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The changing relationship between the Chinese urban medical profession and the state since the republican period: the perspective of the sociology of professions

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Abstract

The relationship between professions and the state is one of the most important issues in the sociology of professions. Using the analysis framework of the corporate-clinical autonomy dynamic relationship, this article delineates and analyzes the changing relationship between the (Western) medical profession and the Chinese state since the Republican period. Before 1949, the relationship between the growing medical profession and the newborn state was characterized by mutual construction. Beginning in 1949, the communist regime successfully transformed medical professionals into members of work units. The profession was tamed and became the functionary of the state. Although China began its reform in 1978, public healthcare institutions still dominate the delivery of healthcare services. Practitioners are thus still dependent upon work units. They hold dominance over both patients and medical enterprises, through which the profession gains economic interests from the market. However, one cost is that the profession serves as the buffer between patients and the government. Further reform of the healthcare system should reconstruct the relationship between the profession and the state.

Keywords: Profession, Professional autonomy, The state, Corporate autonomy, Clinical autonomy, Dependence

Chinese urban doctors in today's China have unique features that distinguish them from medical professionals in other societies: their (formal) income is relatively low, trust from patients has deteriorated, their professional image has become negative, and even the recruitment of medical students is becoming difficult. All these predicaments originate from doctors' "immoral" behaviors, such as treating patients with indifference, practicing defensive medicine, and receiving kickbacks and hongbao (red envelopes containing cash). Thus, some doctors have left public healthcare institutions and entered private practice or private hospitals. It appears that "freedom of practice" is an effective solution for these problems.

Why do urban doctors in China constantly compromise their professional ethics to the point that such practice becomes the norm? Why do they lack freedom of practice? What is the relationship between their non-free practice and immoral normality? What is the relationship between these conditions and the problems of *kanbing nan* (difficulty of

consulting doctors) and *kanbing gui* (the high cost of consulting doctors)? All these questions refer to professional autonomy. In modern societies, professional autonomy is impacted by the state because "the state has ultimate sovereignty over all" (Freidson 1970a, 24). Hence, this paper explores the changing relationship between the Chinese medical profession and the state from the viewpoint of professional autonomy. This not only helps us understand the underlying problems of contemporary China's healthcare system but also enriches theories on the relationship between professions and the state.

Professions and the state: from independence to interdependence

The sociology of professions regards doctors and lawyers as typical professions. Some occupations are viewed as professions but others are not on the basis of the attribute approach; certain characteristics distinguish professions from other occupations. For example, Goode (1957) lists ten traits of established professions, of which "a prolonged specialized training in a body of abstract knowledge, and a collectivity or service orientation" are the two "core characteristics." However, Freidson disagrees with the attribute approach, arguing instead that "the only truly important and uniform criterion for distinguishing professions from other occupations is the fact of autonomy—a position of legitimate control over work" (Freidson 1970a, 82). Accordingly, a profession is free from outside intervention, and its members are able to make decisions on practices on their own. Regardless of whether external powers control the profession's "terms of work" such as the organization of their work and the methods of compensation for services, this profession still holds the control over "the content of work," namely making decisions on diagnosis and treatment (Freidson 1970a, 339). In other words, even if the profession loses economic and political autonomy, it will retain technological or scientific autonomy (for medical doctors this is clinical autonomy). He declares that "so long as a profession is free of the technical evaluation and control of other occupations in the division of labor, its lack of control over the socioeconomic terms of work do not significantly change its *essential character as a profession*" (Freidson 1970a, 25, original emphasis).

To illustrate this assertion, Freidson (1970a) compares the medical profession in three countries: the USA, the UK, and the Soviet Union. Medical doctors in America enjoy both socioeconomic and technical professional autonomy because of the powerful American Medical Association and a less-interventional state. In Britain, the state-established National Health Service results in a great number of medical professionals becoming employees of the state. Although medical doctors in the Soviet Union were confronted with a similar situation, in the UK, doctors were still allowed to open private clinics and hospitals, and they were allowed to practice in both public and private medical service organizations simultaneously. In contrast, in the socialist state, a medical doctor "appear[s] to be almost wholly a creature of the state in that he has no sociopolitically independence from which to stand outside the state" because any form of private medical service institution was prohibited. Freidson claims that though physicians were employees of the socialist state and practiced in public organizations, even in the Soviet Union, they still retained a good deal of control over their work. In another book, he claims: "Clearly, the economic and political autonomy of the medical profession varies from country to country. What seems invariant, however, is its technological or scientific autonomy, for everywhere the profession appears to be left fairly free to develop

its special area of knowledge and to determine what are 'scientifically acceptable' practices. … Thus, while the profession may not everywhere be free to control the terms of its work, it is free to control the content of its work" (Freidson 1970b, 83–84). Hence, in Freidson's view, whether in the USA, the UK, or even the Soviet Union, a medical doctor maintains "the right to diagnose and prescribe according to criteria that are rooted in medical knowledge and to have his work evaluated by colleagues, not by laymen. This is certainly the very heart of professional autonomy" (Freidson 1970a, 43).

In fact, Freidson constructs an endogenous concept of professional autonomy (Liu 2006). His view of the relationship between the state and professions is the base of his dichotomy of economic/political autonomy and technical autonomy. He makes clear that professional power must be acknowledged, accepted, and granted politically as well as socially. However, for Freidson, that is the limit of the state's role. The state may play a significant role in the course of establishing professions and can function as the protector of professional monopoly, but once a profession has been established, the state becomes no more than a tool for providing consistent support for professional domination. Ultimately, Freidson see the state as a passive agency in the practice of established professions, even in socialist countries (1970a, 1970b, 1984, 1986, 1994, 2001).

Johnson (1972) strongly criticizes Freidson's viewpoint and concentrates on the relationship between professions and external powers. Differing from those before him, Johnson treats a profession as a "means of controlling an occupation" rather than a special occupation in itself (1972, 45). He also emphasizes that to understand "professionalism," one form of control must be understood—the producer-consumer relationship that is the main source of uncertainty regarding professionalism in modern, highly specialized societies. If a third party possesses the power of determining needs and the means to meet them, and if the third party is the state, then this type of occupational control can be called state mediation (Johnson 1972).

Johnson turns the endogenous concept of professional power into the exogenous one. Consequently, the role of the state receives more attention. Before Johnson, the state was considered no more than a field, a background, a protector, or a shield that only functioned in an extraordinarily limited way (Liu 2009). However, this presupposition of the state's role has been effectively challenged, especially as the state increasingly intervened in the healthcare system and the medical profession beginning in the 1960s and 1970s. Even in the USA, the government began to be involved in order to guarantee equity of access and control rising costs (Starr 1982; Light 1993; Scott et al. 2000). In academia, Evans, Rueschemeye, and Skocpol's work *Bringing the State Back In* (1985) made scholars pay more attention to the role of the state in professions.

However, when bringing the state back into the study of professions, we must be cautious about such a precondition: there is a relationship characterized by strain and conflict between the state and professions. In other words, the more intervention from the state, the less autonomy professions possess and vice versa. Hence, as Johnson points out, "in the story of professionalization as an historical process, state intervention is often viewed as a major impediment, explaining why certain occupations fail to attain the full flowering of professionalism" (1995, 11). He asserts that existing studies on the state-profession relationship are "too often constrained by analyses dependent upon the intervention/autonomy couple" (Johnson 1982, 186).

By reexamining the historical process of the formation of professions and state building in Britain, Johnson overrules the dichotomy between the state and professions. Instead, he constructs an emergence thesis: "The professions are emergent as a condition of state formation and state formation is a major condition of professional autonomy—where such exists" (Johnson 1982, 189). Thus, he asserts that "the establishment of the jurisdictions of professions like medicine, psychiatry, law and accountancy, were all consequent on problems of government and, as such, were, from the beginning of the nineteenth century at least, the product of government programmes and policies. Far from emerging autonomously in a period of separation between state and society, the professions were part of the process of state formation" (Johnson 1995, 11). One vital reason is that professions and the state are often dependent on each other: not only do professions need recognition, support, and protection from the state but so too the state "is dependent on the independence of the professions in securing the capacity to govern as well as legitimating its governance" (Johnson 1995, 16). A similar insight is confirmed by studies on the medical professions in Italy (Krause 1998), Britain (Larkin 1998; Klein 1990; Lewis 1998), Germany (Light 1995), and China (Xu 2001; Liu 2009).

When studying the medical profession in the Czech Republic, Hoffman (1997) redefines Freidson's distinction of two types of autonomy into corporate and technical. Hoffman defines corporate autonomy as "the political power of the organized profession to define the social and economic context of professional work"; technical autonomy signifies "the control of decision making in the workplace" (1997, 346). In her view, clinical autonomy is not merely "a functional necessity and leads to a degree of corporate autonomy" (1997, 347) nor are the two forms separate from one another. Instead, the two types of professional autonomy are intertwined with each other. In the case of the Czech Republic, Hoffman suggests that physicians' clinical autonomy is eroded because the socialist regime broadly and deeply affected their corporate autonomy and subsequently their "ability to control and direct the application of that knowledge" (1997, 368). Her research substantiates that corporate and clinical autonomy are institutionally embedded in a larger structural context, and thus, the larger institutional contexts should not be ignored when exploring professions.

Therefore, to study the relationship between the state and professions, we need to reject the viewpoint that corporate autonomy and clinical autonomy are independent, and the state and professions contradict each other. We must also put the relationship into concrete historical and social contexts. The following parts analyze the changing relationship between the Chinese urban medical profession and the state since the Republican period.

Before 1949: the mutual construction of the profession and the state

In the Republican period, medical doctors were called "*ziyou zhiye zhe*" (free professionals). This term only referred to certain occupations, including physicians, lawyers, accountants, journalists, and professors because of certain distinguishing features. The practitioners had to complete a professional education; they were self-organized and founded associations; they published academic journals; they set up an education standard and licensure system; they were relatively independent; and the majority was self-employed. In 1929, the term "*ziyou zhiye zhe*" first emerged in a document of the nationalist government, indicating that

they had become politically accepted and recognized as occupational groups (Xu 2001; Yin 2007; Zhu and Wei 2009).

At that time, doctors' self-identity gradually became clear. In one journal published in 1929, a Western doctor, Jiang Zhenxun, commented: "Medical practice is a kind of business indeed. But doctors do this business by scientific principles for the purpose of prevention, diagnosis, and treatment. Therefore, medicine is different from *shengye* (e.g., agriculture and fishing) and business in the narrow sense (e.g., industry, business, and barbers that do not need higher education), which are for the purpose of interest seeking. In fact, medicine is an academic profession" (cited in Zhu and Wei 2009, 218). Doctors had realized that there was a clear boundary between their profession and others.

Professional associations continued to play an increasingly important role. On behalf of all members of the professions, these associations often negotiated with the state on a series of healthcare-related issues. For example, in 1922, Western medical doctors protested against the Beiyang government's attempt to bestow the same professional status to traditional Chinese and Western medicine. The government finally canceled the plan (Xu 2001). Another event occurred in 1929 when the Shanghai Health Bureau tried to adjust the high fees for their medical services; this was strongly resisted by medical doctors. They argued that "the fee is the payment for the professional techniques, rather than the ordinary business or material transactions. … It is neither appropriate nor necessary that the government regulates doctors' fee." The result was a compromise in which the Health Bureau reset the standard of doctors' fees and raised it slightly as well (Zhu and Wei 2009; Xu 2001).

The two cases reveal a very important fact: during the Republican period, the medical profession enjoyed considerable professional autonomy; they could open private clinics, negotiate service prices with the governments, and control the licensing standards. As Xiaoqun Xu observes (2001), they represented a power that was independent from the state. Their greater corporate autonomy was the precondition of considerable professional autonomy. However, the profession and the state were not always in conflict with each other; they were usually interdependent. On the one hand, professional power and autonomy had to be recognized and protected by the state; on the other, the developing modern nation-state also needed support and help from the profession.

The vital project of modern China was to save the nation from subjugation and ensure its survival. Western scientific medicine was regarded as the necessary means to meet this end. "Disability and the weak are social illnesses. The state should encourage personal health, and improve people's health conditions. Illness and pain are the reason that the state becomes weak. Hence, the state should carry out preventive and medical measures to ease people's pain" (cited in Yang 2006, 97). The responsibility of managing the body gradually shifted from individuals and families to the state in the modern era (Hwang 2006), while the state's effective regulation of the body had to be based on scientific medical knowledge and techniques provided by the medical profession. "To ensure the survival of the state and the nation, [we] not only protect the self by the military, but also perform constructions in culture. Scientific new medicine is one of the most important things" (cited in Yang 2006, 96).

According to Nianqun Yang's research in the early stages of the Republic of China, the idea that the medical profession should act in concert with the state was emphasized. To achieve that goal, the government established the modern healthcare system with the help of medical professionals, by which each individual's behavior would better "fit the whole target set by the state" (Yang 2006, 96). Thus, mobilizing the medical profession was an important basis and organic component of the modernization of the national governance system. The Republican period experienced a "nationalization of medicine." In this course, the state intensified the supervision and intervention of grassroots society and individuals and reconstructed urban space through founding a modern health administrative system. This social revolution would have been impossible without the involvement of the medical profession. Du Lihong's study on the public health system in modern Beijing reveals that as a kind of new national governance system, the establishment of health administration would have been unsuccessful without the support and participation of medical professionals (Du 2014).

At the same time, this profession also constantly sought support from the state, including the government's recognition of practice qualifications. Both Western medicine and traditional Chinese medicine believed that medical practitioners should be licensed, and only the government had the power to the license. "Only the government has the responsibility and the power to appraise medical knowledge, and interfere in the medical profession" (cited in Zhu and Wei 2009, 12). The profession clearly realized the indispensable role of the state in professional life. It expected the state to support its legitimacy and guarantee its socially legitimate professional status and professional privileges (Xu 2001). Medical professionals still controlled the licensing standards, but the state granted legitimacy to the profession. For instance, when the Ministry of Health intended to forbid students who did not graduate from medical schools from practicing medicine and give the police department the authority to register professionals, Western medical associations objected strongly. As a result, the government compromised with the profession and allowed all practicing Western doctors to continue their practice (Zhu and Wei 2009).

Thus, as Johnson (1982) has stressed, the formation of professions and the formation of the state are intertwined with each other, as occurred during the Republican period. Although the medical profession and the state were often in conflict, as an emerging modern state China was eager to take advantage of the nascent medical profession to serve the purpose of state building (Henderson 1993; Xu 2001; Yang 2006). The emerging medical profession also needed the power of the state to establish its authority and legitimacy, thereby ensuring its high professional autonomy. In this sense, in the Republican period, the medical profession and the state constituted a "mutually constructed" relationship.

1949–1979: the profession was tamed by the state

The year 1949 was a turning point with the founding of the communist regime. The situation totally changed, the market was removed, and a centrally planned economy was established. Modeling the Soviet Union (SU), the regime reconstructed the healthcare system, and private clinics and hospitals were transformed into public institutions. The entire medical profession was also nationalized. All independent professional associations were disbanded. Some became semiofficial organizations and consequently lost the ability to

negotiate with the government (Davis 2000). These formerly free professionals were no longer free; doctors were turned into employees of the state. Moreover, as Jones points out, in socialist countries "the significance of the state goes well beyond its status as an employer, for the state shapes the general environment in which all occupations operate," including political and ideological environments, education, and all other aspects of professional work (Jones 1991, ix). The new healthcare system constituted very different working conditions for doctors. As a result, the medical profession lost its corporate autonomy to a large extent.

The Chinese Communist Party was concerned that as experts and intellectuals, professionals would have an inclination to break away from the masses and ignore their needs if they held too much professional autonomy. The party needed these professionals for socialist construction and development (Kraus 2004). Reshaping medical professional ethics was thus necessary. In the early 1950s, the communist regime proposed four principles to direct healthcare affairs (Sidel and Sidel 1973; Yang 2006): (1) medicine had to serve *gong-nong-bing* (workers, peasants, and soldiers); (2) preventive medicine had to be given priority over curative medicine; (3) TCM practitioners had to be united with practitioners of Western medicine; and, (4) healthcare had to be integrated into mass movements. These principles, particularly the first (serve the people), became doctors' new practical ethics.

These principles demonstrate that the new regime strived for legitimacy by providing healthcare services to the people. As Tsou Tang points out, "China's political system has no support from religion, so its legitimacy comes from its ability to solve actual problems. Those governments and political systems that cannot overcome problems will lose their legitimacy" (1994, 234). If the regime wanted to obtain legitimacy, it first had to mobilize the medical professional effectively. Given that various resources were in shortage and both economic production and people's lives were difficult at that time, the party had to reshape the organization of the entire society. Accordingly, the *danwei* system was established. The state centralized all resources forcibly and then redistributed them to various sectors to achieve modernization and meet people's needs. Doctors were organized and managed by work units and the government. People's needs and professional services to meet these needs became the objects of mediation by the state.

In the beginning of the PRC, about 80 percent of medical professionals practiced privately. The government initially allowed them to continue practicing by individually motivating them to serve socialist construction. However, associations of medical practitioners were soon set up throughout the country to absorb individual practitioners (Huang and Lin 2009b). By the end of 1965, there were approximately 44,000 doctors in private practice in the whole country; by 1983, this number had risen to 49,148, of which 43,539 practiced in rural areas (Huang and Lin 2009a). One can thus infer that in Mao's era private practitioners in urban China almost disappeared, not to mention private hospitals.

At the same time, the numbers of public healthcare institutions and doctors as work unit members increased dramatically. In 1949, there were 3670 various medical institutions, including 2600 hospitals and 769 outpatient departments (Huang and Lin 2009a). Most were located in urban areas. In 1983 there were 66,662 hospitals operated by the health administration and healthcare organizations, an increase of 24.6 times compared

to 1949. Healthcare personnel from these hospitals accounted for 80 percent of all medical professionals (Huang and Lin 2009a).

Thus, the communist regime completed the nationalization of medical doctors by organizing them into public institutions. During the Republican period, doctors were typically members of certain associations and thus participated in various professional activities that connected them to other practitioners. However, after 1949, doctors became members of a certain work unit and were fragmented. Although professional associations (e.g., the Chinese Medical Association) survived, they were depoliticized. In other words, these associations only functioned academically. Their other functions, such as protecting doctors' rights and self-regulation, were handed over to work units and health administration.

As members of a work unit, doctors could not leave public institutions. They had to practice in the work unit and promote the government's regulation (Davis 2000). This demonstrates the members' "dependence" on the work unit, as observed by Walder (1986); also see Henderson and Cohen 1984). According to Walder (1986), there are two aspects of the employment relationship that define the degree of workers' dependence. "The first is the proportion of the workers' needs satisfied (or potentially satisfied) at the workplace. … The second aspect of dependence, just as important as the first, is the availability of alternative sources for the satisfaction of these needs" (Walder 1986, 14–15). The first aspect means not only the satisfaction of monetary rewards but also other social and economic needs, including "health insurance, medical care, pensions, housing, loans, and education" (Walder 1986, 14). The second (alternative) refers to "the availability of employment elsewhere on comparable terms. 'Availability' implies not only the existence of other job (something that depends on labor market conditions), but also the absence of legal or political barriers that close off these alternatives" (Walder 1986, 14–15). Moreover, "alternatives" also signify "the availability of outside income or alternative sources for the satisfaction of nonwage needs: pensions, health insurance, housing, loans, and so forth" (Walder 1986, 15).

Through this framework, we can infer that doctors in Mao's era were able to practice only after entering public healthcare institutions. Moreover, the government determined their service fee, income, medical equipment, and even their patients. In addition, given that all resources were controlled and distributed by the state, it was impossible for doctors to leave the work unit; in that case, they not only would not be permitted to practice but also would not survive. Therefore, from 1949 to 1979, the majority of doctors were largely dependent on public institutions and the state.

Besides transforming professionals into state employees, the regime successfully produced more doctors by reconstructing medical education. Again modeling the SU, the Chinese government carried out a radical reform of medical education. First, the state shortened the curriculum. Some medical schools (e.g., Peking Union Medical College) were permitted to maintain their extensive education system because their main task was defined as training teachers and researchers. Meanwhile, the government founded many medical schools that provided five-year and even three-year medical training (Sidel and Sidel 1973). During the Cultural Revolution, medical education was decentralized, which broadened the disparity in medical education between provinces (Sidel and Sidel 1973). Second, medical education was divided into several specific parts, including

pediatrics, public health, stomatology, and pharmacy. These revolutionary measures provided high numbers of health personnel in a short time and relieved the shortage of medical professionals to some extent. However, in this process, the state deprived doctors of their corporate autonomy in professional education and admittance.

The lack of corporate autonomy had a negative influence on doctors' clinical autonomy in at least three aspects. First, the state distributed few resources to medicine and healthcare because healthcare was a nonproduction department, ranking at the bottom of the planned economy. Deficiencies in infrastructure and medical equipment limited doctors' diagnosis and treatment. Second, doctors strictly controlled laborers' sick leave because they had to serve the state's interests and ensure socialist production. Third, the state's intervention in medical education directly affected students' learning.

However, doctors' dependence on public institutions is only one side of the relationship between the state and the profession. The other is that as employees of the state, doctors possessed bureaucratic power. Doctors in the SU were "the hybrid profession"; although they had no corporate autonomy, they became a bureaucratic profession and gained a path to power (Field 1988, 1991, 1993). The medical profession's power usually comes from its esoteric knowledge and patients' emotional attachment (Starr 1982); but in socialist states, including China, the medical profession also had bureaucratic power because it became "a state functionary" (Field 1991, 54). Research on the medical profession in the Czech Republic also reaches a similar conclusion (Heitlinger 1991, 1993, 1995). As Heitlinger points out, "Socialist medicine was dependent on the state for financing, provision of workplace, medical supplies and technology, clientele, salaries, the license to practice, and an adequate supply of subordinate health workers. The party-state decreed by fiscal and legislative or administrative means the organizational framework of health services and who should receive them and in what order of priority" (Heitlinger 1993, 175).

However, individual practitioners "were usually left free to choose how to treat their patients and how to practice their particular medical specialty" (Heitlinger 1993, 175). Compared with their counterparts in Western societies, Czech physicians enjoyed more clinical power and professional authority over patients because of their status as civil servants (Heitlinger 1995). Chinese doctors may be in the same situation. To summarize, in the Mao's era, through socialist reforms, Chinese urban medical profession became controlled by the state and lost corporate autonomy. It is a process that doctors were taming (Field 1988, 1991, 1993). All practitioners were turned to the state's employees. They were banned to practice privately and were dependent on work units and the state. But meanwhile, in addition to professional authority, medical professionals also gained bureaucratic power because doctors became "a state functionary." They were operators of social control as well as gatekeepers of scarce medical resources. However, doctors generally prioritized the state's interests rather than patients' interests. As a result, these state-employed medical professionals can be viewed as "an extension of state governance" (Johnson 1995). Some scholars even argue that Chinese doctors in Mao's era underwent deprofessionalization (Sidel and Sidel 1973).

After 1979: the profession becomes the buffer for the state

This last part analyzes the fact that from 1949 to 1979 Chinese urban doctors were highly dependent on public healthcare institutions. With the reform and opening-up,

China began to move away from the "classic socialist model" (Kornai 1992). Thus, the relationship between the medical profession and the country changed again.

Abnormal marketization of the healthcare system

At the end of the 1970s, the state initiated reforms in the healthcare delivery system, and the main terms of work for doctors (Blumenthal and Hsiao 2005; Henderson 1993;Ge et al. 2007; Gu et al. 2006; Zhou 2008). The reforms can be summarized in two aspects: "*zi fu yingkui*" (to self-finance) and "*fangquan rangli*" (to grant power and concede interests). In other words, the government gave "public hospitals policy without financial support." In a 1979 interview with a journalist from Xinhua News Agency, Vice Minister of Health Xinzhong Qian proposed managing "health services by using economic measures." He also noted: "We must work according to objective economic laws and tentatively manage medical institutions as we manage enterprises. We have to entitle them with the power to determine their own expenditure, accounting, equipment purchasing, professional ranking promotion, and rewarding or punishing through performance evaluation" (Xinhua News Agency 1979).

As a result, financial support from the government was shrinking in the income structure of public hospitals. This meant that the state successfully relieved its financial burden in providing healthcare services to its people. According to available statistics, state financial support accounted for about 60 percent of an average hospital's income at the beginning of 1980s, which was not long after the implementation of the reform. This rate steadily declined and fell to below 10 percent in 2003 (Sun et al. 2008). In recent decades, this proportion has constantly been around 7 percent of the total. Table 1 shows each public hospital's average income from 1998 to 2011. The financial support that each hospital received from the government was fairly stable during these years. The minor decline in the income proportion of selling pharmaceutical products does not indicate that the government increased its financial support to public

Table 1 Average income of public general hospitals, 1998–2011 (10,000 RMB)

Year	State financial support	Percent	Medical service	Percent	Pharmacy	Percent	Other	Percent	Total
1998	155.4	5.99	990.9	38.19	1199.1	46.21	137.6	5.30	2594.7
1999	194.6	6.81	1205.2	42.16	1337.3	46.79	87.4	3.06	2858.3
2000	204.1	6.29	1413.1	43.58	1500.6	46.28	96.9	2.99	3242.4
2001	251.6	7.11	1562.3	44.16	1602.6	45.30	93.8	2.65	3537.9
2002	273	7.35	1684.1	45.33	1616.2	43.50	92.5	2.49	3715.1
2003	297.5	7.49	1827.7	46.04	1773.8	44.69	100.2	2.52	3969.4
2004	318.2	6.22	2296	44.92	2045.7	40.02	103.5	2.02	5111.8
2005	333.3	5.98	2685.7	48.17	2383.6	42.75	105.6	1.89	5575.6
2006	393.6	6.39	3045.8	49.41	2559.4	41.52	107.7	1.75	6163.8
2007	523.4	6.97	3713.9	49.48	3127.6	41.67	113.6	1.51	7506.5
2008	646.9	6.97	4545.4	48.96	3924.5	42.28	144.8	1.56	9283.1
2009	850.2	7.40	5590.3	48.63	4846.8	42.16	170.9	1.49	11494.9
2010	997.8	7.18	6868.1	49.39	5824.9	41.89	189.9	1.37	13,906.1
2011	1313.2	7.76	8519.0	50.36	6817.3	40.30	231.6	1.37	16,916.5

Source: Ministry of Health of PRC 2003, 2010, 2012. The total percentage of all incomes in the original data does not total 100 percent; this table reflects that fact

hospitals; rather, this should be understood as a significant increase in the income from medical services. Medical professionals had to constantly balance economic interests, efficiency, and patients' interests while providing healthcare services. The reemergence of "the cash nexus" (Field 1991) between doctors and patients was buried below foreshadowing of the erosion of clinical autonomy and the conflicts between practitioners and patients.

The medical profession continued its dependence on public healthcare institutions because the state still monopolized the provision of healthcare services. In 1980, the State Council published an official document that allowed medical doctors to practice individually, legitimizing private practice. The 1998 *Law on Practicing Doctors* also legitimized private clinical practitioners. Moreover, the central government issued a series of policies to encourage the development of nonpublic healthcare institutions. However, doctors practicing in private clinics and nonpublic hospitals were still small in number (Zhou 2008; Gu et al. 2006; Gu 2011; Ding and Ge 2008). As shown in Table 2, although private hospitals accounted for 40.24 percent of all hospitals in 2013, public hospitals held 84.42 percent of all beds and 86.76 percent of all health personnel. In addition, public hospitals provided 89.78 percent of all outpatient services and 87.92 percent of all inpatient services. By 2011, 85.19 percent of all health personnel and 82.80 percent of all practicing doctors worked in public healthcare institutions (Ministry of Health of PRC 2012). To date, public organizations still dominate the healthcare sector, maintaining the status of the majority of doctors as state employees.

Private hospitals not only enjoy a minor market share of healthcare services but are also restricted by current policies in taxation, medical device equipment, qualifications of health insurance-appointed hospitals, medical research, and occupational opportunities for doctors. As a result, it is difficult for private hospitals to compete with public hospitals, and thus private hospitals can attract few practitioners (Zhou 2008). This decreases the possibility that medical professionals can practice outside public hospitals, which increases the degree of dependence on public healthcare institutions.

The government not only excludes doctors' possibilities of private practice but also sets up a number of institutional arrangements to restrain doctors from occupational mobility, whether between different public institutions or between public and private institutions. The majority of medical doctors hold *shiye bianzhi* (established posts in the public service unit), approximately equal to "iron rice bowls." Therefore, in public institutions, the employment relationship is extremely different from that in capitalist enterprises. As Walder points out: "employment does not fluctuate according to the

Table 2 The comparison of public and private hospitals nationwide, 2013

	Public	Percent	Private	Percent	Total
Number	13,396	54.22	11,313	45.78	24,709
Beds	3,865,385	84.42	713,216	15.58	4,578,601
Hospital personnel (10,000)	460.6	85.76	76.4	14.22	537.1
Health personnel (10,000)	383.9	86.76	58.6	13.24	442.5
Outpatients (100,000,000)	24.6	89.78	2.9	10.58	27.4
Inpatients (10,000)	12,315	87.92	1692	12.08	14,007

Source: National Health and Family Planning Commission 2014. The total number of outpatients do not equal the number of public hospitals added to the number of private hospitals. The same problem also occurs in the number of inpatients. The statistical report has the same problem

firm's demand for labor, nor does the firm's demand fluctuate with changes in demand for its products" (1986, 11).

Apart from these personnel systems for all employees in the public service unit, medical doctors are also constrained by a special institutional arrangement: the *dingdian zhiye* (fixed-point practice) system. In China, a medical student becomes a medical doctor by meeting three conditions. The student must (1) receive a professional education and graduate from a medical school; (2) pass the national examination of practitioner qualification and receive a certificate for practice; and (3) register with a certain medical institution. Only then is the student (or the doctor) able to practice in a registered hospital, but only in that particular hospital; it would otherwise be illegal. The last condition thus ties individual doctors to a certain healthcare institution. In recent years, the government moved to facilitate the "reasonable mobility" of medical doctors and encourage them to practice in several institutions. On March 1, 2011, *the Tentative Measures of Practitioners' Practicing in Several Points* (*Beijingshi Yishi Duodian Zhiye Guanli Banfa* (*Shixing*)) was implemented in Beijing by the Municipal Health Bureau. At that point, only the physician-in-charge or higher-ranking doctors could apply to practice at three other medical institutions within the city. The conditions are that applicants have to be ranked as physician-in-charge or higher; all their practicing locations are within Beijing; and applicants should first finish their duties at their current institution. Thus, this new allowance to practice in more than one institution appears to be only a trivial improvement for most practitioners.[1] A few doctors left public hospitals, but this did not reduce the profession's dependence on public institutions. As a result, some media has advocated the liberation of doctors (e.g., Liu 2013).

To sum up, abnormal marketization of the health sector has led to two contradictory consequences: on the one hand, to a large extent, the government has reduced financial support for public healthcare institutions, which required doctors to always consider service efficiency and economic interests. On the other hand, the government still monopolizes the delivery of healthcare services. As a result, the majority of medical practitioners have to maintain their status as state employees who are dependent on public institutions and cannot exit these organizations (Hirschman 1970).

Becoming the buffer of the system

The medical profession still has no independent associations. To date, there are two main professional organizations: the Chinese Medical Association and the Chinese Medical Doctor Association. Neither controls admission of doctors; this important function, the essential element of corporate autonomy, is carried out by health administrations. As previously noted, the Chinese Medical Association principally played an academic role after 1949. The Chinese Medical Doctor Association was founded in 2002. This association claims to protect doctors' rights, but it only makes appeals without substantial effect. It also claims to supervise doctors' practices, but the Ministry of Health actually issued a series of rules to regulate doctors' "immoral" practices rather than the association.[2] All the facts demonstrate that Chinese doctors still lack a professional association to regulate themselves and protect their rights.

Thus, contemporary Chinese urban doctors still lack corporate autonomy. As a result, this profession does not hold the power to control the price of healthcare services, pharmacy, and medical materials. Moreover, their labor price is extremely low due to

the state's intervention (Zhou 2008). The Chinese government's price control for medical services is seen as a method of guaranteeing the availability of basic medical services for the general public (Liu et al. 2000; Meng et al. 2002; Ge et al. 2002; Sun et al. 2008). According to a study by Renwei Ge and his colleagues (Ge et al. 2002:44), this policy originated from policy makers. In the eyes of these policy makers, the lower the price, the more likely that the patient's interests would be addressed. Therefore, the state tightly controlled the service fee standards for each medical service to ensure that all individuals could access healthcare services regardless of their economic conditions. This inevitably distorts the value of doctors as well as drugs and medical materials (Zhu 2007, 2011; Blumenthal and Hsiao 2015). However, the medical profession is incapable of taking any collective action and negotiating price control policy with the government because they lack corporate autonomy.

Because of the lack of corporate autonomy, the profession is unable to realize effective peer supervision and self-regulation. Furthermore, these conditions erode doctors' clinical autonomy. Although the profession lacks corporate autonomy and enjoys some bureaucratic power both before and after the reform, the reasons that their clinical autonomy eroded are different. First, erosion of clinical autonomy due to shortage of medical equipment rarely occurred after the reform. The majority of urban doctors now have sufficient equipment. Second, there has been considerable progress in medical education, which makes doctors master more medical knowledge. These developments increase doctors' clinical autonomy. Third, however, doctors still have to take nonclinical considerations into account in their practices. These nonclinical considerations changed from political to economic factors originating from the abnormal marketization of the healthcare sector. This abnormal marketization forced public hospitals to raise economic interests to survive. Each department and each doctor of the hospital must deal with the organizational pressure; this constitutes the main cause of the erosion of clinical autonomy because practitioners have to consider economic interests of both the institution and themselves when they are practicing.

Moreover, the profession's clinical autonomy is further eroded because doctors have bureaucratic power. I have indicated that private healthcare institutions are still unable to compete effectively with public ones. Most quality medical resources, including medical equipment and health personnel, are attached to public hospitals. A 2007 survey showed that even though only 51.3 percent of respondents were satisfied with the services provided by public hospitals and 52.5 percent recognized that services delivered by state-owned hospitals fell far below their expectations, up to 94 percent still selected state-owned hospitals as their first choice for medical services (Sun et al. 2007). Lim et al. (2004) present similar findings in their research on public perceptions of private healthcare services in Guangdong, Shanxi, and Sichuan. Thus, patients' reliance on the public healthcare sector has helped maintain public hospitals' domination over its clients.

This leads to public hospitals' monopoly of the terminal sale of drug and medical materials. Take drugs as an example. In the revenue generated through retail sales of all drugs, prescription drugs account for 75–80 percent (Zhu 2007, 2011). Different from nonprescription drugs (i.e., OTC), prescription drugs can only be provided to patients by practicing doctors, the majority of whom are working in public hospitals. In other words, the prescribing and dispensing of drugs is not separated (Li 2010). Consequently, public hospitals nearly

monopolize drug sales and have influence over pharmaceutical companies. Public hospitals thus occupy a significantly advantageous position in their interactions with both patients and pharmaceutical companies. Patients and pharmaceutical companies lack the power to negotiate with public hospitals and their doctors (Zhu 2007).

Public hospitals thus enjoy a dual domination: public hospitals tightly restrict patients' choices in utilization of healthcare services (although patients have remarkable freedom to make choices between different public hospitals); in addition, public hospitals occupy an advantageous position in regard to pharmaceutical companies. With this dual domination, practitioners simply convert their legitimate monopoly of prescriptions to economic interests. Informal payments (Kornai and Eggleston 2001; Ensor 2004; Bloom et al. 2001), including kickbacks and *hongbao*, clearly reflect the dual domination that doctors hold. Hence doctors always compromise their professional ethics during practice because they are unable to make decisions based only on medical knowledge; they have to consider economic interests as well. That's why there always exist induced demands, over-description, and medical representatives (*yiyao daibiao*) in contemporary China. Ultimately, the problem fact that it is difficult and expensive to consult doctors occurs.

Ironically, this dependence on public hospitals and the state is the source of doctors' dual domination. In my view, the bureaucratic power of doctors during the reform was the primary means of the dual domination. The medical profession was able to compensate for their huge economic losses due to the state's price control through transforming the monopoly on prescriptions into economic interests. In this situation, doctors lack corporate autonomy, and their clinical autonomy is eroded. However, they also bear enormous costs: their public image has been badly tarnished, they have lost their patients' trust, and even their lives are constantly under threat. In this sense, the entire medical profession has become an institutional buffer for the problematic healthcare system, and individual medical professionals have become the scapegoat for the entire profession.

Conclusion: the dynamic relationship between the medical profession and the state

This paper analyzes the changing relationship between the medical profession and the state and its causes. In the Republican period, most medical doctors were self-employed. They founded professional associations to deal with various affairs. Their corporate autonomy ensured that they were able to resist intervention from the new modern state. The profession and the state mutually constructed each other: the state strived to solve national crises and control people with the help of the medical profession, while the profession tried to gain legitimate monopoly of healthcare services with support from the state.

After 1949, the communist Chinese state became stronger, and the new regime gained control of the medical profession. Through nationalization of the profession in which most doctors were organized into public healthcare institutions and became members of work units, the power of medical doctors was curbed by the state. Doctors were transformed into gatekeepers of scarce medical resources and social controllers. At the same time, the professionals achieved some bureaucratic power. However, the

profession's corporate autonomy was decreased, and consequently, their clinical autonomy was deeply eroded.

By the end of the 1970s, China instigated its reform, and the state began to selectively retreat from the healthcare sector. This sector was then marketized abnormally: on the one hand, public hospitals were forced to be financially self-reliant, while on the other hand, the government still monopolized healthcare provision. The medical profession still lacks corporate autonomy. The majority of practicing doctors are still dependent on public healthcare institutions; the so-called professional associations are unable to protect rights and self-regulate. As a result, doctors have to accept the terms of work arranged by the state. Under the organizational pressure emphasizing service efficiency and economic interests, doctors are incapable of diagnosing and treating by professional knowledge alone, and their clinical autonomy has been eroded. This erosion is intensified by doctors' dual domination over both patients and pharmaceutical companies. Through dual domination, they easily convert their monopoly of prescriptions into economic interests. They thus compensate for their heavy economic losses due to the state's price control of services and wages. However, the erosion of clinical autonomy and unethical practices are the origin of this conversion; the lack corporate autonomy is the origin of unethical practices. In this process, medical doctors have paid considerable costs—they have become the scapegoat and buffer of the problematic healthcare system and the state.

The case of the Chinese medical profession demonstrates that denying the dichotomy of corporate and clinical autonomy is necessary to understanding the relationship between the state and the profession. When examining the relationship between professions and the state in specific historical and social context, we soon find that clinical autonomy may be eroded. The loss of corporate autonomy definitely influences clinical autonomy, but we should consider the political, economic, and social contexts under which professionals practice since how corporate autonomy influences clinical autonomy depends on the specific political-economic system and institutional arrangements.

Clinical medicine is a highly professionalized occupation. A lay person or even the state cannot supervise practitioners effectively. The only individuals who can effectively supervise may be the practitioners themselves. Self-regulation of the profession is common around the world. In other words, the medical profession should be endowed with corporate autonomy. It may then be possible for the profession to supervise practitioners. Reconstructing the relationship between the profession and the state and creating a self-regulating professional association should be the methods for changing the negative situation of the medical profession that currently exists in China.

Endnotes

[1]According to Yan (2014), by November 2013, there were a total of 1355 practicing doctors who registered a several-point practice. Their professional rank was physician-in-charge or higher. By 2011, there were 43,952 practicing doctors in Beijing (Ministry of Health 2012). Therefore, the number of doctors registering a several-point practice only accounted for approximately 3 % of the total.

[2]For instance, according to my own statistics, since 1988, the Ministry of Health has issued at least 14 documents, suggestions, and measures against doctors receiving *hongbao*.

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The author declares that they have no competing interests.

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