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Mobility, Knowledge Transfer, and Innovation: An Empirical Study on Returned Chinese Academics at Two Research Universities

Qiongqiong Chen [1,*] and Yuan Li [2]

[1] Office of Strategic Planning and Development, Southern University of Science and Technology, 1088 Xueyuan Avenue, Shenzhen 518055, China

[2] Center for Language Education, Southern University of Science and Technology, 1088 Xueyuan Avenue, Shenzhen 518055, China; liyuan@sustech.edu.cn

* Correspondence: chenqq@sustech.edu.cn

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Abstract: This study provides an in-depth analysis of the effects of academic mobility on higher education innovation through an empirical study on returned Chinese academics at two research universities in China. Based on data obtained through document analysis and semi-structured interviews with 15 academic returnees, this paper aims to examine the everyday interactions between individual returnees and their environment, with a focus on exploring how different institutional contexts affect returnees' capacity for integration and innovation. It finds that returned academics play an important role in promoting higher education innovation in China through mobilizing their transnational capital and resources. However, their capacity to innovate is largely subject to their working environment. Evidence from the study suggests that differing institutional contexts make a substantial difference to the reintegration experiences of returnees and to their contributions to institutional changes. This paper provides a window into the changing institutional environment in China and the academic lives of returnees there. It also provides important implications for talent policy decisions.

Keywords: academic mobility; knowledge transfer; higher education innovation; institutional environment

1. Introduction

In an interconnected and globally competitive environment, cross-border movement of students and academics has become widespread. Mobility is regarded as the *sine qua non* of the global academy [1], as it is often linked to notions of internationalization, global connectivity, transnational academic capital, and the knowledge economy [2,3]. For a long time, the policy discourse on academic mobility has been largely framed by the emotive term "brain drain", which is defined as a one-way flow of emigration of skilled human resources from one country to another [4]. This view, however, has recently given way to studies on the notions of "brain gain" and "brain circulation". Substantive literature has shown that the global movement of highly qualified people can be a powerful booster, enhancing knowledge transfer, international cooperation, and innovation [5,6]. In the name of sustainable development, the mobility of talented people, including scientists, academics, scholars, and entrepreneurs, has become incorporated into the "sustainable development" strategies of institutions, regions, and nation-states [7]. There is a pro-talent mobility agenda among institutional and national policy frameworks that stresses the need for the circulation of knowledge and human resources to achieve sustainable development on a global scale.

One of the countries that has captured attention is China, because it has had a large and persistent outflow of students and scholars since it opened up to the world in the late 1970s [8]. Recently, this flow has begun to reverse itself due to China's strong economy and its government's policy of bringing back talented overseas Chinese. In higher education sectors, China has an explicit goal to attract overseas academics back to its universities, as well as a policy agenda of building world-class universities. Despite the increased number of returning academics in China and elsewhere, research on return academic moves remains scarce. In fact, studies of academic mobility have focused extensively on outbound moves, pull–push factors, and the experience of being abroad [9]. Less attention has been paid to the experiences and discourses entailed in the process of return.

Given the large and growing percentage of overseas academics returning to China, the question of how best to engage returned academics in China's academic system has become an increasingly pressing issue, and an important topic for research. While there is a small amount of academic literature on the subject of Chinese academic returnees, the institutional perspective has often been overlooked. This study provides an in-depth analysis of the effects of academic mobility on higher education innovation and attempts to include an institutional level of analysis. Specifically, it aims to answer the question of how different institutional contexts affect returnees' capacity for integration and innovation. Based on data obtained through document analysis and semi-structured interviews with 15 academic returnees at two different types of Chinese universities (one a traditional research university in the interior of China's Northwest, and the other a newly established university in a more cosmopolitan city on China's South Coast), this study explores the everyday interactions between individual returnees and their environment, with a focus on the opportunities and challenges faced by the faculty members in different institutional contexts. The researchers find that the differing contexts of these two types of universities make a considerable difference to returnees' reintegration experiences and their contributions to institutional changes. This paper provides a window on the changing institutional environment in China and the academic lives of returnees there. It also provides important implications for talent policy decisions.

2. Literature Review: Return Academic Mobility in China

China is an important example of a nation that has sought to attract its overseas nationals to contribute to domestic development. In recent years, the Chinese government has adopted various programs to lure back its overseas talents, including the "One Hundred Talent Program", the "Program of Introducing Discipline-Based Talent to Universities", and the "Overseas High-Level Talents Program". These programs have aimed to encourage the return of overseas scientists, scholars, and entrepreneurs by providing them with particularly favorable conditions and incentives, including competitive salary packages, start-up funding, housing subsidies, spousal employment, children's education, a special policy for residential permits, etc. [10–14]. Some interesting studies [12,15] have explored the strategies used by the Chinese government to entice the best and brightest scholars from overseas. Studies have shown that policy matters in terms of attracting overseas Chinese scholars, especially top-tier academics [16]. However, policies are not necessarily the most significant deciding factors for returning academics. Research on the motivations of Chinese academics has indicated that individual factors, such as one's career prospects, national identity, sense of cultural belonging, and family considerations, are as influential as state interventions [14]. Other macro conditions, such as the rapid growth of China's economy, its improved research system, and its increasingly internationalized higher education system, have been identified as driving forces behind the recent tide of return moves [14,17].

In higher education sectors, Chinese universities have been actively recruiting faculty who have been educated or who have worked overseas as one of their key strategies for promoting internationalization and pursuing world-class status. Returnees are assumed to "hold four basic superiorities—English proficiency, academic vision, technical skills, and ability to develop foreign relations" [16] (p. 230). Empirical studies have confirmed their unique role in knowledge transfer and capacity building, through introducing new ways of teaching, research, and university management [14].

Rosen and Zweig [10] employed the term "transnational capital" to analyze the uniqueness and advantages of returned academics. They defined transnational capital as a kind of scientific and technical human capital that is "based on international knowledge or linkages accumulated overseas that are not readily available in China" (p. 111). In their comparative study of 109 returnees and 90 local academics, Rosen and Zweig claimed that returnees surpassed their domestic colleagues in terms of language proficiency, international publications, and international collaborations. This was also evident in Jonkers and Tijssen's [18] research on 76 returned Chinese life sciences researchers. They found that there was a positive correlation between international experience and scientific productivity. Researchers with a higher international profile tended to be more likely to collaborate internationally and have more publications. Similarly, in their case study on a group of distinguished returned young scientists (Thousand Youth Talents Scheme Scholars), Li, Yang, and Wu [16] showed that the contribution of those returnees to Chinese scientific research and internationalization was particularly substantial.

Despite the advantages that returnees have, studies have shown that integrating into China's academic system is not always an easy and beneficial process [14,19]. The tension between returnees and their local counterparts is a perpetual theme in the literature. Evidence has suggested that the preferential policies created for returnees have stimulated resentment from local scholars who feel that their degrees are devalued and their positions are threatened by the massive influx of returning scholars [11,14,20]. This has further hampered the integration of returnees into local institutions and complicated the talent policies in China. Moreover, some studies have pointed out that returnees encounter challenges posed by the existing university structures and academic culture, which include the bureaucracies of institutional administration, the absence of an invisible college, complicated interpersonal relationships, and the lack of an effective academic culture that supports high-quality teaching and research [14]. Adopting a qualitative research approach with 56 returnees across five universities, Chen [14] illustrated how the institutional environment has a direct impact on the academic lives of returned scholars.

The scarce literature that currently exists on academic returnees in China has examined such themes as the general pull and push factors affecting return mobility, the individual perspectives of the returned academics themselves, and the returnees' contributions to China's higher education internationalization efforts. The institutional perspective on recruiting and retaining returned academics has received little attention in the literature. However, some research on international faculty mobility has pointed out that institutional policies and realities play an important role in the attraction and integration of international faculty [21]. Rumbley and de Wit [22] pointed out that the lives of international faculty were heavily affected by the circumstances they faced within a particular institutional setting. As such, the institutional level of analysis is vital to understanding the "lived reality" of returnees in a specific context and the consequences of mobility. However, such analysis is rarely covered by the academic literature. To fill this gap, this paper includes an institutional level of analysis in its qualitative inquiry into the everyday interactions between the returned scholars and their work environment.

3. Methods and Methodology

3.1. Background and Case Selection

This paper is derived from a qualitative study on the experiences of Chinese academic returnees and the role they play in the educational systems and individual universities where they are employed. The academic returnees in this study were Chinese-born scholars who had completed at least their undergraduate education in China, then obtained their doctorate degrees overseas, and subsequently returned to Chinese universities upon graduation or after several years of work abroad. As a qualitative study, the purpose of this research was to achieve a nuanced understanding of the returned academics' lived experiences and the meaning they made of those experiences.

While the larger study involved 72 returned academics from seven research universities across China, the present paper focuses on 15 academics in two out of the seven universities. They were chosen as focal participants because of their contrasting accounts of working in different institutional environments. The two featured universities, one in the interior of China's Northwest (called West University, a pseudonym) and the other in a more cosmopolitan city on China's South Coast (called South University, also a pseudonym), were selected because both of them are research-intensive universities but differ significantly in terms of geographical location and history, as well as internal governance and management. By drawing on a sub-set of data from the larger study, this paper analyzes in depth the effects of academic mobility on innovation from an institutional perspective.

3.2. Data Collection and Analysis

Semi-structured interviews, non-participatory observation, informal conversations, and document analyses were used to collect data. The fieldwork was conducted in the fall of 2013 and 2018, respectively. Individual in-depth interviews were the primary method of data collection, as this method facilitates a deeper understanding of personal perspectives and experiences [23]. Each interview lasted between 60 and 90 minutes. The interviews were conducted in Mandarin Chinese and were recorded with the participants' permission. Pseudonyms were used to protect the identities of the participants. A total of 15 participants were included in this article, seven from West University and eight from South University (as shown in Table 1). In addition to interview data, we used policy texts, newsletters, reports and archival records as supplementary data for analysis.

Table 1. Characteristics of the qualitative sample.

No.	Pseudonym	Univ.	Gender	Age Group	Discipline	Academic Rank	Years of Stay Abroad
F1	Dr. Chen	West Univ.	M	40–49	Physics	Professor	6–10
F2	Dr. Lin	West Univ.	M	40–49	Biology	Professor	6–10
F3	Dr. Jin	West Univ.	M	40–49	Engineering	Professor	6–10
F4	Dr. Cao	West Univ.	M	40–49	Biology	Professor	6–10
F5	Dr. Ma	West Univ.	M	30–39	Food Science	Professor	1–5
F6	Dr. Yang	West Univ.	M	50–59	Management	Professor	11–15
F7	Dr. Mao	West Univ.	F	30–39	Chemistry	Associate Professor	1–5
F8	Dr. Wu	South Univ.	M	50–59	Mechanical Engineering	Professor	16–20
F9	Dr. Zhao	South Univ.	M	40–49	Materials Science	Professor	11–15
F10	Dr. Huang	South Univ.	M	50–59	Management	Professor	16–20
F11	Dr. Gao	South Univ.	M	50–59	Chemistry	Professor	16–20
F12	Dr. Liu	South Univ.	F	40–49	Environmental Science	Associate Professor	11–15
F13	Dr. Yu	South Univ.	M	40–49	Electronic Engineering	Professor	11–15
F14	Dr. Zheng	South Univ.	M	30–39	Finance	Associate Professor	6–10
F15	Dr. Li	South Univ.	M	40–49	Physics	Professor	6–10

The data analysis in this study was informed by a combination of inductive analysis of the raw data, deductive coding from the literature review, and the objective of the larger study from which this paper emerged. The coding process was aided by both a manual coding strategy and a

computer-assisted program called Nvivo 11. In terms of data interpretation, we followed the *Standards for Reporting on Empirical Social Research* in AERA Publications [24] "to review the corpus of available data to locate all relevant instances to support the claims, to search for confirming and disconfirming evidence, and to try out alternative interpretations" (p. 38). We contextualized the analysis in a larger global and social context instead of simply listing the major findings.

4. Findings

4.1. A Limited Engagement: Return to West University

West University, located in the western region of China, is a university that has more than 80 years' history. As one of China's "Double First-Class" universities (a total of 42 top universities were included in the list of "Double First-Class" universities plan, an initiative to develop world-class universities and first-class disciplines in China), the university enjoys a long-term reputation for academic excellence and has contributed greatly to China's development. In recent years, the university has initiated a timetable for achieving world-class status. Recognizing that the overall quality of its faculty team did not match that of the best universities nationally and globally, West University has made great efforts to recruit first-rate scientists and scholars from an international talent pool.

However, due to geographical restrictions in the less developed western region of China, West University is in a disadvantaged position with regards to attracting overseas talents compared to its counterparts in more cosmopolitan cities. According to the university's annual report, less than 20% of its faculty members were educated overseas. To compensate for its geographic disadvantages, it has adopted special talent schemes to attract Chinese graduates from the top Western universities. These relocation packages include not only a housing subsidy, seed funds, and spousal employment, but, more attractively, full or associate professorships for selected candidates. Six out of seven participants from West University were granted the title of full professor, including a newly graduated Ph.D. These scholars took advantage of institutional policies to shorten their transition from junior to senior professor. It was an opportunity few of them expected to have had they returned to other research universities in first-tier cities in China.

4.1.1. Opportunities and Expectations

According to our participants at West University, there were at least three major opportunities, or rather expectations, for them. First, they were expected to publish in international journals. Such publications are now used as one of the major indicators to evaluate a university's performance [14,25]. West University has implemented reward policies to encourage its faculty to publish in international journals. For example, if a paper is published in a leading international journal, the author(s) will receive certain monetary rewards. The cash reward for a paper published in an international top-tier journal could be equivalent to a whole year's salary. The respondents acknowledged that they had advantages in international publications compared to their local colleagues due to their rigorous academic training, English proficiency, and global linkages, a byproduct of their mobility experiences [14]. Through analyzing the curriculum vitae of the participants, we found that they were strong in international publications, and many of these articles had been coauthored with colleagues at their previous institutions abroad. Several empirical studies have demonstrated the positive correlations between mobility and international publications and co-publications [18]. This may be one of the main reasons that West University is keen to attract overseas academics.

Second, the returned academics were expected to foster the international development of the university. In order to compete globally and nationally, West University has made substantial efforts to embrace internationalization as a key institutional priority. The participants, in general, were actively involved in, and had positive experiences with, international service. More than half of them mentioned their roles in, and contributions to, the expansion of the international dimensions of the university. These included developing international programs, promoting cooperative agreements with

foreign institutions, boosting faculty visits and student exchange programs, organizing international conferences and meetings, and participating on international committees or serving as editors/reviewers for international publications. No matter whether these activities were formal or informal, the returnees were acting as bridges, connecting the international and domestic academic communities [16].

The third task for the returnees was to develop "English as medium of instruction" (EMI) programs to internationalize the curriculum. The number of EMI programs has become an important indicator of internationalization in Chinese universities. The first-tier universities in China, on average, offer 5–10% of all courses in English [26]. To meet such criteria, West University provided additional funds and resources to encourage its faculty, especially returnees, to establish EMI programs. According to the participants, such initiatives created opportunities for them; they were more competent and competitive in EMI teaching compared to their local colleagues due to their language proficiency, familiarity with original English textbooks, and inter-cultural competencies.

Overall, our respondents from West University were positive about their overseas experience in learning and knowledge transfer, but they were negative about their roles and contributions in driving organizational changes.

4.1.2. Challenges and Constraints

Despite the opportunities and advantages that the returnees had, most of them shared that the journey home was more difficult than anticipated. They typically cited "resistance from local colleagues", an "unsupportive academic culture", and "complicated local power relations" as major barriers to reintegration. All respondents from West University, except one, reported certain degrees of exclusion and marginalization from their local colleagues, as the following two quotations illustrate:

> There is a conflict between the top administrative level [of the university] and the subsectors in terms of talent policies. While the university leadership places great emphasis on recruiting overseas talents, some deans and department chairs are sensitive to these policies, because they see us [returnees] as a threat. Although they may not resist boldly, they place invisible barriers for us and control most of the local resources. To be honest, without the support of our president, I don't think I could survive here. Basically, this is a cultural issue. Half of the faculty graduated from here. They are quite traditional and less likely to embrace new ideas or changes. . . . You need to learn how to deal with the local politics. (Interview with Dr. Yang, a professor in Management)

> Before you joined the university, they were very welcoming, but once you joined them, things changed. You feel that they are trying to push you away. [Interviewer: Why? They have invested time and energy to attract you back.] Certainly, the university wants you to stay, but the colleagues are different. They want you to serve them, even in very small things. (Interview with Dr. Mao, an associate professor in Chemistry)

Both of the above participants reported difficulties adjusting to the local institutional culture. The tension between returnees and local nationals was a recurring theme in our research. As the quotations suggest, some local nationals were upset by the unequal treatment of local and returning scholars and felt that the talent policies favored "outsiders" who might not necessarily be as capable as they were. Furthermore, they worried that their positions and authority might be challenged by those returnees. These mixed feelings of admiration, worry, and resentment from the local nationals created barriers for the returnees and limited their career opportunities [11,14,27].

The situation was worse for lower-ranked junior returnees. Take Dr. Mao, whom we quoted above, as an example. Due to the university policy that only full professors are qualified to lead a laboratory, Dr. Mao, as an associate professor, had to join a senior professor's team rather than be an independent principle investigator (PI). She used the word "miserable" to describe her overall experience at West University. "I thought I could have a career here, but I was wrong. I can barely survive, let alone fulfill my career aspirations," she explained.

Indeed, even those who returned with the title of full professor and were granted autonomy as PIs felt frustrated with the bureaucratic academic culture at West University. As Dr. Cao, a professor in Biology, explained,

> Recently, the university has planned to adopt a PI system to build up innovation teams and encourage cooperation between PIs. In my view, the implementation of this new policy should first ensure equal access to resources for each individual PI. However, the reality here is that the large research teams have substantive power in gathering important resources, while the small teams with one or two students can barely secure funds. How could there be real and fair cooperation? A small research team is doomed to be merged into the large ones. This so-called cooperation is an exercise in acquiring personal resources in the name of collective strength. This problem at bottom is caused by the academic culture here, which is very complicated. (Interview with Dr. Cao, a professor in Biology)

According to Dr. Cao, the lack of an open and fair academic culture was a major barrier to reintegration. He attributed this to the established traditions of inbreeding at West University. To him, inbreeding enhanced the power of senior faculty and particularism ("not fair competition for all" in his language), which made changes difficult. This is consistent with previous studies on academic inbreeding that have concluded that inbreeding has deleterious impacts on universities and tends to engender traditionalism and solidify hierarchical relationships [28]. Although policy makers at West University were aware of the potential consequences of inbreeding and had adopted new policies against it, the entire academic culture was still less open than it could be.

The case of West University demonstrates that it is relatively easy for a university to adopt new policies and schemes to attract overseas academics, but it is far more difficult to change its academic culture to make it not only welcoming but also conducive to these academics' career development [14]. Despite this, our participants at West University were overwhelmingly positive about the future of their university. They believed that the increased number of returned academics would finally produce a critical mass on campus to promote institutional innovation.

4.2. A Critical Mass: Returning to South University

South University, located in the most cosmopolitan city on the South Coast of China, is a newly established university, which has been widely regarded as a pioneer of higher education reform in China. It distinguishes itself from other traditional Chinese universities in terms of its research profile, internationalization, entrepreneurship, and innovation in university governance, education, and faculty hiring. More than 90% of its academics hold overseas doctorates. The English language is commonly used as the medium for teaching and research. Drawing on the best practices of world-class universities and aiming at becoming such a university itself in 20 years' time, South University has adopted a new type of governance and administration system—including the adoption of a Board of Regents (board of trustees), tenure system, and PI structure borrowed from the Anglo-Saxon model. Due to its international outlook and its high similarity with Western universities in terms of governance and operation systems, South University is often considered one of the most attractive destinations for returned Chinese academics among Chinese universities.

4.2.1. Opportunities and Expectations

In addition to the three common expectations (international publications, international development, and teaching in English) that were discussed in the above case, the returnees to South University perceived "higher education reform", "societal impact", and "student cultivation" as three major opportunities, or rather tasks, for them.

At South University, the culture of innovation and the structure supporting the development of new ideas in education entice people who have dreams or a vision for higher education. All the participants shared that they came to the university because of its mission of higher education reform

and because the university's governance system matched their aspirations of "being an enactor of the changes" [14]. This was particularly true in the case of Dr. Li, a full professor in Physics. Dr. Li first settled in a traditional university in China before joining South University. He was disappointed by the bureaucratic structures and local politics at his former university, and was attracted to South University due to fewer drawbacks related to the traditional power relations in an academic context. As he explained,

> The system at South University is close to that in the US where faculty and students are respected and have autonomy in decision making. This kind of governance system is more suitable for faculty coming back from overseas. ...The interpersonal relationships are relatively simple and everyone can get along well with each other since they are independent in their research. I once planned to return to the US after one year's stay here, but the comfortable working environment changed my thoughts. (Interview with Dr. Li, a professor in Physics)

Like Dr. Li, there were two other established returnees who joined South University after several years' experience in traditional universities in China. They were, in general, satisfied with their experiences of working at South University, where they enjoyed more academic autonomy and freedom compared to their previous universities. "We are making history," one of the interviewees claimed.

For young and ambitious scientists, the PI system, with its sufficient initial research funding and lab space, was usually considered a major reason for joining South University. Unique to South University, all faculty members, from assistant professors to full professors, were hired as independent PIs, and granted start-up funds starting from 3 million RMB. This is different from West University or other traditional universities in China, where junior faculty are usually not eligible to be independent PIs and have to work in a large team under the supervision of senior researchers [14]. As expressed by the participants, working at South University as a PI turned out to be a rewarding experience. They were allowed the autonomy to develop their research interests with great flexibility, which they might not have been able to achieve had they returned to a traditional university in China.

In addition to the nontraditional structure and innovation culture at South University, the region where the university is based also played an important role in luring top-quality scholars and scientists, who saw in its strong and quickly developed industries a great opportunity for their academic career advancement and the transfer of their research to industry. Most of the interviewees in this study were in the STEM fields. They acknowledged that they were attracted to South University because of its location in the city that has the greatest dynamics in terms of technology and economic development. Considered "the new Silicon Valley", the city is regarded as the global epicenter of high-tech design and manufacturing. "Not many places in the world are like this. For an applied science researcher, this is an attractive land," explained Dr. Zhao, a professor in materials science. Dr. Zhao was a successful young scientist before he returned to China. However, he was tired of the cycle of the closed-loop academic system ("applying for funds—publishing papers—applying for more funds—publishing for more papers," in his words), and expected to do valuable things that had real societal impact. The good industrial foundation of the city and the close connection between the university and industry gave him opportunities to transfer his research and products to industry. Dr. Zhao, an excellent scientist, took advantage of these opportunities through successful entrepreneurship. He had two companies under his name. To him, generating new knowledge and turning it into new products and services was a better contribution to society than solely publishing papers. Returning to South University enabled him to extend his traditional role as a faculty member and researcher to become an entrepreneur.

The returned academics' efforts at promoting "societal impact" were reflected not only in their research practices, but also in their teaching. Dr. Wu, a chair professor in mechanical engineering, had long been committed to the improvement of engineering education to meet the needs of future society. Dr. Wu had been studying and working in Europe, Australia, the United States, and Hong Kong for more than 20 years. He had rich experience in connecting university to industry and training young talents with an innovative mixture of project-based and humanities-enriched team learning.

When asked about his viewpoint on "industry–university–research", he shared that "students are the key." Dr. Wu had been actively involved in exploring new approaches to engineering education. His exploration in education was fully supported by the university. To him, South University was a perfect place to cultivate future start-ups and innovators, given the high quality of its students, the favorable local industrial network, and the open and supportive university culture that promoted innovation and the cultivation of innovative minds.

The term "societal impact" emerged again and again in the interview data. The participants emphasized the importance of creating and transmitting new knowledge throughout society. How to facilitate universities' better interaction with society has become one of the major themes of higher education reform [29]. This has also been conceptualized as a "third mission" of higher education in the literature. According to Laredo [30], the third mission entails not only industry-related research, but also social engagement that exceeds universities' two traditional missions of teaching and research. However, the role of mobile academics in engaging in the third mission of universities has seldom been captured in the literature on the academic mobility of Chinese scholars. Most studies have focused on the effects of mobility on teaching and research, and little attention has been paid to the involvement of mobile scholars in entrepreneurship-related activities. The case of South University demonstrates that returnees are playing a key role in reaching out to society through their knowledge and technology transfer.

4.2.2. Challenges and Constraints

Compared to their counterparts at West University, participants from South University seldom raised the issue of local resistance. This was because the returnees had created a critical mass to reinvigorate the academic culture to be more open and tolerant of diversity. The new governance adopted by South University, on the one hand, gave returnees more freedom and autonomy to transfer their transnational academic capital [10], while, on the other hand, putting them under great pressure in terms of publications and performance.

In contrast to the old "iron rice bowl" employment system (which refers to a permanent job position with a steady monthly income) [27], new faculty at South University are hired under a six-year contract with a competitive annual salary package. The benefit of the tenure system used at South University is that faculty receive an annual salary significantly higher than the average level in China; however, at the same time, they are under great pressure to publish [14]. The stakes are high, and so is the stress level. The sixth-year—with its "up-or-out" decision point—is a critical moment in the careers of South University faculty. All of the young tenure-track faculty in our research admitted to certain degrees of burnout under the pressure for publications and securing grant money. Both the university and the academics hungered for success in bidding for state-funded research projects and publications in top journals. The pressure was always there for this young university and its young researchers.

Moreover, working at a new university where there were no ready laboratories in an established PI system, the new faculty had to spend a large amount of time on building their laboratories and platforms, especially in the beginning. Dr. Yu, a professor in electronic engineering, regarded himself more as a start-up founder rather than an academic. He explained,

> You have to start from scratch. Everything is under construction, including the buildings and academic disciplines. It takes a lot of time to design the lab and get devices and the team in place. Then, you have to race against time to get research and work done in a few months that might otherwise have taken a few years, even at an established university. (Interview with Dr. Yu, a professor in electronic engineering)

Dr. Yu further illustrated how a large research platform was needed for greater or more complicated research, and this meant more time required to build the platform up. Facing the challenge of the lack of ready platforms, several interviewees shared that they had been using their transnational connections to maintain continuity in their research. According to an official report published by South

University, international collaboration is one of the key characteristics of the university. This can be attributed to the returnees' transnational networks and their ability to mobilize international resources.

Finally, the participants also reported that they felt overwhelmed by a large amount of managerial work. The governance structure of South University is quite decentralized, with academic departments as the main units. All departments are newly founded, so the founding academics have had to spend a large amount of time on recruiting faculty and staff, and setting up the department structure, regulations, and protocols. When there were few faculty in the early stage of the departments, the ones who first joined the university played multiple roles in research, teaching, and management. The urge for quick development increased the workload and pressure on these faculty. Dr. Zheng, an associate professor in Finance, used the term "sandwiched academic life" to describe his situation of trying simultaneously to teach, research, advise students, serve on committees, and deal with managerial errands. "There are so many managerial affairs and meetings in the day time. I'm either sitting in a meeting or on the way to a meeting. There simply are not enough hours in the day to do research," he complained.

Dr. Zheng was not alone. All academics at South University were under great pressure to balance managerial work and research. The pressure was further enhanced by the managerial practice at South University of "mak[ing] academic performance accountable" [27](p. 507). Under the discourse of competition, quality assurance, and accountability [31], the faculty were urged to be productive and competitive. The quick rise of South University in various university league tables in a short time has been due to the dedication of its faculty.

5. Discussion

The above comparative analysis demonstrates that there were similarities, as well as differences, in the ways that returnees reintegrated into our study institutions (a comparison of the two cases is given in Table 2).

All the participants, from both South and West Universities, were positive about their mobility experiences and believed that overseas experiences brought many social and professional benefits, namely, research strength, capacity to publish in international journals, and resources in international academic networks. The returnee academics were regarded as important nodes in the global networks through which joint research is carried out and knowledge is transferred [13,32]. This reflects the general conclusion from the literature that mobility and innovation are often associated—bringing diversity, global connectivity, new perspectives, and innovation [11,14,16,33]. It can be argued that academic mobility can go a long way to improve the quality and outcomes of teaching, learning, research, and public service, which ultimately promote sustainable development in higher education.

However, mobility is not always positive and beneficial for scholars. There are constraints that limit the effectiveness with which mobility operates. This study suggested that, irrespective of individual characteristics (disciplinary background, length of stay, and academic rank), the returnees' contributions to innovation were largely subject to institutional and cultural conditions. In general, those who returned to West University were less satisfied with their work conditions and less positive about their roles in making innovation than those who came back to South University. As we discussed above, most of the respondents from West University found the institution's heavy bureaucratic and hierarchical governance structures burdensome and experienced certain degrees of resistance. Like most traditional universities in China, West University has a long history of inbreeding, which is often associated with a whole range of worrisome issues—hierarchy, respect for age, complicated personal relationships, and traditional ways [28]. These constraints constituted a limit to the effective engagement of the returnees. The case of West University demonstrates that there was a gap between the university's leadership team and sub-organizations in terms of talent policies. The university leaders had the vision of bringing in talents, but, in practice, many ambitious returnees were excluded at the departmental level.

Table 2. A comparison of the data from two case institutions.

	West University	South University
Institutional characteristics	• Research-intensive university • More than 80 years' history • A large number of its faculty were educated domestically (many graduated from the university itself) • Located in a less-developed region	• Research-intensive university • Newly established • More than 90% of its academics hold overseas doctorates • Adopted a new governance structure that is similar to American universities • Located in a cosmopolitan city
Policies for attracting overseas talents	• Housing subsidy • Seed funds • Spousal employment • Associate or full professorship	• Housing subsidy • Seed funds • Independent principle investigator system
Returnees' perceptions of opportunities/advantages	• Publication in international journals • Serving the international development of the institution • Developing programs/courses by using English as the medium of instruction	• Opportunities to build something new (i.e., new department, programs, research platforms) • Transfer of research into industry • Promotion of societal impact through teaching
Returnees' perceptions of challenges	• Resistance from local colleagues • Heavy administrative process • Hierarchical structures due to inbreeding	• Pressure in publication and performance • Starting from scratch to build research labs and platforms • Overwhelmed by a large amount of managerial work
Perceptions of contributions	• Negative about contributions	• Positive about contributions

In contrast, those who came back to South University seemed to face few problems in reintegrating into the system. All participants from South University reported high levels of job satisfaction and were positive about their role in knowledge transfer, disciplinary development, and institutional innovation. This could be attributed to the easy integration of returnees into the local culture, a high level of academic autonomy, sufficient funding support, and a governance structure similar to their prior overseas institutions. Despite the friendly and favorable internal environment, the returnees also expressed that they were under great pressure to publish and make their academic work accountable. Under the influence of neoliberal changes in higher education in China, South University has adopted a new type of managerial governance, with features such as the "up-or-out" tenure model and a PI system with quantifiable evaluation. These practices, on the one hand, have improved the quality and efficiency of the institution, while, on the other hand, creating unprecedented pressures on its faculty. It can be argued that the "lived reality" of academics at South University manifests the changing role of faculty in China; that is, it has become more competitive and performance-based.

The case of South University serves as an example of mass mobility and how returnees collectively can establish a new model of world-class university in China. As more overseas scholars return to China, it is inevitable that China's academic culture will become more open and competitive on a global scale [14]. However, it is important to note that this research does not aim to propagandize the idea that returned academics are necessarily "better" than their domestically-trained counterparts, or that South University is "better" than West University. No data from the study prove this premise. Instead, the research aims to capture the trend of changes in different types of universities in China and how they affect returnees' capacity to innovate.

6. Concluding Remarks

This study has contributed to the current debate on academic mobility and higher education innovation by taking into account China's particular context. Evidence suggests that returnees

play an important role in promoting higher education innovation in China through mobilizing their transnational capital and resources. However, their capacity to innovate is largely affected by their working environment. The findings from our two case study institutions indicate that the lives of returnees were colored heavily by the circumstances they faced in their specific context. It can be argued that differing institutional contexts make a substantial difference to the reintegration experiences of returnees, especially their capacity to adjust and innovate. Therefore, in analyzing the consequences of return mobility, it is vital to consider institutional contexts, especially the relations between returnees and their host institutions. This paper points a way forward with respect to understanding academic mobility by considering the institutional level of analysis.

The findings of this study also shed light on the implementation of national and institutional policies to recruit overseas talents. We argue that mobility should continue to be encouraged by special policies and funding. Simply implementing policies, however, is not enough. More attention ought to be paid to improving institutions' working conditions and institutional culture in order to harvest the benefits of mobility.

In line with an educational sustainability position, this study has implications for higher education institutions seeking to optimize the role that mobile academics play in their competitiveness and internationalization in the increasingly inter-connected global knowledge economy. If academic mobility can be better understood by local institutions as a triple-win strategy for both the sending and receiving institutions, the mobile and local academics, and the global community of related disciplines, this will plant the seed for the institutions' future sustainable and comprehensive development.

Despite the significance of this study, it has several limitations. It does not include the perspective of university administrators on the hiring of academic returnees, their promotion, or other aspects of their work. Further research is needed to include the voices of administrators and domestically-educated faculty in order to assess the consequences of mobility on higher education more accurately. It would also be interesting to explore differences between disciplines and, in particular, how return mobility plays out among social sciences and humanities faculty versus those in STEM fields.

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References

1. Morley, L.; Alexiadou, N.; Garaz, S.; González-Monteagudo, J.; Taba, M. Internationalisation and Migrant Academics: The Hidden Narratives of Mobility. *High. Educ.* **2018**, *76*, 537–554. [CrossRef]
2. Kim, T. Transnational Academic Mobility, Knowledge, and Identity Capital. *Discourse Stud. Cult. Politics Educ.* **2010**, *31*, 577–591. [CrossRef]
3. Wang, J.; Hooi, R.; Li, A.X.; Chou, M.-H. Collaboration Patterns of Mobile Academics: The Impact of International Mobility. *Sci. Public Policy (SPP)* **2019**, *46*, 450–462. [CrossRef]
4. Solimano, A. (Ed.) *The International Mobility of Talent: Types, Causes, and Development Impact*; Oxford University Press: Oxford, UK, 2008.
5. Meyer, J.B. Network Approach Versus Brain Drain: Lessons from the Diaspora. *Int. Migr.* **2010**, *39*, 91–110. [CrossRef]
6. Siekierski, P.; Lima, M.C.; Borini, F.M.; Pereira, R.M. International Academic Mobility and Innovation: A Literature Review. *J. Glob. Mobil.* **2018**, *6*, 285–298. [CrossRef]
7. Leung, M.W.H. Unraveling the Skilled Mobility for Sustainable Development Mantra: An Analysis of China-EU Academic Mobility. *Sustainability* **2013**, *5*, 2644–2663. [CrossRef]
8. Hayhoe, R. Foreword. In *Globalization and Transnational Academic Mobility: The Experiences of Chinese Academic Returnees*; Springer: Singapore; Higher Education Press: Beijing, China, 2017; pp. v–vi.

9. Gill, B. Homeward Bound? The Experience of Return Mobility for Italian Scientists. *Innov. Eur. J. Soc. Sci. Res.* **2005**, *18*, 319–341. [CrossRef]
10. Rosen, S.; Zweig, D. Transnational Capital: Valuing Academic Returnees in a Globalizing China. In *Bridging Minds Across the Pacific: U.S.-China Educational Exchanges*; Li, C., Ed.; Lexington Books: Lanham, MD, USA, 2005; pp. 111–132.
11. Zweig, D. Competing for Talent: China's Strategies to Reverse the Brain Drain. *Int. Labour Rev.* **2010**, *145*, 65–90. [CrossRef]
12. Pan, S.-Y. Education Abroad, Human Capital Development, and National Competitiveness: China's Brain Gain Strategies. *Front. Educ. China* **2011**, *6*, 106–138. [CrossRef]
13. Welch, A.; Hao, J. Returnees and Diaspora as Source of Innovation in Chinese Higher Education. *Front. Educ. China* **2013**, *8*, 214–238. [CrossRef]
14. Chen, Q. *Globalization and Transnational Academic Mobility: The Experiences of Chinese Academic Returnees*; Springer: Singapore; Higher Education Press: Beijing, China, 2017.
15. Ma, Y.; Pan, S. Chinese Returnees from Overseas Study: An Understanding of Brain Gain and Brain Circulation in the Age of Globalization. *Front. Educ. China* **2015**, *10*, 306–329. [CrossRef]
16. Li, M.; Yang, R.; Wu, J. Translating Transnational Capital into Professional Development: A Study of China's Thousand Youth Talents Scheme Scholars. *Asia Pac. Educ. Rev.* **2018**, *19*, 229–239. [CrossRef]
17. Jonkers, K. *Mobility, Migration and the Chinese Scientific Research System*; Routledge: Abingdon-on-Thames, UK, 2008.
18. Jonkers, K.; Tijssen, R. Chinese Researchers Returning Home: Impacts of International Mobility on Research Collaboration and Scientific Productivity. *Scientometrics* **2008**, *77*, 309–333. [CrossRef]
19. Xu, D. Opportunities and Challenges for Academic Returnees in China. *Asia Pac. J. Manag.* **2009**, *26*, 27–35. [CrossRef]
20. Zweig, D.; Chen, C.; Rosen, S. Globalization and Transnational Human Capital: Overseas and Returnee Scholars to China. *China Q.* **2004**, *179*, 735–757. [CrossRef]
21. Mihut, G.; de Gayardon, A.; Rudt, Y. The Long-Term Mobility of International Faculty: A Literature Review. In *International Faculty in Higher Education: Comparative Perspectives on Recruitment, Integration, and Impact*; Yudkevich, M., Altbach, P.G., Rumbley, L.E., Eds.; Routledge: New York, NY, USA; London, UK, 2017; pp. 15–31.
22. Rumbley, L.E.; de Wit, H. International Faculty in Higher Education: Common Motivations, Disparate Realities, and Many Unknowns. In *International Faculty in Higher Education: Comparative Perspectives on Recruitment, Integration, and Impact*; Yudkevich, M., Altbach, P.G., Rumbley, L.E., Eds.; Routledge: New York, NY, USA; London, UK, 2017; pp. 267–287.
23. Patton, M.Q. *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*, 4th ed.; SAGE Publications: Thousand Oaks, CA, USA, 2015.
24. Green, J.L.; Hedges, L.V.; Levine, F.J. Standards for Reporting on Empirical Social Science Research in Aera Publications: American Educational Research Association. *Educ. Res.* **2006**, *35*, 33–40.
25. Xie, M. Living with Internationalization: The Changing Face of the Academic Life of Chinese Social Scientists. *High. Educ.* **2018**, *75*, 381–397. [CrossRef]
26. Li, M.; Chen, Q. Globalization, Internationalization and the World-Class University Movement: The China Experience. In *A Handbook of Globalization and Higher Education*; King, R., Marginson, S., Naidoo, R., Eds.; Edward Elgar: Northampton, USA, 2011; pp. 241–255.
27. Lin, Y. Auditing Chinese Higher Education? The Perspectives of Returnee Scholars in an Elite University. *Int. J. Educ. Dev.* **2011**, *31*, 505–514.
28. Altbach, P.G.; Yudkevich, M.; Rumbley, L.E. Academic Inbreeding: Local Challenge, Global Problem. *Asia Pac. Educ. Rev.* **2015**, *16*, 317–330. [CrossRef]
29. Cai, Y. From an Analytical Framework for Understanding the Innovation Process in Higher Education to an Emerging Research Field of Innovations in Higher Education. *Rev. High. Educ.* **2017**, *40*, 585–616. [CrossRef]
30. Laredo, P. Revisiting the Third Mission of Universities: Toward a Renewed Categorization of University Activities? *High. Educ. Policy* **2007**, *20*, 441–456. [CrossRef]
31. Raaper, R. Academic Perceptions of Higher Education Assessment Processes in Neoliberal Academia. *Crit. Stud. Educ.* **2016**, *57*, 175–190. [CrossRef]

32. Delicado, A. The Consequences of Mobility: Careers and Work Practices of Portuguese Researchers with a Foreign Phd Degree. In *Analysing the Consequences of International Academic Mobility and Migration*; Dervin, F., Ed.; Cambridge Scholars Publishing: Newcastle, UK, 2011; pp. 163–180.
33. Altbach, P.G.; Yudkevich, M. Twenty-First Century Mobility: The Role of International Faculty. *Int. High. Educ.* **2017**, *90*, 8–10. [CrossRef]