Research Article

Articulating and Enacting Development: Skilled Returnees in Ghana's ICT Industry

Seyram Avle

University of Michigan

Abstract

This article examines how returnee technology entrepreneurs in Ghana articulate and enact the notion of development through their motivations for return, work choices, and practices within the ICT industry. Drawing on interview data, the article shows the ways in which these returnees integrate a transnational outlook into a localized sphere of development activities that, although ultimately privilege specific forms of knowledge and experience, still have the potential for social, cultural, and economic transfers in support of capacity building and service provision within the industry.

1. Introduction

In a 2012 article in a special "Africa" edition of the British newspaper *The Observer,* journalist Afua Hirsch (2012) calls her recent move to Ghana "far from being original." The daughter of a Ghanaian mother and British father, she was raised and schooled in Britain with only a handful of visits to Africa until her relocation in 2012 to work as a foreign correspondent in her mother's birth country. She found herself "part of a narrative told with increasing fluency, as a steady stream of other European and American passport holders of African descent arrive at Ghana's Kotoka International Airport" (Hirsch, 2012). Indeed, her mother's migration to the UK in the 1960s was not unusual. Hundreds of Ghanaians, like other Africans, left the country's shores for other parts of Africa and then Europe and North America in the decades following independence from colonial rule (Adepoju, 2005; Awumbila, Manuh, Quartey, Addoquaye Tagoe, & Antwi Bosiakoh, 2008). Their children, such as Hirsch, form part of a group of returnees that includes Ghanaians who left as young adults in the late '80s and early '90s, often for educational purposes and/or work experience (Ammassari, 2004).

The 2010 national census showed that the majority of Ghanaian emigrants (about 1% of the country's 24.6 million citizens) head to the North, with about 38% of them going to Europe, 24% to the United States and Canada, 36% across Africa, and the rest scattered across Asia and Oceania (G.S.S., 2012). The census did not ask about returnees, but anecdotal evidence and the studies referenced in this article suggest that since the 1990s, and perhaps more so in the 2000s, Ghanaians have been steadily returning to live and work in Ghana after living in other countries. Many of the Ghanaians who left for the North in the period following independence up to the 1990s did so due to economic and political turmoil, and those who returned for the most part did so because those circumstances changed (Ammassari, 2004). Further, lifecycle reasons (such as family and lifestyle in the source country) also play a key role and are consistent with research on other South–North migration returns (Chacko, 2007; Yang, 2006; Zhou, 2008). As other research has shown, wealthier migrants tend to return, and education and experience are key for the skilled among them (Gibson & McKenzie, 2011). In the changing global economy, skilled migrants appear to be better positioned to take advantage of market changes to relocate to their source countries than other migrants (Ammassari, 2004; Gibson & McKenzie, 2011).

Returnees' impact on development, broadly defined, relates to accumulated financial capital, skills enhanced while abroad, and ability to reintegrate into their source country (Black, King, Litchfield, Ammassari,

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& Tiemoko, 2003). As part of the brain-drain continuum, skilled returnees ostensibly compensate for the massive outflows of skill that states in the South, especially in Africa, have experienced in the last five or so decades (Wickramasekara, 2002). In the so-called "three Rs" of the migration-development link (i.e., recruitment, remittances, and return), the state is often placed at the center of action and tasked with enacting specific policies to bring back financial and human capital from citizens abroad, or at least slow their flight (van der Wiel, 2005). For instance, at different times, the governments of Taiwan, China, and India have instituted programs to attract migrants back through a range of programs such as changing nonresident citizenship rules, instating return bonds, and financing or subsidizing business creation in specific cities (Chacko, 2007; Saxenian, 2006a; Zhou, 2008). In Ghana, while there have been a number of attempts to engage with Ghanaians in the diaspora, there is no sustained program to recruit and evaluate returnee impact, even though a number of initiatives, often promoted by organizations such as the International Labor Organization or the Global Migration Group, keep the state central in such attempts. Recent efforts, such as the Diaspora Engagement Project suggest renewed interest in harnessing the development potential of Ghanaians abroad; however, returns, for the most part, appear to occur out of individual choice or circumstance and not in direct response to a particular government recruiting attempt. In this absence of a targeted, sustained recruitment of skilled talent abroad or returnee-focused policy, it is important to see why and how highly skilled Ghanaians (or others in similar countries) are returning and what exactly they are doing.

Across a number of studies on returnees, including the few on Ghana, skilled returnees tend to mention not only lifecycle considerations, but also desire to contribute their skills and experiences to some development goal (especially in open-ended survey questions or through interviews) (see, for instance, Ammassari, 2004; Black et al., 2003; Chacko, 2007; Gibson & McKenzie, 2011). Older skilled returnees tend to mention nation building as a motivation for return, with the possibility of playing a role being more salient to them than the younger generation (Ammassari, 2004). While much of the research mentions this motivation in terms of understanding why people return to the South, it stops short of seeing if this and other motivations are associated with specific activities upon return. This might be linked to the fact that often returnee impact is explained in strictly economic terms. However, returnees sometimes cite social and cultural change as part of their contributions. In Ghana, where returnees tend to end up in the private sector, skilled individuals view changes to workplace and public culture as key areas where they can contribute to general socioeconomic development in the country (Ammassari, 2004; Black et al., 2003; Bowditch, 1999).

More research is needed on these aspects of the migration-development nexus, specifically, why and how skilled returnees return, how their motivations are linked to their practices, and what effect they have. As has been argued for the broadening of what constitutes remittances to include social transfers (Levitt & Lamba-Nieves, 2011), and for development to include institutional changes that account for social capital and entrepreneurial citizens (Ostrom, 2000), so too must efforts to understand migration's impact include returnees' contributions (or otherwise) in sociocultural ways. This might include an understanding of the ways in which such people articulate and "enact" development from their perspective as active agents with lived experiences in developing nations, not merely as objects of study or imposed interventions. Doing so underscores the ways in which beliefs, behaviors, practices, and norms relate to economic activity and productivity instead of only quantifiable outcomes such as number of jobs created, which, useful as they are, are not the sum of experiences associated with well-being.

In this article I focus on how skilled returnees in Ghana's ICT sector articulate the notion of development through their stated reasons for return, choice of entrepreneurial activity, and practices within the relatively resource-constrained environment they return to. This is significant in light of the fact that ICTs are systematically constructed as key components in development goals by states in the South, and the fact that African states have not had much sustained success when directly recruiting or retaining skilled migrants (Patterson, 2007; Wickramasekara, 2002). Taking a qualitative look at how individual returnees in this particular industry situate themselves as development agents, predicated in part on the affordances of emerging ICTs and in part on their entrepreneurial aspirations, not only acknowledges their agency but also has the potential to provide insight into what practices skilled return labor in an African country engages in within the ICT industry, in contrast to places such as Taiwan, China, and India, where there is already a growing literature across various

methodologies and theoretical approaches (Chacko, 2007; Saxenian, 2006a; Zhou, 2008). Further, understanding the attitudes of Ghanaian returnees in Ghana's ICT industry, an industry in its nascent stages, provides evidence for how not only countries (or even regions) differ in terms of return migration and skilled labor but by industry stage. This article begins with a discussion on return migration and skilled labor within ICT industries globally, followed by a discussion of prominent themes from a case study of Ghana. It concludes with a review of the implications and significance of the arguments put forth.

2. Return Migration of Skilled Labor in ICT Industries

In a two-country model where "migration flow is negatively selected on skills, return migrants are the 'best of the worst,' and if it is positively selected on skills, return migrants are the 'worst of the best'" (Rooth & Saarela, 2007, p. 91). Moreover, if skills are sufficiently portable between the two countries, and migration costs are "time-equivalent," those with higher skills will find it more rewarding to migrate, and the same principle drives return (Rooth & Saarela, 2007). Skills such as management experience are fairly portable across borders and, due to the increasingly fragmented nature of production in ICT, so too are technical skills such as computer programming. Beyond particular skillsets that move easily across borders, having international experience is also a highly privileged asset, especially in developing countries.

A previous study of Ghanaian returnees showed that even those who left Ghana unemployed were able to find employment on their return and others used their newly acquired experience (and new skills where applicable) to start their own enterprises (Anarfi, Kwankye, & Ahiadeke, 2005; Black et al., 2003; Bowditch, 1999). Given their understanding of the culture and local networks, returnees are better able to quickly establish themselves than, say, foreign professionals or entrepreneurs who might have relocated to work there. Furthermore, because returnees do not sever ties with the places they gained experience in, they become part of a "digital diaspora," and bring together "countries on their residential itinerary" (Zhou, 2008, p. 245). This means being able to leverage resources from a wider range of actors and to participate in long-distance collaborations. These sorts of connections, especially by technically skilled migrant communities with ties to Silicon Valley and other technology centers, have been identified as key actors in the development of high-tech industries in emerging markets (Saxenian, 2006b). That said, the argument has also been made that returnees are not major change makers in industry; rather, they merely return to take advantage of foundational work already done by local entrepreneurs and multinational corporations (MNCs) that play a larger role in skills transfer (Kenney, Breznitz, & Murphree, 2013). In this view, returnees may not be pioneers but they may still be considered catalysts for growth as they tend to bring in capital and up-to-date technical information.

The state of the industry that returnees return to, then, is important for understanding their roles, particularly if some form of "development," however defined, is a stated reason for return. While a number of returnees go back to work for established firms, a large percentage have entrepreneurial ambitions. Returning, then, becomes about taking on risks as well as opportunities in a space that could use their particular expertise or capital (Kisfalvi, 2002; Parker & NetLibrary, 2005; Schumpeter, 1949). On one hand, an established industry will attract confidence that things work, but the profits may not be great if the market is too small. On the other hand, a nascent industry might attract those with a higher risk tolerance with potential for greater reward. While the risk profiles of returnees is beyond the scope of this article, it is worth noting that returnees often demonstrate entrepreneurial ambitions and sometimes take on roles that extend beyond their training or previous jobs (Saxenian, 2002, 2006b; Wadhwa, Saxenian, Freeman, Gereffi, & Salkever, 2009; Wadhwa, Saxenian, Rissing, & Gereffi, 2008).

Ghana's ICT industry is still in a nascent stage, with ample room for growth and development. It is considered one of the most liberalized industries, with the mobile sector alone having six competing firms to serve the relatively small population of 24 million people (Essegbey & Frempong, 2011). Mobile subscriptions are already at 100 per 100 inhabitants (ITU, 2013). The country's ICT firms produce software, hardware, and technology-enabled services. From the sample of participants interviewed for this study, these firms are mostly small (5–19 employees) or medium sized (20–99 employees), privately held entities. Larger firms tend to be MNCs that are either telecommunications providers, such as Vodafone, or business process outsourcing (BPO)

services firms such as Affiliated Computer Services (now Xerox).¹ The Internet speed and availability of fiber optic cables have made data a growing segment of the industry, and the competitive nature of the mobile sector has opened possibilities for applications and services, both for the large telecommunications firms as well as smaller ones. Companies such as Google and IBM operate in the market and, generally, the country's political stability and economic growth in the last few decades have attracted the attention of not only these corporate entities but skilled Ghanaians scattered around the world.²

The Ghanaian government envisions a fundamental transformation of Ghana into a high-income country, and from a commodities-based economy to an information-based one through ICTs. In an interview with me, the minister of communications at the time said the "commitment as a government is to transform Ghana into a knowledge and information society where people can access, share information, and to use ICT as a leverage ... for social and economic development" (H. Iddrisu, personal communication, April 20, 2012).³ He indicated a number of policies that are aimed at expanding access to various communication technologies, increasing local participation in the market, as well as creating an enabling environment to bring the country to international standards in the networked global society. A director of a national ICT institution observed that industry issues were one of the few that the government worked on in a bipartisan manner. Indeed, my interviews with a former deputy minister of communications from the previous government (and opposing political party) and the minister confirmed the two have a cordial (even friendly) professional relationship, even though the public understanding is one of general disagreement between Ghana's two main political parties. That the former deputy minister is a returnee is worth noting. In fact, the director of the prominent national ICT institution mentioned above is also a returnee. They underscore the synergistic nature of policy and industry in the quest for economic growth, even if it is at a micro level, and demonstrate how returnees are embedded in high-level positions within and around the ICT industry. In light of the perceived openness and development potential often associated with ICTs and the ways in which skilled returnees are also viewed as agents of development, it is useful to see how returnees fit, at least from their perspective, within such broader expectations of leveraging the ICT industry and skilled labor for socioeconomic good.

3. Methods

I conducted in-depth, face-to-face interviews with 14 returnees out of 27 entrepreneurs and policy makers in Ghana selected to discuss skilled labor in Ghana. Four of these interviews took place in 2010, with the rest in 2012 during brief visits to Accra at participants' places of business. Of these 14 returnees, nine worked in the ICT sector and the rest in finance, policy/management consulting, solar energy, public relations, and fashion. Their international experience came mainly from the United States and United Kingdom, with a few having lived in other African countries in their childhood or other parts of Europe, such as the Netherlands. The views of those not working in the ICT sector were helpful comparable perspectives.

Participants were selected primarily from their involvement in prominent businesses in their sector as determined from industry press and events. For instance, I asked my gatekeepers for introductions to speakers at industry events and set up interviews after explaining the questions I was interested in. I used snowball sampling where I could, asking those participants for access to other skilled returnees as they were more likely to know others like them. I followed up my initial contacts with emails and phone calls, making sure to include an overview of the research and consent form in the emails. Participants only signed forms in-person after I had explained more and made clear what their participation meant in terms of content and publication. The semistructured interviews averaged about 45 minutes, with follow-up questions sent by email. Beyond these,

^{1.} There are a few exceptions, for example, RLG Ghana, which employs close to 500 people. In general though, firms tend to be on the small size, as observed by Fafchamps (2004).

^{2.} The country's gross domestic product (GDP) grew at an average annual rate of 6.3% between 2000 and 2011, one of the highest in the world (World Bank, 2013), and has been a stable democracy for more than two decades, with peaceful elections and transitions of power among opposing political parties. That said, the lower-middle-income country still has a high poverty rate, about 28% according to the World Bank in 2013.

^{3.} The Ghanaian government has a history of shuffling ministerial positions midway through terms, and in February 2013, Haruna Iddrisu was made the minister of trade and industry.

some participants spoke with me off the record, providing their opinions on issues discussed in the interviews, allowing me to seek more information from industry records and online and offline press.

The tenor of the conversations followed issues both in the question guide and additional issues raised by participants. I took a grounded theory approach (Strauss & Corbin, 1990) to analyzing my data, coding, and looking for patterns and emergent themes across and within interview transcripts (Denzin & Lincoln, 2000). I also drew on my observations of the sector (including attendance at industry events) during an eight-month field stay in Ghana as part of a larger project, as well as a mix of textual evidence ranging from industry material to press coverage to policy documents.

Overall, the returnees interviewed were highly skilled, relative to the larger Ghanaian population, of which about 12% enroll in tertiary institutions (World Bank, 2013). All except one had a bachelor's degree in computer science or finance from a university outside Ghana; all had some years of corporate experience with international firms, many at the management level. All of them had additional training in their field. They had worked in specialized sectors, earned significant incomes and resources overseas, and had access to additional financial sources in Ghana, enough to not only relocate internationally but also to set up companies that employed others in the local economy. Certainly their elite status put them in a unique position within the industry and society at large.

4. The Ghana Case

Motivations for Return

In response to questions I asked about their decisions to return to Ghana, some of the returnees remarked that they knew they would return either before they left or soon after arriving at their new destination. For instance, Chinery-Hesse, founder of the company SoftTribe and a serial technology entrepreneur, said, "I was packing up my bag three days after I went to America. . . . There was never a time when I was never coming back" (H. Chinery-Hesse, personal communication, June 16, 2010). Even though he was born in Dublin, he grew up in Ghana and moved with his family around Africa, first to Gambia and then Tanzania, Uganda, and Zambia as a teenager due to his parents' jobs as international legal experts. He left for university in Texas in the United States in 1983. After graduation, he went to England to work, returning to Ghana in 1990. He noted that even though racism in the American South then was part of his immediate desire to leave the U.S., there was also a strong dislike of "traditional" work, i.e., as an employee for a company. That led him to relocate to Ghana to start his own software company. Likewise Dadzie, the chief executive officer (CEO) of Rancard, said he "had always planned to come home" (K. Dadzie, personal communication, June 15, 2010). He attended Vanderbilt University in the late '90s, acquired some technical skills working for Dell Computers, and then returned to Ghana in 2001 to set up his own firm. His original plan had been to work for a few years in the United States and transfer home after acquiring some more capital and experience. This became a relatively short eight-month stay at Dell, followed by a year between the UK and Germany, before he returned to Ghana to set a business plan into motion with a childhood friend. Like Chinery-Hesse, one of Dadzie's parents worked for an international organization, and he grew up in a transnational environment.

For others, it was a matter of timing; either because they thought their time in the West had come to an end or they saw new opportunities opening up in Ghana. Gadzekpo, CEO of Databank, one of the first private financial and investment firms in the country, was back in Ghana within five years. After graduating from Brigham Young University with an accounting degree, he moved to Washington, DC to work for a year and decided he did not want to be an accountant. At that crossroad in his career, he accepted an offer to partner on a new venture in Ghana with a friend who had graduated from Columbia University. He saw that the tides were turning in Ghana, both politically and economically. In his words:

When I was leaving, [Ghana] was a basket case . . . pretty bad . . . But [I] came back four years after, and it looked hopeful. And I remember very well, I said to myself, "Hmm, this thing is either a window of opportunity, which might shut, or it's going to be open for a long while. In any case, it's a window." I took note of the fact that a good wind was beginning to blow. (K. Gadzekpo, personal communication, March 22, 2012)

Bartels-Sam, CEO of InCharge Global, had been in the U.S. for five years when her husband got "fed up" and in 2001 suggested they move back to Ghana. Calling herself adventurous and willing to take risks, she agreed. The couple turned over their travel business to her brother and started over in Ghana, this time—without any prior experience in the sector—building a technology company focused on loyalty cards and payments. Tawiah, CEO of IT infrastructure services company Ostec, relocated to Ghana after working for years in the financial services and portfolio management industry in London. By then he had started a family and accumulated enough capital to strike out on his own. To him, the time was right, and "the challenge to prove that one has done something was going to be done here in Accra, so I was ready to move" (J. Tawiah, personal communication, April 17, 2012).

This interest in "doing something" for oneself was framed either in opposition to what the previous generation did or as an express interest in entrepreneurship. While not all the returnees are children of diplomats or international career professionals, their parents had the ability to travel internationally (a not-insignificant marker of wealth in Ghana) or owned landed property, worked in elite professions such as law or medicine, lived in an urban area, and could afford to send their children to university in Ghana or elsewhere. They grew up in environments that privileged education and fostered creativity. However, unlike their parents who favored more traditional career paths, this generation chose to pursue entrepreneurship in new and evolving fields. Chinery-Hesse stated, "We had great grandparents as peasant farmers, then next generation, one of them becomes a teacher. The next generation you have the professional class; next generation should be business entrepreneurial class" (personal communication, June 16, 2010). According to him, his parents' insistence that he remain overseas to work in the same field (or "level," as he called it) was outdated and irrelevant. He saw himself as part of a generation that had to be business-oriented and entrepreneurial. He returned to Ghana against his parents' wishes. With "no money," he started programming software on his laptop and got a friend to help him find clients. Rodolf, 4 who left a position in the U.S. as a strategist for one of the world's largest financial firms and moved to Ghana to start his mobile application company in 2011, thinks he had always had an independent streak. According to him: "My dad has always said that I'm the kind of person who would want to kind of own his own thing. So, maybe right from the get-go, that was it" (S. Rodolf, personal communication, May 20, 2012). However, he also credits his training at one of the top science and technology universities in the U.S. for his entrepreneurial turn: "They instilled this sense of entrepreneurship and this sense of, you know, possibilities; and this belief in [yourself that] you can create stuff, you can solve stuff." Ten years, two degrees, and two positions in MNCs later, he felt it was time to return "to do something entrepreneurial."

Not all the returnees immediately became entrepreneurs upon relocating. Brown⁵ worked for years as an economist in an international organization in several countries before returning to take a leadership role at a national institution focused on ICT development. While she gave no indication of having wanted to become an entrepreneur, Gyewu, on the other hand, moved back initially to start a technology firm. Things did not work out immediately, though, and he spent the first few years after his return in public sector jobs, first with the office of the presidency and later as a deputy minister of communications. He had returned to Ghana after 13 years of traveling worldwide in a senior management position with a multinational electronics firm, in addition to those he had spent in school in Britain before starting his career.

The majority of technology entrepreneurs interviewed came from elite social and educational backgrounds. The schools they went to (even before leaving Ghana) and their international exposure demonstrated privileged backgrounds relative to the majority of the nation's population. That they are technology entrepreneurs today, however, goes beyond having a more privileged background than the average Ghanaian. Specifically, they came up during the dot-com boom and bust of the late 1990s and early 2000s. Some were in the U.S. or Europe then, others were in Ghana at that time and all part of a generation that saw new communication technologies arise and diffuse rapidly. Global technology changes opened up a space that made a technical career choice more logical to this group of people than simply following their parents' footsteps into established professions such as law or teaching. In many cases, they saw the older generation's path as untenable or impractical. The opportunities that these returnees saw did not exist even a decade earlier. The decreasing cost

^{4.} Pseudonym.

^{5.} Pseudonym.

of transportation, educational opportunities, the value placed on knowledge products, and multinational firms' increasing competitiveness for global talent made it easier for migrants from developing countries such as Ghana to secure employment and obtain training internationally. As business practices and technologies converge, people with the right backgrounds are finding that national borders no longer pose significant challenges, provided other (often personal) conditions are right.

The ICT Industry as Entrepreneurial and Developmental Gateway

As participants described their motivations for returning, their entrepreneurial ambitions were couched in terms of the opportunities that the relatively new technology sector in Ghana affords. Bartels-Sam said she is unable to "program one line of html" but sees the ICT industry as the place for "creating things" and "coming up with solutions." In her estimation, "there's too many opportunities in IT" (S. Bartels-Sam, personal communication, April 24, 2012). Tawiah, for his part, decided to start an IT firm because he "saw a gap in the market to come and do IT services in a slightly different way" (J. Tawiah, personal communication, April 17, 2012). Others mentioned specific infrastructural or institutional problems they saw in the Ghanaian economy that they thought communication technologies were particularly suited to solve, and their choice of products and services reflected as much. For instance, Chinery-Hesse's latest venture, *Hei Julo*, is a mobile platform for alerting radio stations and neighbors to criminal activity, a tool that uses the country's very vocal media sector and communal characteristics to provide a service that an understaffed police force lacks the resources to attend to as much as is needed. Bartels-Sam's company issues fuel cards for companies to track employee travel as a way of improving record keeping in the largely cash-based economy. Rodolf's payment processing application taps into the mobile "top-up" culture as a work-around to the country's manual and inefficient bill-paying system.

Each entrepreneur discussed the challenges of making large profits from their ventures and underscored the fact that they pursued the line of work because the needs they were filling are not only market-based but were needed in a developmental sense. The need for their product to "solve a real problem" was thus integral to the decision to work in the ICT industry and in their choice of service or product. They considered the challenges or risks in starting up companies with little comparative base in the country an inherent aspect of entrepreneurial activity that, if managed properly, could eventually be monetized but only in the long term. A number of interviewees in more established stages of their enterprise further opined on the state of the industry and what role the Ghanaian government should play to support it.

In a way, these returnees resemble the many Taiwanese, Chinese, and Israelis who relocated back to their home country after working in Silicon Valley for years (Saxenian, 2006b). Such returns can be linked to broader migration trends and the fairly fluid nature of the global ICT industry. Because computers and mobile phones run on essentially the same basic principles worldwide, knowing how to program or code in specific languages such as Java or C++ means that, for the most part, one can start making things with a networked device. However, the systems that support the development of communication services and artifacts beyond a single prototype or micro scale differ by country, and it takes more than government action to build an industry. Saxenian argues that in all the countries she examined, returnees

transformed the local environment for entrepreneurship by addressing immediate obstacles to success, ranging from capital markets and telecommunications regulations to the educational systems and research institutions. In each case, they have contributed to the rapid creation and improvement of local capabilities. (2006b, p. 9)

The evidence from these Ghanaian returnees suggests that they are also trying to address perceived challenges not only related to their own enterprises but also to the industry and country at large. They generally spoke of the ICT sector as a place that allowed them to not only be entrepreneurial, but also use their international skills and expertise to fill critical gaps in Ghana's overall socioeconomic infrastructure. This constitutes the development ethos attached to returning and working in ICT as articulated by these technology entrepreneurs.

The Skills Challenge

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International experience is valued not only by returnees, but also nonreturnees as well as MNCs and the numerous nongovernmental organizations (NGOs) in the country. From Anarfi and associates' (2005) survey of

returnees, even those who left the country unemployed were gainfully employed in one way or another upon return. This may not necessarily mean that it is merely traveling outside the country that gives one an edge, but rather, as some interviewees plainly stated, work experience and education outside gives a different perspective on doing things and makes returnees more competitive as employees. Claiming both international work experience and local knowledge cannot hurt business, as shown by the more established returnees in the group, given their success and relative name recognition in the industry. Those interviewed, though, for the most part showed an awareness of this privileging of a specific kind of profile, while some saw it as a responsibility to address what they viewed as key challenges in the country.

One such challenge is the quality of education and training in computer science, engineering, and related technical areas. For some, the overall education system was why they left Ghana in the first place. This is consistent with previous work showing that migration and education are often intertwined for skilled labor (Gibson & McKenzie, 2011). The goal for both returnees and nonreturnees interviewed is to build companies that could compete at the international level, and to do that, they need international-quality skills. This means acquiring both technical and managerial skills that are adaptable to changing trends. For the former, the main complaint was that computer science courses (the most relevant to their industry) tend to be highly theoretical in Ghanaian schools and even though students get to do independent work, limited infrastructure means they have limited exposure to sophisticated tools with which to hone skills beyond the few classroom hours. For instance, whereas a student at the Massachusetts Institute of Technology (MIT) in the U.S. may have access to large and fast servers on which to test an idea from his dormitory, a student at the Kwame Nkrumah University of Science and Technology (KNUST) in Ghana must share a smaller, most likely also slower, server with a larger number of people and is thus limited in the scale of projects he can embark on, either as a course requirement or a "pet" project to tinker with.

With regard to management and strategic skills, the perception is that international exposure is integral to becoming competitive on a global scale. This view, expressed most vividly by Rodolf, the most recent returnee in the group of interviewees, is that "there's a clear distinction between the type of experience you get outside and the type of experience you get in Ghana." While he concedes "there are some excellent companies in Ghana," he insists that

they still lack a certain level of discipline, level of experience, level of exposure you get outside and that's unparalleled to just even living outside. Your mentality is different, your exposure is different, and you see things differently. You appreciate a different culture, a different way of doing things, so when you go back to Ghana, you see everything that's done in a different light or you start to think of solutions versus this is just how things are done. (S. Rodolf, personal communication, May 20, 2012)

To address this skill and experience issue then, technology entrepreneurs employ two strategies.

First, they give additional training to locally educated technologists. Tawiah's company, Ostec, did that at earlier stages of the company's existence, as did a number of other, more established returnees such as Dadzie of Rancard. Tawia of Leti Arts, who was trained locally at KNUST and is currently pursuing a distance graduate degree at the Open University, also uses training as a response to the dearth of specific skills he needs from the pool of university graduates available for his gaming company. He and his Kenyan partner (who works from Nairobi) must hire consultants to do much of the work, but they have instituted an internship program in which Tawia devotes considerable time training students to become familiar with the gaming environment, apply their existing skills to the field, and acquire new ones that he teaches them. A passionate advocate for African games (stories, characters, etc.) in mobile and online spaces, he stressed that not all the skills need to be technical, as the gaming environment requires diverse skills such as storytelling, editing, etc. As such, his trainees include nontechnical students whom he teaches to apply their creative skills to a very different environment than they are exposed to in school.

Thus, training people is a pragmatic move that fulfills an immediate need (employing the right people) and generally lifts the skill pool in the industry to the quality these entrepreneurs want. It was sometimes framed as "doing something" or taking action to fill a different kind of gap in the nation's infrastructure. For those receiving the training, in addition to gaining employment in their industry of choice, they ostensibly receive

what should become an opportunity for career advancement in a corporate setting, and an enhancement of skillsets not common in the country as a whole. The question, however, remains whether these possibilities for advancement are indeed realized, given that upper management is populated by returnees, and that setting up one's own technology enterprise, while for the most part requires little to start up, requires significant resources to scale up.

The second strategy is to hire from the international labor market, that is, firms owned and run by returnees actively recruit skilled internationally based Ghanaians to return home to work with and for them. Dadzie's company, Rancard, has mostly returnees in management, notably graduates of Yale, Harvard, and other top U.S. schools. Those at the top level of management in Tawiah's company were recruited mainly from the UK, which is the other market he is familiar with. Such internationally trained managers are perceived to be of the highest quality, and therefore, the tipping point is when the company can afford to hire them.

You're competing with everyone else for them . . . the key difference for us now is that we have the resources to go out and compete outside of Ghana for the best . . . The standards that we demand are very high of all our managers. We do compete with the largest industries for the best candidates and we will pay them well. Absolutely. We compete on money, and you know, the way I look at it, let's get quality in here and our customers will pay for it. (J. Tawiah, personal communication, April 17, 2012)

Hiring senior management from abroad almost exclusively could be interpreted as privileging international travel and an upper-class education. The sentiment that there is something unique about working abroad that makes one a better professional or management-level employee may inadvertently promote the idea that one must travel outside Ghana to succeed. This is a cosmopolitan vision that reinforces returnees' elite position in the broader Ghanaian society and complicates their developmental vision as it could limit local engagement and the opportunities available for the very people being recruited and trained locally who may also be seeking to participate in the global knowledge industry from home.

A positive reading, however, is that it signals the transnational manner in which the Ghanaian entrepreneurial class views itself and how it endeavors to undertake industry development by leveraging international and localized expertise. Arguably, they could simply hire expatriates or more returnees at nonmanagerial levels, as costly as that may be to the bottom line. However, they all seemed to hold strong opinions on using Ghanaian talent, encouraging their peers to return also, partly because they thought they were best suited to combine world-class knowledge with a local understanding of the Ghanaian culture and partly because it strengthens the Ghanaian, not expatriate, skill level within the country. Training then fosters knowledge transfer and arguably transforms the corporate culture, both managerially and technically.

5. Discussion

Returns to Ghana demonstrate that as smaller economies in the South join the global information society, careers and occupational opportunities that go along with it make it feasible for emigrants to return home. In general, the motivations for skilled emigrants returning from the North were framed mainly in lifecycle terms, that is, as a matter of timing or opportunity for the self and/or family instead of income. The overlay of education and elite status in the choice to go North and return are similar to findings in the Pacific region and Southeast Asia.

The occupational choice of those interviewed, compared to their parents' generation, suggests a shift within the larger Ghanaian society toward a new entrepreneurial elite based mainly in urban areas. During the Industrial Age in the West, it was the norm to work in a factory if you were not landed gentry. As whole economies and societies changed, so too did the workforce. Prior to colonial rule in Ghana, most people followed their families into farming. With British rule came new institutions such as law courts (an entirely different system from the way disputes were traditionally settled by chiefs and tribunals) and formal education (wherein one left home and went to a classroom to be trained in a new language and subjects). This meant new occupations were created, such as teachers of a new language (English), physicians familiar with Western medicine, lawyers adept at the new, imposed British legal system, and so on. The professional classes grew and civil service as a career choice became more and more popular as the system of governance changed.

Today the public sector still absorbs some graduates from the country's universities; however, anecdotal evidence suggests there is some dissatisfaction among the younger generation in terms of remuneration and long-term professional mobility. While government employ may be secure (its most distinguishing feature in a country with high unemployment in the formal sector), it is increasingly less desirable for what appears to be the new, more entrepreneurial class emerging in the country. Many young Ghanaians work in wholly new industries that did not exist when their parents were young, especially in ICT. This is not unique to Ghana, for as technology changes by generation, our capacity as humans to create and innovate improves with it, and many people now do things their parents or grandparents did not imagine possible.

The rapidity with which the ICT industry evolves is remarkable compared to other industries. It is one that allows for quick entry in a place with significant infrastructural challenges such as Ghana. Sometimes all it takes is a laptop and/or mobile phone and the requisite skillset to create a new program or application. These tools are fairly ubiquitous within the urban and educated populations in Ghana, and increasingly, several institutions in the country focus on training programmers and developers in tandem with the government's explicit push toward developing the ICT sector as a way to join the global information society. The characteristics of the global ICT industry, in terms of how easy it is to transfer certain skills across borders (such as the ability to program or manipulate computer code) and the relatively little capital required to start some kinds of enterprises (such as application development) make the case of returnees in this particular sector in Ghana relevant to our understanding of skilled return migration in contemporary Africa to some degree. To be sure, some ICT enterprises (such as hardware manufacturing) require extensive capital investments and take more than a laptop. However, the point here is that the affordances of new communication technologies—both their technical properties and the relative portability of the skills needed to make them work at various levels—have increased the potential for uses and modifications, and facilitated a relatively easier transnational flow of knowledge and information. This potential is part of what drew many of the skilled migrants interviewed back to Ghana; that, and the perception that the industry is well-suited for entrepreneurship. The ICT industry's comparatively early stage of growth also makes it an open field for entry, especially in light of the capital requirements.

Unlike the younger returnees in Ammassari's (2004) study, who were less likely to point to nation building or development as a reason for returning, these (also young) returnees argued that they were motivated by the promise of ICTs as avenues for entrepreneurship and for filling infrastructural gaps, and the possibility that their expertise and experience could be transferred through training and industry practices. They were not asked about development-related motivations but they consistently included it in their responses to questions about why they returned and what they do. It therefore seems meaningful to them that they enact their development vision in a way that promotes social, cultural, and economic transfers in support of capacity building and service provision within the country. This is likely where they would be willing to expend more energy should the state or other institutional actor decide to coordinate additional development efforts.

Development, in a general sense, addresses improved social and economic conditions for individuals and societies; however, it is very much a contested notion, with multiple meanings for different social groups. These multiple meanings are articulated, or given expression, in ways that are not uniform, as they derive from the stock of personal and lived experiences that guide individual action. Moreover, their translation into action (or enactment) also reflects the various circumstances, experiences, goals, and capabilities that different people bring to the term. Thus, any meaningful engagement, be it through aid, capacity building, state policy, or other means, must include the subjectivities of those for whom it is most pressing or relevant and acknowledge the roles they give themselves. In some ways, this is similar to what advocates of participatory development emphasize, particularly on the point of giving voice and agency to those for whom decisions are being made, as well as a deeper understanding of sociocultural contexts (Jennings, 2000; Mansuri & Rao, 2012). However, the core issue here is the independent, uncoordinated, and locally focused activities of those living within the "development context," rather than an imposed or externally driven process by aid or donor agencies or even the state. This kind of development from within is likely more sustainable, given the right institutional arrangements and active engagement from those impacted by actions toward that end.

6. Conclusion

Ghanaians who left for greener pastures have been returning to the country since the 1990s. Given the resources required to successfully relocate and remain in the professional and business class, returnees appear (relative to the rest of the population) to be of elite stature within the Ghanaian society. However, their return mirrors the global South–North circulation of skilled (technical) labor. Like other relatively wealthy migrants elsewhere, income was not a primary factor for returning, but rather lifecycle considerations and opportunities for entrepreneurship and contributing to social and economic development in different ways seemed more relevant (Gibson & McKenzie, 2011). Other research mentions nation building or development as important to some skilled returnees, and indeed, the returnees interviewed for this article also emphasized the desire to "do one's part" in moving the country to the "next level," while creating globally competitive enterprises.

I have shown that those motivations are manifested through actual choice of enterprise and organizational practices. Namely, the relatively easy entry into the ICT sector served as an impetus, not only for the provision of products and services that address broader needs such as financial payments and security, but also organizational activities that, potentially, could fill some gaps in corporate culture, education, and skills acquisition in the ICT industry. In general, these efforts characterize the importance of social contributions to development, as articulated by the very people working in industry, not by the state, researchers, aid agencies, etc. These efforts suggest an increasingly formalized entrepreneurial space in Ghana and showcase grassroots efforts at industry building. Ultimately, such efforts must tie in with state efforts at developing specific industrial capacities in pursuit of broader economic growth through both the ICT industry and skilled labor that has migrated. The key policy challenge remains coordinating such efforts in a way that leverages the human capital that these sorts of returnees represent, specifically the efficient transfer of knowledge and skills to others.

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Seyram Avle, Researcher, University of Michigan, USA. seyram@umich.edu

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