” regarding “the very institutional and technological structure of the country’s rapidly expanding and transforming communication systems, different concepts of communication, and principles and priorities that will shape economic and social development in China.”<sup>98</sup>

The ecological aspect of the communication infrastructures can be also illustrated at the local level by the case of the Dichangkeng village in Jinyun County, Zhejiang Province.<sup>99</sup> During her fieldwork for a project on “media use and modernization,” Bu Wei, researcher at the Institute for Journalism and Communication Studies in the Chinese Academy of Social Sciences, visited this village in 1991.<sup>100</sup> The name of the village, Dichangkeng, means literally “bottom of a long ditch,” which vividly characterizes the location of the rural community in the depths of a remote mountainous zone.<sup>101</sup> This geographical location severely limited the scope of the village’s communication infrastructure and the quality of its connections with the outside world. For instance, difficulties in postal delivery impeded the circulation of newspapers, and television sets could pick up nothing but static.<sup>102</sup> Even though radio signals were accessible, this was of no help to ordinary villagers, who could not understand Mandarin, the official language in which radio programs were broadcast.<sup>103</sup>

However, with the help of an interpreter, Bu was surprised to meet village children talking to her about the Gulf War, which, at

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<sup>97</sup> William Dutton, *The Ecology of Games Shaping Telecommunications Policy*, 2 COMM. THEORY, 303, 306, 307 (1992); see also William Dutton & Helen Makinen, *The Development of Telecommunications: The Outcome of an Ecology of Games*, 13 INFO. & MGMT. 255, 257-58 (1987).

<sup>98</sup> Yuezhi, *supra* note 93, at 6.

<sup>99</sup> Interview with Bu Wei, Researcher, Institute for Journalism and Communication Studies, Chinese Academy of Social Sciences; Director, Center for Media and Adolescent Development, CASS, in Washington, D.C. (May 24-28, 2001). [hereinafter Bu Interview].

<sup>100</sup> See *id.*

<sup>101</sup> See *id.*

<sup>102</sup> See *id.*

<sup>103</sup> See *id.*

the time, was the most prominent news in global headlines.<sup>104</sup> How could this be possible in such an underprivileged rural community? She traced the source of information down to a blackboard hanging at one end of the village that is next to the house of the community's wired radio station manager.<sup>105</sup> The wired radio station (*youxian guanbo zhan*) was the most prevalent form of rural mass communication during Mao's China.<sup>106</sup> It transmitted communist party propaganda along with entertainment programs and other useful information regarding sanitation, agricultural production, child rearing, etc.<sup>107</sup> The wired radio system, however, has been declining since the official abandonment of Mao's rural commune policy in late 1970s.<sup>108</sup>

However, Dichangkeng had somehow managed to employ a wired radio station manager in 1991, whose job was often difficult due to barriers in geography and language.<sup>109</sup> This person maintained the blackboard that showed a map of the Gulf War, which was updated daily based on radio newscasts about the latest moves of the Iraqi army and Operation Desert Storm.<sup>110</sup> By visualizing the news and making it accessible to all those who passed by the blackboard, the wired radio manager was able to stimulate the local interpersonal communication network to engage in discussions of this global event. During this process, elements from mass media, bulletin boards, personal conversation, and the Maoist communication infrastructure were integrated in a most innovative way.

The case of Dichangkeng is designed to highlight the significance of historical-institutional legacy and local agency as indispensable parts of the communication infrastructure. Excessive emphasis on the presence of "new" technology and its accompanying "new" policy structures has characterized recent discussions of China's information inequalities, which is an inadequacy that also applies to the bulk of Euro-American studies of the digital divide.

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<sup>104</sup> See *id.*

<sup>105</sup> See *id.*

<sup>106</sup> See *id.*

<sup>107</sup> See *id.*

<sup>108</sup> During Mao's age, wireless radio stations were funded by rural communes. But after decollectivization in the late 1970s, access to information has become largely responsibilities of individual households, leading to a void of news, education, and cultural life. See Yongcheng Wang, *We Cannot Do Without Radio Speakers in the Countryside*, ZHEJIANG DAILY, Aug. 16, 1994, available at <http://61.129.66.46/node2/node3/node26/user-object1ai303286.html> (Oct. 30, 2001); see also Zhang Chongjiu, *Difficulties in Rural Cultural Construction*, PEOPLE'S DAILY, Nov. 27, 1998, at 9.

<sup>109</sup> See Bu Interview, *supra* note 100.

<sup>110</sup> Fortunately, unlike regular villagers, the station manager could understand Mandarin in radio programs. See *id.*

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By introducing this case at a lower level of analysis, no specific policy is recommended to enhance information equality nationwide. The general point is that tackling informational stratification practically and/or intellectually is a project that goes beyond the allocation of digital technologies. This entails an ecological understanding of the entire communication environment and must also accommodate the older forms of social fabric and viable agents in social units of different sizes, be it a village, a city, a province, or the entire country.

## CONCLUSION

The twofold intention of this paper, to outline the current state of information inequalities in China and to propose the concept of informational stratification, merely signals a point of departure that may hopefully spur a more comprehensive examination of the Chinese situation as well as a more refined conceptualization of social inequality issues, which the notion of “digital divide” signifies. In sum, the uneven distribution of communication resources in China displays the patterns of core-peripheral disparities, urban-rural disparities, and inter-media disparities with high-tech communication resources being disproportionately concentrated to rich regions and social groups with high income and education. Analytically speaking, all these descriptions are more complicated than dualities. In a practical sense, these issues of inequality have caught the attention of China’s national leaders, policy analysts, and entrepreneurs in the IT industry. Each group holds a distinctive interpretation of what the “digital divide” means under the Chinese context. Therefore, it remains unclear how the discursive commitment will be converted into realistic solutions with assessable public consequences.<sup>111</sup>

The tentative definition of “informational stratification” is to build on current concerns for the “digital divide” and advance a larger conceptualization in which uneven access to the Internet is construed as the tip of an iceberg of social inequalities within existing communication infrastructure. In existing structures, various aspects of informational inequality, old and new media forms, and communicative agents at different levels, are integrated ecologically. The notion of “informational stratification” does not illustrate exactly how the problem of disparity shall be countered in

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<sup>111</sup> Compared to formative research of information equality projects that so far characterize most studies on China’s “digital divide,” evaluative research on actual policy outcomes is a more needed field of inquiry.

China, which stays an open question whose answers are most likely to vary according to the nation's vast geographical and social differences. Yet, the concept also alludes to a successful solution-seeking process that will most certainly be filled with actions of local organizations and individuals with their agency. It will also be a path-dependent process in which existing communication infrastructure, including its Maoist components, shall play a role.<sup>112</sup>

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<sup>112</sup> Although Mao passed away twenty-five years ago, his legacies are still part of the current communication environment in cities as well as the countryside. However, the heritages can be either existing opportunities, as illustrated in the case of Dichangkeng, or potential pitfalls. There are a few obvious alerts. First, we need to be warned against a homogeneous model for nationwide application, which may dampen local agency, including an individual's right to choose media programs, or even be flatly unfeasible, for example, by extending wired radio to nomadic people in western China. Another serious issue pertains to the content of the information being disseminated. Mao built the infrastructure first and foremost to serve communist propaganda, or to instigate large-scale political movements such as the Cultural Revolution. If considerations for content are put aside and all we are concerned about is the increase in penetration rates of various kinds, there is no guarantee that the good will of technocrats will not be abused at the end of the day. Thirdly, the popular conception of Maoist China being increasingly egalitarian has been recently challenged by Yehua Dennis Wei, who argues that interprovincial inequality actually increased in Maoist age, especially in early 1970s. See YEHUA DENNIS WEI, *REGIONAL DEVELOPMENT IN CHINA 202* (Routledge 2000). In this book, Wei also writes that, "uneven distribution of resources, consideration for industrialization and national defense, decentralization, and problems with orthodox socialism made the task of equalizing productive forces across regions difficult." See *id.* In addition, after China's opening-up in 1978, "foreign investment, state policy, and local states and development conditions have all played important roles in even regional development in China." See *id.* Tackling inequalities in China has been a very complicated process that involves a great multitude of domestic and foreign players, at all levels of government, with the spins of various ideologies, in a huge ecology of games. It is therefore unlikely that the Maoist communication infrastructure, or whatever existing model, can be effectively implemented in diminishing information inequality nationwide without modifications, negotiations, and compromises.