Medicine as business: Chinese medicine in Tanzania

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To the annoyance of any anthropologist embarking on fieldwork, Chinese medicine in Tanzania was a media item when I started my research in 2001. The first Chinese medical clinic in Dar es Salaam had been set up in 1996, in Upanga, catering to the upper middle classes. In the following six years, clinics mushroomed to between 20-40 in Tanzania, with over 15 estimated to be in Dar alone, and others in Arusha, Moshi, Mbeya, Iringa, Dodoma, Mwanza, even the remote Shinyanga. However, many clinics were short-lived and numbers declined in the following years during which I conducted fieldwork in eight one-month periods at least once a year.

This does not mean that Chinese medicine in Tanzania has a history of only ten years. There are five different fields of medical care that proponents of Chinese medicine have populated since Tanzania's independence in 1961. I will first sketch out the first four, and, after an interlude about research methodology, embark on discussion of the private sector. As will become evident, the entrepreneurial set up of Chinese medical clinics has the potential to contribute in meaningful ways to primary care in Tanzania, not least because the Chinese medical doctors, in skilful ways and on multiple levels, have combined Chinese and Western medical services. However, the Tanzanian government must ensure that well-educated Chinese medical doctors set up business.

Five Fields of Chinese Medical Care in Tanzania

Julius Nyerere, Tanzania's first president, (1962-85), who was socialist in orientation, cultivated contacts with the People's Republic of China (PRC) from the very start. Collaborations extended to the medical field. At one stage, the PRC despatched over two hundred expert teams of Chinese biomedical doctors to government hospitals in the country's major cities on an annual basis. These were generally mid-career doctors, respected both for their professional expertise and personal reliability, and chosen by their superiors; they were on two-year contracts, which they spent continuously away from spouse and child. As became apparent during fieldwork in Dar es Salaam, apparently, each of China's twenty-two provinces was 'in charge' of an African nation: Sichuan for Uganda, Shandong for Tanzania, and Jiangsu for the semi-independent Zanzibar (none for Kenya). However, by 2001, these teams had shrunk to the insignificant number of only about four in Tanzania. One worked in Muhimbili hospital's first-rate institutes such as the Institute for Orthopaedic Surgery built with the aid of the Swiss, or the Institute of Microbiology which housed a Swedish research programme on HIV/AIDS. Another worked in the city of Tabora, and two in more modest conditions on Zanzibar. Most of these teams also included an acupuncturist, since Chinese medicine -

¹ The two medical teams I visited in December 2003 included two inner medicine specialists (one in cardiovascular diseases, one in endocrinology), one anaesthesist, one radiologist, one stomatologist, one oto-rhino-laryngologist, one urinary surgeon, one gynaecologist, one head nurse, and one acupuncturist stationed at Mnasi Mmoja on Unguja. At the Abdulla Mzee Hospital on Pemba, there was an inner medicine generalist, an anaesthesist, a radiologist, an oto-rhino-laryngologist, a surgeon, a gynaecologist and an obstretician. These medical specialists were in both places accompanied by an interpreter and a cook. They were mostly men, while each group included two women. Hsu E, 'Zanzibar and its Chinese Communities', *Population, Space and Place* Vol. 13, No. 2 (2007), pp. 113-124.

and acupuncture in particular - belonged in the package of world socialism that China then exported.² However, by 2001 the 'acupuncturist' in Muhimbili was not a professional, being a trained biomedical clinician. He offered a greatly underutilised service and was already off duty at 8 am in the morning after seeing less than a handful of patients. Evidently, the socialist fervour with which acupuncture once used to be promoted had cooled down.

However, the Chinese doctors who lived on vividly in the memory of the Tanzanians I spoke to were the general practitioners who had worked on the Tazara project.³ Strictly speaking, this second group of Chinese health professionals comprised only Western medical ones, as peoples' memories in fieldwork suggested. They were fewer in number, probably not as expert in their speciality (they were employees of the Ministry of Railways and not the Ministry of Health), and they worked in Tanzania, presumably in one or two year spells, during the decade within which the railway from Dar es Salaam to Lusaka was built between 1965-1976.⁴ Their main objective was to guarantee the health of the Chinese railway workers but they did not shy away from

² Hutchinson A. 1975: *China's African Revolution*. London: Hutchinson, p. 222; quoted by Zhan M. 2002. The Worlding of Traditional Chinese Medicine: a Translocal Study of Knowledge, Identity and Cultural Politics in China and the United States. Ph D thesis in Social and Cultural Anthropology, Stanford University, p. 45. To be sure, the teams consisted of Western medical staff, inclusive of one acupuncturist; none was constituted merely by Chinese medical professionals.

³ Fieldwork in Mbeya, July 2003.

⁴ See also Jamie Monson's chapter, 'Liberating Labor? Constructing Anti-Hegemony on the TAZARA Railway in Tanzania, 1965-76', in this volume.

treating the locals. The encounter appears to have been mutually edifying as the Chinese doctors also kept the memory of Tanzanians alive.

A third and less well-known Chinese medical impact on African health care is of a different order. It was not mediated through Chinese physicians who were sent abroad but through the World Health Organisation (WHO). The way socialist China dealt with its indigenous *materia medica* became a model for the WHO and appears to have been implemented by its traditional medicine programmes. African medicinal plants have accordingly been recorded and researched according to the criteria of the Chinese *materia medica*, sometimes under the guidance of Chinese experts personally. Ethno-medically speaking, Tanzania has an extremely rich tropical flora and fauna, and many plants have been shown to contain substances that are pharmacologically active and continue to be used by locals against minor ailments, mental problems and what we (more than the locals) consider serious diseases such as malaria. The Traditional Medicine Research Unit at Muhimbili Hospital was inaugurated in 1974, after, on the initiative of the Chinese, early efforts from the late 1960s to endorse a policy of collecting plant materials

⁵ Ethnobotanical fieldtrip to Ghana, June 2000.

⁶ In general, they are first identified by their indigenous names and by the Latin name indicating their Linnaean genus and species, which makes a reliable identification of synonyms possible. Then, their indigenous attributes are listed, including, for instance, information on their taste, such as whether they were bitter or sweet, or on their effects, whether they were cooling or heating. There then follows a list of their most common therapeutic usages, which indiscriminately draws on learned and popular indigenous and biomedical terms for any kind of ailment, symptom or disease. In some cases, a considerable effort has been made to identify the active substances in the plant, isolate and purify them. Although traditional Western pharmacopoeias have much the same structure, it appears the WHO endorsed the Chinese model.

among Regional Medical Officers had failed. By 1991, apparently, this Unit had identified over four thousand healers and tested three thousand herbs. By 2001, the Unit had become an Institute and comprised a good dozen senior researchers including chemists, pharmacognocists, botanists, and even one medical anthropologist. 9 While a psychiatrist from the London School of Tropical Medicine and Hygiene, who worked as an advisor to the Tanzanian Ministry of Health, was open-minded enough, during an informal encounter in a Oxford college, to credit traditional medicine effectiveness in the realm of mental health, ¹⁰ and while there is a general tenor among anthropologists that traditional healers in Africa have admirable psychological powers and are good at 'healing' their patients, by framing and re-interpreting their problems, the Tanzanian intellectuals I encountered valued their traditional medicines primarily for their pharmaceutical potential. This attitude is occasionally found among the odd plant scientist but above all, it reflects that of the Chinese socialist government towards traditional medicine during the Maoist period (1949-76). Perhaps, the close collaboration with China made it to such a prominent issue in Tanzania.

If the Chinese schema of how to systematise, write and publish the indigenous *materia medica* came via the WHO to African nation-states, and in Tanzania through Chinese delegates directly, the fourth Chinese medical field is very particular to Tanzania.

⁷ ILIFFE, J., East African Doctors (Cambridge: Cambridge University Press, 1998), p. 211.

⁸ Ibid. As always when scientists work with locals, there were communication problems. I happened to encounter a healer who had initially collaborated with 'those from Muhimbili', as he called them, but since no results had been obtained or reported back, he felt cheated (fieldwork in Dar, March 2001).

⁹ On the Unit and its history, see also Langwick, S., *The Matter of Maladies: Ontologicial Politics in Postcolonial Healing in Tanzania* (forthcoming), chapter 3.

¹⁰ Personal communication, 2002.

During the period of socialist orientation, not only Chinese experts had been sent to Tanzania, but Tanzanian medical students also went for training to the PRC (though, notably, none were sent to learn Traditional Chinese Medicine). During the six years of their medical training (one year of learning the Chinese language and five years of medical training), they were obliged for at least one semester to attend a course on acupuncture because of the communist system of medical education based on the Maoist vision of combining Western and Chinese medicine. 11 In contrast to any other country in the world, students enrolled in medical school were thus forced to attend courses on traditional medical knowledge, not only in the 1950s, also in the 1980s, and since every Western medical hospital must, by governmental regulation, include a traditional medicine section, these African students could not avoid also being exposed to herbal Traditional Chinese Medicine, bone setting and massage; and, on the streets, to the meditative practices of qigong and taijiquan. Some of them came back to Tanzania transformed, with an entirely different attitude to traditional medicine: it need not be backward and superstitious. In fact, I found in interviews with Chinese medicine patients in Dar that some said Chinese medicine was more 'advanced' than biomedicine, an attitude which perhaps reflected the underlying sentiment that socialism is more advanced than capitalism.¹²

¹¹ Taylor K. 2005. *Medicine of Revolution: Chinese Medicine in Early Communist China*. London: Routledge.

¹² HSU E. 2002. "The medicine from China has rapid effects": Patients of Traditional Chinese Medicine in Tanzania. In E. Hsu & E. Høg (eds) *Countervailing Creativity: Patient Agency in the Globalisation of Asian Medicines, Anthropology and Medicine* 9 (3), Special Issue, 291-314.

It may have been that such an anti-Imperialist attitude, combined with a certain pragmatism and belief in Chinese medicine, ignited the collaboration of the Chinese and Tanzanian Ministries of Health and in 1989 led to the institutionalisation of a long-term Traditional Chinese Medicine research programme on HIV/AIDS at Muhimbili hospital. I sporadically worked in that clinic between 2001-3. A group of about thirty regular patients were seen every other day between 8-11 am. One Tanzanian doctor was in charge, seated behind a large table on which there were piles of patients' files and a young Traditional Chinese Medicine post-doctoral fellow was on either side of the table. She acted as translator and director (having studied medicine in the PRC, she was fluent in Chinese), assisted by two Tanzanian nurses. The files were all in Chinese, showed the handwriting of a different doctor on every page, and while note taking was basically conscientious, it varied, which demonstrates that by 2001 the project had lost in cudos. I was not allowed to take handwritten copies of the patients' files, not because of a lack of 'informed consent' but because this was confidential 'research data'. 13 No results had yet been published in English. An earlier public statement of researchers on the programme had apparently upset the biomedical profession because any claim that a herbal remedy could change a sero-positive patient into a sero-negative one was flatly 'impossible' and therefore 'immoral' because it engendered false hopes. In the early years, renowned senior Chinese doctors had been on the project, whose understanding of Chinese medicine certainly was deeper than that of the post-docs but who, in the light of their striking findings, seem to have underestimated the sanctions they would encounter by not

¹³ However, I did obtain permission for copying four file-based authentic prescriptions and correlating herbs that had been used for treating an AIDS patient during one month. They are now on display in the permanent exhibition 'Living and Dying' of the British Museum in London.

paying due tribute to statistical evidence. Discredited in their research activities, the programme nevertheless has had an impact on a practical level as on its basis the antiviral drug *Aikeji* was developed with Chinese medical ingredients only. It is now sold at a very high price in the private sector.¹⁴

This brings us to the fifth field of Chinese medical doctors' activities in Tanzania, which since 1996 has taken place in the private sector. Restrictions on private practice had been removed in the early 1990s, ¹⁵ after the World Bank had put pressure on the government to privatise health care. 16 The Chinese medical doctors who due to these altered health care policies have immigrated into Tanzania differ in important ways from the above. First, they are private entrepreneurs. Second, their training in Chinese medicine varies: some are highly qualified but in the early 2000s the majority were 'learning by doing'. Third, some operated within grey zones of legality, in fields marked by rigid bureaucratic structures and 'red tapism', and this impacted on the ways in which they offered their services. The response I received after asking about why they had come to Tanzania to do medicine was: "For doing business". I was surprised. It is no secret that medicine is business, and sometimes big business, but medical doctors are expected to emphasize the provision of services. The person in question clearly was following the Dengist tenor that it is to the advantage of the nation to do business. Ironically, Tanzania that is one of the lowest income countries was considered one of the best places worldwide for 'making money'.

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¹⁴ Fieldwork in Mombasa, 2004-5.

¹⁵ Iliffe, East African Doctors, p. 218.

¹⁶ A foreign health worker, personal communication during fieldwork in Dar, March 2001.

Fieldwork

Here a note on methodology is warranted. Fieldwork was multi-sited and in only two cases was I allowed to live with the people I studied: with a doctor and his nuclear family in Mombasa and with a Tanzanian nurse and his extended family on Pemba. This is, methodologically, a weak point of my study, but at least I lived with families on both the Chinese and Tanzanian sides. Language-wise, Chinese posed no problems as I had formally learnt it over twenty years earlier but I was an absolute beginner in Swahili. If the rapport was good with the doctor, tape recording posed no problems; each patient was given the choice to turn it off but only few requested this (although, as I later learnt, not entirely unproblematic).

I interviewed almost every doctor in Tanzania and Kenya of whose existence I knew and thus can claim to have personally spoken to the majority of the Chinese doctors who were practising between 2001-4. The first encounter with doctors was almost always difficult. They were migrants, sometimes had a considerable history of mobility, and were suspicious of my status and objectives. Many were from North-Eastern China; a number had been a jack of several trades. It is difficult to make generalisations, as these doctors each stand out for their individualism and their capacity for taking the initiative. One said he wished me to report in my publications that their lives had been difficult first in China and then in Tanzania. Thereafter he reminded me that my research permit was for studying "Chinese medicine and other traditional medicines in Tanzania", and refused to speak to me any further on issues other than what he considered strictly medical ones.

In the interviews with patients I was not met with the same suspicion. Whenever possible I went to visit them in their homes, which in the light of the expanse of the city, the condition of the roads (or rather, perhaps, 'tracks') and the non-existence of addresses was an adventure in itself.. However probably due to this extra hardship - a very time consuming one at that too, considering that it was for a brief thirty to sixty minutes interview only - almost all of them felt honoured, were welcoming and also forthcoming. ¹⁷ I interviewed thirty patients in Dar es Salaam twice (in January and July 2002), thirty in Mombasa twice (in July 2003 and January 2004) and thirty on Pemba (in December 2003). Not only did the doctors stand out for their individualism and initiative, but also their patients: apart from those on Pemba, they came from very different city wards. They had in common that they identified themselves as members of the 'middle class', but their living conditions varied from what an outsider would call a 'slum dwelling' to a 'little palace'. Almost all were very positive about the services they had received, and praised the Chinese doctors for their regularity and reliability (most worked six or seven days a week, and eight or more hours a day). In some cases, they went out of their way to praise the effectiveness of their medicines, although there were some who were not satisfied; the costs and relative ineffectiveness of the treatment were issues. However, on Pemba, which is one of the two tropical islands that constitute the semi-state of Zanzibar, the patient population I interviewed was different. The Pemba clinic had opened only a few months earlier; it was the first and only one, and due to quarrels with his superior, the doctor in charge had to close it again a few months later. There, the patients were, first, mostly rural, and second, my sample was strongly affected by a brief

¹⁷ I had to explain to most that I was not an employee of the Chinese medical doctors, but nevertheless the answers may have been biased.

(three sessions-long) successful acupuncture treatment, which enabled an incapacitated woman to walk again, and resulted in many villagers migrating to the Chinese clinic with arthritis problems.

Finally, I also interviewed translators, laboratory technicians, receptionists and shop attendants, who either were in collaboration with or were employed by the Chinese doctor and all worked towards the business success of Chinese medical clinics. We were already so familiar with each other at that time that it was strange to sit apart for half an hour or so and conduct a formal interview but from the translators, particularly, there emerged unexpectedly moving life stories of capable people. Several had enrolled in higher education in the PRC and later dropped out of the system in Tanzania due to health reasons, personal problems with their superiors, or otherwise stifling bureaucratic structures. In the odd case, they had learned Chinese in an attempt to become a Buddhist monk. Apparently, Taiwanese monks ran a preparatory course in South Africa which offered education and boarding free of charge for two years before selected candidates were sent to a monastery in Taiwan. One had even spent time in Taiwan, only for a few months though; his mother could not bear the separation, so he said.¹⁸

Legal Regulation of T/CAM Health Provision

¹⁸ Fieldwork in Moshi, April 2002.

Having written about the Chinese doctors and their patients, the spatial layout of their clinics, their life stories, their relations with other Chinese, and their medicines, ¹⁹ I will focus here on their entrepreneurial set up after examining the legal regulation of Tanzanian traditional and complementary and alternative medicine health provision (T/CAM).

In contrast to the traditional practitioners of Indian descent, who quietly practised their medicine in the same neighbourhoods as the Chinese and were known by word of mouth only to their not exclusively Indian clientele, the Chinese advertised themselves loudly, often with big white script on red ground, drawn onto placards and walls. Various Indian healers had suffered from earlier pogroms²⁰ - for example several on the coast north of Dar es Salaam had fled from Zanzibar in the early 1960s - and this may explain their silence. Apparently, the immigrant Chinese had flooded the Ministry of Health and Ministry of Commerce with applications for opening their businesses as either 'clinics' or

¹⁹ HSU E. 2002. "The medicine from China has rapid effects": Patients of Traditional Chinese Medicine in Tanzania. In E. Hsu & E. Høg (eds) *Countervailing Creativity: Patient Agency in the Globalisation of Asian Medicines, Anthropology and Medicine* 9 (3), Special Issue, 291-314.; Hsu E. 2005. Time inscribed in Space, and the Process of Diagnosis in African and Chinese Medical Practices, in W. James & D. Mills (eds) *The Qualities of Time: Anthropological Approaches*. Oxford: Berg, 155-170; Hsu E. forthcoming 1: Mobility and Connectedness: Chinese Medical Doctors in Kenya. In H. Dilger & al. *Transnational Medicine, Mobile Experts: Globalization, Health and Power in and beyond Africa*; Hsu E. 2007: Zanzibar and its Chinese Communities, quoted in footnote 1; Hsu E. forthcoming 2: Wonders of the Exotic: Chinese Formula Medicines on the East African Coast. In K. Larsen (ed) *Knowledge, Renewal and Religion: Repositioning and Changing Ideological and Material circumstances among the Swahili on the East African Coast.* Uppsala: Nordic Africa Institute.

²⁰ Parkin D. 2004. In the Nature of the Human Landscape: Provenances in the Making of Zanzibari Politics. In J. Clammer, S. Poirier, & E. Schwimmer (eds) Figured Worlds: Ontological Obstacles in Intercultural Relations. Toronto: University of Toronto Press, 113-131.

'drug stores', which in effect were much the same. The executives in charge evidently had issued licences, bona fide, each for two years maximum with the option of renewal. After 2001, however, no licenses were re-issued to almost any Chinese medical doctor, and several were forced to return to China, among them even families who had hoped to stay in Tanzania on a long-term basis. A bill from the Ministry of Health was being prepared, which differentiated between 'traditional medicine' (among which belonged Arabic and other local herbalists, *ngoma* and other local spiritual healers) and 'complementary and alternative medicine' (CAM), inclusive of reflexology, European phytotherapy, homeopathy, and also Chinese medicine. Perhaps it was the sudden influx of Chinese medical practitioners into Tanzania, which had led to media attention that triggered efforts in the highest echelons of government to regulate the non-biomedical health market in Tanzania? Whether and how the governmental regulation will be implemented remains to be seen. Not every Chinese medical doctor had to leave Tanzania in the last five years, and each of those who have stayed (and some procreated offspring in this time) had their own individual channel to secure further temporary licenses.

The new bill for regulating traditional and complementary and alternative medicines contains a paragraph that requests that traditional and biomedical drugs and practices be strictly separated.²¹ It thereby directly targets the practice of 'integrated Chinese and Western medicine' (*zhongxiyi jiehe*), which provides the conceptual basis for 'Chinese formula medicines' (*zhongchengyao*) of the globalised form of 'Chinese

²¹ Fieldwork in Dar, July 2004.

medicine and pharamaceuticals' (*zhongyiyao*) that currently are on the global health market. To a certain extent, it is precisely the combination of traditional and scientific/biomedical knowledge and practice that makes the Chinese medicine clinics competitive in the health market which, with the demise of the primary health care through central governmental structures by the WHO in the 1990s has been commercialised on a global scale.

As argued earlier, the ambiguity of the term by which Chinese medicine is known, dawa ya Kichina, is an asset for attracting clientele. First, it designates 'Western medicine as practised by the Chinese', for instance, by the government-sent foreign experts. Thus, paradoxically, the entrepreneurial, often poorly trained Chinese medical doctors live off the good reputation that was created by highly qualified biomedical doctors during Tanzania's socialist orientation. Second, it can be understood to refer 'Chinese drugs', i.e. Chinese medical drugs or Western medical drugs produced in China (their packaging is the same: they come as capsules, tablets, pills, powders, creams, etc. in carton boxes, plastic containers, aluminium foil, covered mostly if not exclusively in Chinese script). Third, it can be understood to refer to 'drugs' that come from China rather than medical practice with an entirely different medical rationale, and thereby dawa ya Kichina fits into an existent local treatment strategy in East Africa.

Whyte has suggested that there are two strategies for solving medical problems in East Africa: either one can, symptomatically and furtively, try to solve it by consulting a

herbalist, ²² who has 'medicines' (*dawa*) but often does not speak the local language, ²³ and whose medicines are the more potent the further away they come from, or, if the problem does not subside, one resorts to involving the elders, and searches for underlying causes which may be found in an offence of the ancestors or an unpaid bride price, and the like, and tend to involve extended village meetings with the elders and much publicity. In urban areas, people mostly take recourse to the former strategy and hence also to *dawa ya Kichina*.

Medicine as Business in the Private Sector

The entrepreneurial set up of the private Chinese medical clinics allows not only for a furtive but also a 'quick fix'. The clinics typically are located in areas of buzzing petty enterprise, even in the midst of a bazaar or on bus stations. Only rarely are they located in residential areas. I became particularly aware of this as I listened to my tape recordings, the loud motors of cars and lorries, bells of bicycles, shouting and advertising of goods, even arguments on the street. One can, almost by accident, step into a Chinese clinic, although often access to it was up a staircase (being located in the first floor was considered a measure of safe guard against crime). One encounters first a receptionist, often a stylish young Tanzanian woman, who is in charge of registration but does not request any consultation fee (as government clinics do). One is seen by the doctor after less than ten to twenty minutes in the waiting room (as opposed to waiting for hours). In

²² Whyte S.R. 1988. The Power of Medicines in East Africa. In S. van der Geest & S.R, Whyte (eds) *The Context of Medicines in Developing Countries*. Dordrecht: Kluwer Academic Publishers, 217-233.

²³ Rekdal O.B. 1999. Cross-Cultural Healing in East African Ethnography. *Medical Anthropology Quarterly* 13 (4): 458-482.

the busiest clinics, the doctor's consultation room was often small and stuffy (and had the feel of a divination hut) and the door was shut during a consultation (privacy was assured). If a lab test is needed, the Chinese medical clinic can provide it (no need to go to another establishment). Chinese medical doctors rent out one room in their clinics to local lab technicians, who bring their own equipment, and can provide the results of a test in less than half an hour. Tests on offer are for malaria parasites, stools, urine (routine, sugar, albumin), syphilis (VDRL test), typhoid (WIDAL), pregnancy, full blood pictures, haemoglobin, diabetes, and the like. Thereafter one returns to the Chinese doctor, who evidently is also competent in Western medicine, looks at the lab results and writes out a prescription. The shop attendant outside the consultation room, usually another agreeable woman (or the same person as the receptionist), prepares the package of medicines, wraps it up in a bag, cashes the money, and provides, if necessary, explanations in Swahili. Chinese medical clinics evidently have integrated traditional local and modern urban Tanzanian elements into their offering of combined biomedical and traditional Chinese medical services.

In contrast to the socialist government-sent medical teams that included an acupuncturist, the private Chinese medical entrepreneurs almost exclusively rely on 'Chinese formula medicines' (*zhongchengyao*). These are easy to consume, in contrast to the medicine that adherents of so-called 'classical' Chinese medicine (as common in Europe and North America) advocate, namely the Chinese 'herbs', as traditionally prepared, simmered, and decocted, in laborious daily routines. 'Chinese formula medicines' provide traditional ingredients in modern form and packaging. Needless to

say the quality of these drugs varies. Just as there are brands of biomedical drugs, so there are brands of Chinese drugs and, in particular, formula-medicines. Furthermore, the rationale underlying the manufacture of these drugs varies. The contents of some consist of standardised ingredients of a 'classical' Chinese medical decoction, others are based on secret recipes and folk-medical knowledge, yet others contain Western medical additives, such as vitamins or steroids. In the tropics, some doctors told me, it was impossible to treat patients in the valuable, precious (*zhengui*) way. Here the precious Chinese drugs (*zhongyao*) went mouldy and rotted too quickly. Therefore, doctors had to make use of formula-drugs.

Formula-drugs are handy for the patient but they make it difficult to treat persons in a sophisticated way according to the Chinese medical rationale. They are designed to treat specific 'disorders' - a cough, a headache - and not the particular person's condition. It is the case that some formula-drugs are composed of standardised ancient Chinese prescriptions (fangji), which require the doctor to differentiate between, say, a yin depletion headache or a yang exuberance headache, and some doctors I spoke to emphasized that formula-drugs could be used in sophisticated ways. However, in general, there is no doubt that treatment with Chinese formula drugs requires significantly less skills and knowledge from the practitioner than treatment with Chinese drugs and recipes, and pulse diagnosis is so rarely practised that most people in East Africa do not know that Chinese medical doctors are supposed to rely primarily on it.

Discussion

The entrepreneurial practitioners currently constitute by far the largest and most diverse group of Chinese medical practitioners in Tanzania. The finding that Chinese individuals on their own initiative set up clinics in Dar, Tanzania and Africa at large is part of a larger pattern. As seen above, many Chinese doctors come to do business construction, textiles, and business in the food industry. The North-East is the region in China that was the first to be intensively industrialised, not least during the Japanese occupation before World War II, and here the economic reforms have had the most visible impact on existent state-run 'work units' (danwei). With the restructuring of these units, many employees became redundant. They diversified in the private sector, some migrated to other parts of China, others into other parts of the world. In the early 1990s, I was told, enterprising individuals emigrated to Russia, in the late 1990s to Africa. By the late 1990s, the barriers posed by bureaucratic paperwork had been reduced to such an extent that some felt the government encouraged them to go abroad and do business. Since all sell Chinese goods, and on various levels ensure a flow of cash back into China (e.g. remittances, paying off daughter-mother company debts, taxes), the business Chinese medical doctors are doing in Tanzania ultimately is profitable also to the Chinese state.