Learning and Knowledge Transfer in Africa-China Joint Ventures: 
An Exploratory Study

Thèse

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Sous la direction de :

Zhan Su
Résumé

À l’heure des diverses controverses sur la présence de la Chine en Afrique, les études sur la nature et l’ampleur des relations qu’entretiennent ces deux régions continuent d’affluer. La Chine, puissance économique en émergence, continue d’accroître son internationalisation vers l’Afrique. En effet, la Chine est aujourd’hui le premier partenaire économique et commercial de l’Afrique. Le continent africain est aussi en émergence avec notamment plusieurs pays au plus haut taux de croissance économique au monde. Ces dynamiques se traduisent par des rapprochements croissants notamment entre les entreprises des deux régions. Cette thèse s’intéresse à cet émergent rapprochement. Elle apporte ainsi une contribution dans le débat sur les motivations et retombées de ce rapprochement.

Le premier article aborde la controverse sur la présence chinoise en Afrique particulièrement en contrastant les regards occidentaux et du sud à travers une revue exhaustive et critique de la littérature relative aux discours dominants ou marginalisés. Les résultats indiquent que les études existantes restent discutables et nécessitent davantage de rigueur scientifique.

Le deuxième article examine 29 coentreprises sino-africaines dans 12 pays d’Afrique sous l’angle d’apprentissage et du transfert de connaissances. Les résultats indiquent que les partenaires chinois emploient cinq stratégies majeures pour monopoliser leurs connaissances en fonction du pouvoir disponible et du type de connaissances. L’article propose un modèle dynamique de gestion de connaissances.

Le troisième article aborde l’apprentissage et le transfert de connaissances selon la perspective du capital social et des informalités organisationnelles. Les résultats indiquent des Africains entrepreneurs, ayant souvent utilisé des mécanismes sociaux informels, voire même clandestins, pour acquérir des connaissances.

Le quatrième article analyse les faiblesses des Africains en matière de transfert de connaissances. Il combine les perspectives stratégique et institutionnelle pour un meilleur transfert de connaissances. L’analyse souligne la nécessité de corriger ces faiblesses et d’adopter une démarche dichotomique pour développer un cadre intégrateur de formulation de politiques et stratégies de développement de connaissances.

La conclusion présente les contributions théoriques et pratiques de l’étude et la portée des résultats. Elle souligne aussi les limites de l’étude et propose des perspectives futures de recherches.

Mots-clés : Apprentissage organisationnel ; transfert de connaissances ; acquisition de connaissances ; partage de connaissances ; apprentissage ; Afrique ; Chine ; sino ; coentreprise ; alliance ; stratégie ; gestion de connaissances ; politique
Abstract

Amidst various controversies concerning China’s influence in Africa, studies on the nature and extent of the relationship between these two regions are increasing. China, an emerging economic power, continues internationalization into Africa. China is now the largest trading partner of Africa, a continent emerging with one of the highest economic growth rates in the world. These dynamics have resulted in increasing rapprochement between companies from the two regions. The current research focuses on the emerging debate on African and Chinese motivation for this rapprochement.

The first paper in this dissertation discusses Chinese presence in Africa and contrasts the Western and Southern perspectives through a comprehensive and critical review of the literature. The results indicate that greater scientific rigor is required in existing studies that are considered controversial.

The second paper examines learning and knowledge transfer in 29 Africa-China joint ventures in 12 African countries and proposes a dynamic model for knowledge control. Chinese partners employ five strategies to control their knowledge assets according to the available power and the type of knowledge.

The third paper discusses learning and knowledge transfer from the perspective of social capital and organizational informalities. The results indicate that entrepreneurial Africans use informal or sometimes unconventional social mechanisms to acquire knowledge.

The fourth paper analyzes Africans’ institutional and organizational weaknesses with respect to knowledge transfer. This paper combines strategic and institutional perspectives toward better transfer of knowledge. The results indicate major weaknesses and suggest an approach toward an integrative framework for strategy and public policy formulation for knowledge development.

The conclusion presents the theoretical and practical contributions of this study, highlights its significance, underlines the limitations, and finally offers research avenues.

Keywords: Organizational learning; knowledge transfer; knowledge acquisition; knowledge sharing; learning; Africa; China; Sino; joint venture; alliance; strategies; knowledge management; policy
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List of abbreviations

ABDC: Australian Business Deans Council
AFDB: African Development Bank
AGOA: African Growth and Opportunity Act
AIB: Academy of International Business
ASAC: Administrative Sciences Association of Canada
AU: African Union
CEO: Chief Executive Officer
CIRRELT: Centre Interuniversitaire de Recherche sur les Réseaux d'Entreprise, la Logistique et le Transport
COMESA: Common Market for Eastern and Southern Africa
ECCAS: Economic Community of Central African States
ECOWAS: Economic Community of West African States
FDI: Foreign Direct Investment
FOCAC: Forum on China-Africa Cooperation
FSA: Faculté des Sciences de l'Administration
IGAD: Inter-Governmental Authority on Development
IJV: International Joint Venture
JV: Joint Venture
NEPAD: New Partnership for Africa’s Development
OSAA: Office of the Special Adviser on Africa
R&D: Research and Development
SACU: Southern African Customs Union
SADC: Southern African Development Community
SSHRC: Social Sciences and Humanities Research Council
Vanier CGS: Vanier Canada Graduate Scholarship
WTO: World Trade Organization
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Yes, we did it!
Preface

Article 1: This paper is a critical analysis of the major studies on China’s engagement with Africa. A systematic literature review explores the main controversies on Chinese investments and companies in African countries. The article was accepted for publication on July 25, 2014 by Critical Perspectives on International Business, a UK-based journal. Prior to its submission to this journal, the paper was presented at international conferences including the ASAC Conference. A significantly modified version was also presented at the 2012 China Goes Global Conference held at Harvard University. Constructive feedback from these conferences contributed to the refinement of the article. The article was co-authored by my doctoral adviser, Professor Su, but Ado Abdoulladre was the principal author.

Article 2: This paper addresses knowledge control in Africa-China JVs in 12 African countries. The study explains power operations in the JVs and the control strategies that the Chinese alliance partners used to monopolize their knowledge assets. This paper was presented at the 2015 AIB-Sub-Saharan Africa Chapter Conference in Johannesburg, South Africa and won the Best Paper Award. The article was then submitted to a journal. The article was co-authored by my doctoral adviser, Professor Su, and with the collaboration of Dr. Roseline Wanjiru. However, Ado Abdoulladre was the principal researcher, and his contribution is predominant because he drafted the majority of the content.

Article 3: This paper explores learning in Africa-China alliances from the perspective of organizational and individual informalities and the mobilization of social capital. The paper explores the ways that African partners adopted to manage their learning and knowledge transfer processes from their Chinese counterparts. This paper was presented at a competitive session at the 2015 Annual Conference of the Academy of International Business in India. After improving the content based on reviewers’ comments, the article was then submitted to a journal. The article was co-authored by my doctoral adviser, Professor Su, and with the collaboration of Dr. Roseline Wanjiru. However, Ado Abdoulladre was the principal researcher who made the greatest contribution by drafting the overall content. Finally, the methodology section of this article (the original version submitted to the journal) has been shortened because of its many similarities with article two in terms of data collection and interview processes.

Article 4: This paper adopts a prospective and normative approach based on a strategic and institutional perspective. The paper proposes better ways for Africans to increase their learning potential and knowledge gain from their Chinese partners. Recommendations for improvements to the Africans’ organizational, national, and pan-African characteristics and behaviors are offered to enable better learning and knowledge transfer and sharing in Africa. This paper suggests strategies for achieving Africa’s potential for industrial development. The paper was presented at the 2014 Knowledge, Economy, and Society Conference in Sydney, Australia. It

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was then submitted to a journal. The article is co-authored by Professor Su, but Ado Abdoulkadre was the principal contributor and developed the overall content. The methodology section of this article (the original version submitted to the journal) has also been shortened because of its many similarities with article two in terms of data collection and interview processes.

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0. Introduction

African countries are engaging in increasing dynamic rapprochement with their Southern peers. A new form of cooperation for some, a reconfiguration of the international economic order for others, the assessments of this emerging rapprochement between developing nations are diverse. Economic cooperation between emerging country actors is intensifying. This is the case with Africa-China cooperation, which has expanded rapidly and significantly during recent years through cooperation arrangements, partnerships, joint ventures (JVs), and other types of alliances between Chinese and African companies. However, Africa-China cooperation is seen by various actors as either Chinese exploitation of Africa or Chinese support to Africa’s development and a win-win cooperative situation. This research focuses on Africa-China cooperation, partnerships, and JVs. The research critically assesses the state of current knowledge in Africa-China literature and examines the learning and knowledge transfer phenomenon by exploring the learning processes and achievements of Africans within JVs formed with their Chinese partners in twelve African countries.

0.1 Research context

Africa has often maintained economic cooperation with its traditional partners to benefit from preferential trade agreements, such as the African Growth and Opportunity Act (AGOA), or for humanitarian concerns (Yin & Vaschetto, 2011). However, in the current context of South-South cooperation, emerging countries such as China promote their trade relations with Africa on the basis of complementarity discourse between the two economies and to pursue bilateral and multilateral mutual interests while increasing interdependence between the two parties. For example, Yin and Vaschetto (2011) stated that while China exports its goods to Africa, it deploys parallel efforts to strengthen the Chinese market for imported African goods. However, the presence of China in Africa is subject to debate among researchers but also among the Chinese, traditional Western partners, and Africans, and there are various positions and conflicting assessments. With respect to Chinese motivations, studies such as Marysse and Geenen (2009) suggested that the Chinese policy of cooperation with Africa is fundamentally based on the desire to access the natural resources of African countries. Herbert (2011), through a study of 10 African countries, emphasized that Chinese infrastructure projects in Africa lack emphasis on the development of African local capacity and knowledge transfer necessary to fulfill African ambitions to industrialize.

The controversy over the status of Africa-China relations is broadening the research on central issues related to Sino-African partnerships. This current research contributes to the literature and explores a specific aspect of Africa-China cooperation by investigating the study of learning and knowledge transfer in Africa-China JVs. The current context of market globalization, multifaceted alliances, and cross-border competition is increasing the use of JVs because of their strategic significance in foreign markets and as a means of acquiring and
developing knowledge from and through the partners involved (Ozorhon, Arditi, Dikmen, & Birgonul, 2010). Wind and Perlmutter (1977) argued that internationalization decisions are a major concern for firms in the selection of an appropriate strategy to establish successful international partnerships. Recent years have yielded significant theoretical contributions to the internationalization strategy field that address international alliances such as JVs. An IJV is a separate legal entity that is partly owned by parent companies from different countries (Shenkar & Zeira, 1987) and widely used as a means of collaboration. JVs help to achieve several organizational objectives, and the involved partners have specific motivations. The various advantages of JVs for knowledge transfer, and the incentives offered by several host governments justify, in part, preferences for IJVs during internationalization in emerging countries (Walsh, Wang, & Xin, 1999). However, despite their wide use, JVs do not guarantee success (Meschi & Cheng, 2002). Many studies have indicated that several JVs, particularly those in emerging countries, present serious management challenges and suffer from a lack of performance (Beamish, 1988; Sim & Ali, 1998) with respect to knowledge transfer. The explanation for these various problems and failures is thus a major research topic, and further study is required on the determinants of smooth JV functioning and success. To date, existing results are diverse and often contradictory because of different methodological and theoretical approaches, but also because of variations among industry types and JV host country characteristics (Anand & Delios, 1997; Bond, 2002; Brouthers & Brouthers, 2001; Chang & Rosenzweig, 2001). Therefore, the multiple existing findings reflect the specific context and framework of the associated study, and it is difficult to generalize conclusions on the success of JVs and their determinants. Context and contextualization matter when conducting rigorous research and results analysis.

This research focuses on the Africa-China JV context. The study contributes to the understanding of inter-organizational learning and knowledge transfer mechanisms and identifies the conditions that promote or inhibit learning and knowledge transfer success between partners. Beamish (1985) argued that because JV operating environments are different, the managerial and organizational experiences accumulated in other countries or with other partners cannot automatically be transferred although the occurrence of inter-organizational learning depends on the previous experience of each partner. Therefore, JVs work differently in different environments, and learning occurs according to the dynamic characteristics of the environments in which those JVs operate (Harrigan, 1984). The external environment thus influences the configuration, the proper functioning of the alliance, and inter-organizational learning.

0.2 Research questions and objectives

The main objectives of this research are, first, to clarify some of the controversy surrounding the Africa-China win-win or lose-win relationship from the perspective of knowledge transfer and inter-organizational learning. Second, the research aims to strengthen the literature on learning and knowledge transfer within South-South
JVs and within the Africa-China context because existing research has mainly focused on JVs operating in industrialized countries (Nigam & Su, 2010).

Therefore, this study answers the following key questions and sub-questions concerning Africa-China relations and in the specific context of Africa-China JVs:

- What is the current state of knowledge and controversies on China’s presence in Africa?
- How does the knowledge transfer mechanism between Chinese and Africans function?
  - What are the achievements of Africans with respect to their initial learning objectives?
  - What are the knowledge management strategies of the Chinese, and how do they function?
  - How do Africans acquire knowledge, and what strategies and tactics do they use?
  - What facilitates or prevents learning and knowledge transfer in Africa-China partnerships?

The potential answers to these questions generate another interesting question:

- How can Africans improve their learning and knowledge gain from Chinese partnerships?

### 0.3 Theoretical approach

IJVs can ensure better cooperation between partners through resource complementarities even if partners have different motivations. Each partner seeks to achieve various objectives through the JV. Many companies develop new knowledge and gain access to new markets or scarce resources through the establishment of an IJV. The study of Kogut (1988) argued that IJVs are formed to achieve synergies through the combination of complementary resources of the various partners to develop the competitiveness of the new entity and possibly that of the parent companies. According to Dymsza and Vamberg (1987), the search for cross-border synergies is one of the main motivations for the establishment of JVs and synergies occurring through the combination of resources, capacities, and strengths of each partner within the new organization. Depending on the country of origin, experience, and expertise of each partner, synergies can take various forms, and individual contributions are diverse in nature. Partner objectives in terms of learning and knowledge gain are significant in selecting the right partners and for overall JV success. Since the initiation to form the IJV, each partner negotiates with other partners depending on their prioritized objectives and likelihood of meeting those objectives (Beamish & Lupton, 2009). The goals of each partner, particularly for Southern countries, include the sharing of experiences in the form of inter-organizational and intra-organizational learning. According to a case study by Nam (2011) on the automotive sector in emerging markets, JVs are typically used for mutual learning and to reduce risks related to local uncertainty. Yan and Gray (1994) considered it inconceivable that no learning and knowledge transfer would occur between partners because of the valuable specific knowledge and various contributions of each partner. However, to learn and acquire knowledge at both the individual and organizational levels, several conditions and factors are required. The literature is abundant in this regard.
Table 1 presents a review of the recurring, necessary conditions and factors in the literature for learning and knowledge transfer.

Table 1: Learning and knowledge transfer supporting conditions and factors

<table>
<thead>
<tr>
<th>Conditions and factors</th>
<th>Corresponding studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance of power</td>
<td>Crozier &amp; Friedberg, 1977; Ingham, 1994; Ingham &amp; Thompson, 1994; Kogut &amp; Zander, 1992; Yan &amp; Gray, 1994</td>
</tr>
<tr>
<td>Motivation to learn</td>
<td>Kundi &amp; Saleh, 1993; Lee &amp; Beamish, 1995</td>
</tr>
<tr>
<td>Strategic value of knowledge</td>
<td>Chrysostome, 2000; Hamel, 1991</td>
</tr>
<tr>
<td>Learning skills, absorptive, receptive capacity of individuals and organizations</td>
<td>Hamel, 1991; Lyles &amp; Salk, 1996; Su, 1997</td>
</tr>
<tr>
<td>Knowledge specificities</td>
<td>Claus, 2001; Mar Benavides-Espinosa, 2012; Otto Scharmer, 2001</td>
</tr>
<tr>
<td>Knowledge transfer mechanisms and organizational structure</td>
<td>Grosse, 1996; Inkpen, 2008a</td>
</tr>
<tr>
<td>Rotations, assignments of highly skilled personnel</td>
<td>Inkpen, 2008a, 2008b</td>
</tr>
<tr>
<td>Regular training</td>
<td>Grosse, 1996; Lyles &amp; Salk, 1996</td>
</tr>
<tr>
<td>Joint experimentation</td>
<td>Arrow, 1962; Lei, Hitt, &amp; Bettis, 1996; Miller, 1996; Nonaka, 1994</td>
</tr>
<tr>
<td>Collaboration and positive intercultural interactions</td>
<td>Bowen &amp; Inkpen, 2009; Lyles &amp; Salk, 1996; Mohr &amp; Speakman, 1994</td>
</tr>
</tbody>
</table>

Building upon the different theoretical perspectives and considering the research questions, we develop a theoretical framework to highlight our approach to learning and knowledge transfer. Figure 1 shows the most recurrent requirements for learning and for acquiring knowledge by individuals and organizations.
0.4 Qualitative method: Case study approach

This study adopts a multiple case study approach that, according to Yin (2011), focuses empirically on a contemporary phenomenon within a real context while spanning several investigative sites. The multiple case study method facilitates a thorough understanding of a specific phenomenon in a certain situation and does not attempt to generalize the findings, although Campbell (1975) stated that this methodological approach is a preliminary step towards theoretical generalization. The case study remains the dominant qualitative research method in the international business field (Welch, Piekkari, Plakoyiannaki, & Paavilainen-Mäntymäki, 2011), and the exploratory nature of this research implies that the case study method is an optimal approach (Yin, 2009). Moreover, according to Denzin and Lincoln (1994), the more specific and unique the study object, the more the epistemological rationality of the case study method becomes relevant. The case study is characterized by the limited number of situations in the analysis, the depth of the analysis, and the inductive approach (Gauthier, 2008). Given the exploratory nature of this research, the multiple case study method has the advantage of allowing methodological adjustments during the research process. Stoecker (1991) stated that the characteristics of case studies also shape the choice of theoretical and methodological framework, an idea supported by Gauthier (2008, p. 219), who stated “the best researchers adopt an iterative approach allowing them to refine their research instruments or even to add sub-questions to the original questionnaire.” Another advantage of the multiple case study method is that a holistic approach based on a collection of various information sources (statements, speeches, and official documents) enables a thorough review of the phenomenon complexities (Denzin & Lincoln, 1994). This flexibility proved insightful during our research. Alliances, such as IJVs in Africa, have not featured as objects of significant scientific studies (Beamish &
Lupton, 2009; Uzo & Mair, 2014). However, in recent years, IJV arrangements have become more prevalent on the African continent and with Southern partners such as the Chinese. Therefore, the novelty of the scope of this research justifies an exploratory case study approach to the learning and knowledge transfer phenomenon within Africa-China JVs. The novelty of this subject also emphasizes the innovative aspect of this research. JVs in Africa have not been the subject of major studies (Beamish & Lupton, 2009), however, in recent years, this type of partnership is increasingly used on the African continent with other Southern country partners such as the Chinese. Therefore, the novelty of the research context justifies our proposal to conduct an exploratory study of the emerging phenomenon of learning and knowledge transfer and the subsequent individual and organizational mechanisms within Africa-China JVs operating in Africa.

0.4.1 Data collection

Initially, 43 JVs in Africa were identified and contacted to participate in the research. Overall, 29 accepted to take part in the study. Therefore, the group of 29 Africa-China JVs was selected as research subjects to address the research questions. The selected JVs operate in African countries where China has significant investments. The study objects were exclusively Africa-China JVs with several types of investment from private or public partners. Therefore, established JVs were selected based on public-public, public-private, or private-private partnerships between the Chinese and African governments or companies. The factors used to originally categorize countries with several JVs were composed of social, economic, and political indicators, for example, the amount China has invested in a specific African country. Then, we analyzed the nature of that investment, the type of partners involved, and the establishment date of the JV. The period of interest dated from the early 2000s, specifically, from the year 2001 when China joined the WTO. The identified JVs were located in 12 African countries: Benin, Burundi, Cameroon, Chad, the Democratic Republic of Congo, Ghana, the Ivory Coast, Niger, Nigeria, the Republic of the Congo, Rwanda, and Togo.

Since the entry of China into WTO, several Africa-China JVs have emerged on the African continent in several sectors (Gboyega, Musibau, & Ogunkola, 2011). Consistent with China’s “Going Global Policy,” some JVs were established in African countries that have significant complementarity potential with China (Gboyega et al., 2011) including countries with significant natural resources. Several African countries have laws that require all foreign investors to find a local African partner for any new investment, thus creating more Africa-China JVs in those countries. Also, many African states have revised their foreign inward investment policies to require JVs as the only investment option when creating a new business in those countries. This type of legislation allowed us to identify potential target countries for the selection of Africa-China JVs.

Moreover, the exploratory nature of this study requires caution in the selection of JVs. The JVs must be at least three years old because three years is the minimum that the literature on knowledge transfer considers significant for organizational learning to occur (Chrysostome, 2000; Ingham, 1994; Lyles & Salk, 1996). The
economic presence of China in Africa is a phenomenon that only gained momentum in the early 2000s following China's accession to WTO, and this limits the scope for selection among the JV group. Since 2001, many Africa-China JVs have emerged in Africa, but they remain immature and limited in number compared to other South-South alliances.

0.4.1.1 JV selection
Yin (2009) suggested that depending on the constraints of the researcher's resources, the greater the number of cases analyzed, the superior the research in terms of relevance and insights pertaining to alternative phenomenon explanations and potential for generalization. Therefore, this research includes as many Africa-China JVs as are available, although the overall selection was based on certain predefined criteria. The age of the JV was a key selection criterion, and we adopted an age referential of three years. Three years is the minimum existence retention period in several studies on IJV learning. This time frame is considered sufficient for the occurrence of organizational learning. Prior studies that used this time threshold include Ingham (1994) and Lyse and Salk (1996), which explored knowledge acquisition mechanisms in Hungarian JVs. The studies adopted a minimum duration of three years as a JV selection criterion. Another criterion that we assumed is that the JVs formed among African and Chinese partners only. We were interested in JVs formed only by African and Chinese partners to avoid any bias during the data analysis because the scope of this study is Africa-China relations only. The JVs operate in various sectors and their number often depends on the size and nature of cooperation that the African country has with China. Overall, we selected 10 JVs in telecom and media, three in aviation services, four in mining and refining, one in water sanitation, two in manufacturing, three in power and energy (thermal, biomass, and renewables), three in construction, and three in textiles. The fieldwork was conducted in 2013 and 2014 in China and Western, Central, and Eastern Africa.

0.4.1.2 Recruitment and interview processes
The interview data are primarily obtained from African respondents because this research is from an African perspective. Based on predefined selection criteria, we contacted participants in the field through several channels including LinkedIn profiles, using a snowball effect, and through our personal network because we had previously participated in similar projects in China. In some cases, during the fieldwork, JV employees introduced the interviewer to individuals who fit the participant selection criteria. We conducted interviews with Africans working in the JVs for the African parent companies or the host country government. We met with at least two individuals from each JV. Interviews with African employees and the local JV partner allowed the exploration of different facets of the key research questions. The various thematic information facilitated understanding of the learning and knowledge transfer phenomenon in the Africa-China JVs from an African perspective. Additionally, interviews were held with representatives and leaders of several Africa-China JVs to
gain insight to the learning and knowledge transfer phenomenon from top management. Thus, each JV was the subject of interviews with several of its stakeholders. Data from other sources, such as annual reports, have been collected for triangulation purposes and to ensure the reliability and validity of the information collected. Participants included engineers, operators, technicians, managers, managing directors, ministers or their deputies, CEOs, translators/interpreters, and members of the board of directors. Some participants occupied multiple positions simultaneously because they worked for both the government and the company. Participants possessed between five and 19 years of work experience. All participants had worked for at least three years within a JV environment with Chinese employees who acted as either their colleagues or supervisors. Official documents, such as the JV establishment terms, the agreements included therein, and collaborative arrangements were also collected as relevant information. These various data were valuable for triangulations when certain information appeared incomplete.

We used a qualitative questionnaire to interview respondents. The six main topics discussed during each semi-structured interview included (1) the acquisition of new knowledge; (2) the joint creation of knowledge; (3) motivation, skills, absorptive capacity, and specificity of knowledge; (4) structure, transfer of knowledge, and power relations; (5) organizational and individual communications; and (6) the determinants of successful learning. Because of the semi-structured nature of the interviews, each respondent had the opportunity and latitude to raise specific issues that were not necessary fully addressed by our questions. Because of the novelty and exploratory nature of the research, we deliberately encouraged respondents to open up and discuss details. Overall, we interviewed 75 consenting participants.

0.4.1.3 Research and field work challenges
This research was challenging on many fronts. First, the subject is new, and the literature is early in its development. On several occasions, it was difficult to find reliable and quality information sources for learning and knowledge transfer in the Africa-China context. Reports and publications are rare and often journalistic. This stretched our research agenda and required a comprehensive critical literature review to assess the state of the current knowledge in the field. This extra effort resulted in the first article of this thesis, which is now published. For the data collection field work in Africa, we faced tremendous challenges visiting 16 African countries between 2013 and 2014. We traveled to all countries where Africa-China JVs were identified using various means of transportation. Of the sixteen countries visited, we obtained data from 12 countries for a total of 29 JVs out of 43. On several occasions, we were denied to interviews with JV employees and, in extreme cases, were unable to contact the JVs. The Chinese partners were reluctant to allow interviews. Such opposition did not come as a surprise because collecting data in Africa is extremely challenging, particularly when the project requires adaptation and several local trips in an African environment that is not research-collaborative (Lages, Pfajfar, & Shoham, 2015; Rogerson & Rogerson, 2010).
0.4.2 Data analysis

The data collected was analyzed through a qualitative approach. The majority of the data is in the form of words and speeches, and a qualitative analysis method is considered the most relevant for case studies (Miles & Huberman, 1991), although Yin (2011) suggests that there is always some risk related to subjectivity and neutrality inherent in any research process. There are two complementary processes in qualitative analysis: deconstruction and reconstruction (Deslauriers, 1991). Given the exploratory and predominant qualitative nature of our data, this study has adopted content analysis (Lincoln & Guba, 1985; Strauss, 1987; Taylor & Bogdan, 1984) as the method of data analysis. The data collected were first divided into small segments that were later reintegrated into a coherent set through a cyclical and iterative process. The main steps of these iterations were data codification and layout, categorization, and gradual highlighting of the findings in line with the theoretical dimensions and the thematic issues discussed during the interviews. These steps in the qualitative analysis were described by Miles and Huberman (1991) as concurrent analytical workflows. Therefore, we rigorously analyzed the data and performed triangulations given the various sources of data and the diversity of the African respondent profiles and the partners from 12 African countries. Moreover, we used transcription support software for comprehensive data processing and elaborate reconstruction considering all relevant interview segments. A data coding system was established to structure the various facets of the verbatim transcriptions and to ensure consistent categorization of extracts to better understand the learning and knowledge transfer phenomenon. The codification consisted of assigning a symbol or a keyword to each extract from the text to condense the data into simpler units and to capture and analyze the most significant segments of the transcript (Huberman & Miles, 1991). We then arranged the data using tables and figures, enabling a better layout of data segments and the identification of preliminary trends. The consolidation of those preliminary trends led us to preliminary conclusions from the overall analysis of the empirical data. We constantly checked and compared our preliminary findings with the existing literature on learning and knowledge transfer to draw our final conclusions while considering the possibility (and opportunity) of contradictions between our results and other studies’ findings. However, the data analysis process did not start only once all the data had been collected. The literature on research methodologies and data analysis emphasizes that the researcher must consider methods for data analysis from the initial stages of the data collection process (Eisenhardt, 1989). Silverman (2010) argued that data analysis does not occur only at the conclusion of field work but during the entire research process. Therefore, the researcher remains in a virtually permanent state of analytical thinking throughout the research project. Indeed, we repeatedly revised our initial analysis grids because the phenomenon was more complex and multifaceted than expected. Consequently, we occasionally readjusted our analysis approach. A logbook in which we entered our field notes concerning methodological adjustments, categorization, and other relevant changes helped to refine the overall analysis.
0.5 Ethical considerations
This research is approved by the Research Ethics Board of Laval University (CERUL). We took all necessary measures to enforce the ethical principles that govern the practice of research in social sciences involving human subjects. Additional ethical considerations were also enforced to avoid any conflict of interest. Although the researcher held the Vanier CGS award from Social Sciences and Humanities Research Council and other scholarships from institutions such as FSA and CIRRELIT, the objectivity of this research has not been affected. The process from the formulation of the research questions to data analysis and the publication of results has conformed to the ethical dashboard of Laval University. Thus, all documents related to the participant recruitment process, the interviews, and the conservation of interview transcripts have been carefully securitized and approved by a competent organization. Overall, all recruited participants voluntarily agreed to be interviewed, although many requested strict confidentiality. In total, we contacted 86 individuals for interviews from which 11 refused to participate. Fourteen interviewees did not authorize a tape-recording of their interview but permitted note taking. Although conducting research in Africa is challenging because respondents are unfamiliar with scientific research, we fully respected all the terms of our ethical engagement and insured that the collected data are anonymized and secure without prejudicing any interviewee.

0.6 Thesis structure
This thesis’s main body is composed of four articles, each an individual chapter. Additionally, the introduction and the conclusion represent two independent parts each. Overall, the thesis contains six parts. A link between all the chapters has been established to ensure coherence in the research as a whole. Each of the four articles contributes to the answers to the main research questions presented earlier. The general introduction specifies the Africa-China context, the research area, and geographical delimitations. The first chapter (the first article) addresses the controversies over China’s presence in Africa, and the identification and critical analysis of the main studies related to this subject. The second chapter (the second article) identifies the main strategies employed by the Chinese JV partners to protect their strategic knowledge assets. The third chapter (the third article) explores the strategies and tactics, used by African JV partners to learn and to gain knowledge from the Chinese. The fourth chapter (the fourth article) identifies Africans’ weaknesses with respect to knowledge transfer and proposes potential solutions to reverse the significant lack of learning and knowledge gain. It provides recommendations for improvements in knowledge transfer towards Africans. Finally, the general conclusion recalls the major findings, the empirical and theoretical contributions, the managerial and policy implications, and the limitations of the research as a whole. Figure 2 shows the overall thesis structure.
Figure 2: Thesis structure
0.7 References


1. Chapter 1: China in Africa: A Critical Literature Review

Abstract
This article critically assesses the major contributions to the academic literature on China’s increased focus on Africa, from 2001 to 2011. It discusses the key trends concerning China’s presence in Africa, and draws conclusions on the significance of the studies by emphasizing and contrasting the prevailing positions. Based on a qualitative approach employing an integrative and comprehensive literature review, we performed a content analysis of high-impact, peer-reviewed articles. The paper questions and repositions some of the existing controversies. The results from existing studies remain questionable, requiring further clarification and more theoretical and empirical backing. It, moreover, highlights the notion that behind the explicit neutrality of views of China’s presence in Africa, implicit assumptions may exist. These are often in the differences in narratives conveyed by Western and Southern stakeholders. Most of the conclusions drawn from this paper need to be re-explored and supported by additional research. This could be done by widening the scope of the analysis. Studies need to provide more empirical support for their assertions, through quantitative data and evidence-based qualitative analyses – all within a framework that considers more cultural, social, and historical dimensions. The paper also suggests that an institutionally based view appears most relevant in better explaining China in Africa. This paper reviews a decade of research on China in Africa, and presents a snapshot of the current state of knowledge. It also raises concerns to be analyzed by future research, and proposes new avenues for better understanding China’s presence in Africa.

Keywords: Africa-China cooperation; intra-African trade; Sino-; controversies; African industrialization; natural resources; developing countries; sub-Saharan Africa; FOCAC; Chinese trade policy
Chapitre 1 : La Chine en Afrique : une revue critique de la littérature

Résumé

Cet article évalue de manière critique les principales contributions à la littérature académique sur l'engagement accru de la Chine en l'Afrique, de 2001 à 2011. L'article examine les principales tendances relatives à la présence de la Chine en Afrique et tire des conclusions sur la portée des études existantes en soulignant et en contrastant notamment les positions dominantes. L'approche de recherche est basée sur une démarche qualitative à travers une revue de littérature intégrative et globale. Ainsi, nous avons effectué une analyse de contenu des articles majeurs publiés dans les principales revues à comité de lecture. Le papier questionne et repositionne alors certaines des controverses existantes. Les résultats indiquent que les études existantes restent discutables et nécessitent davantage d'éclaircissements et plus de rigueur méthodologique et d'assise théorique. Aussi, les résultats suggèrent que, derrière la neutralité explicite des avis sur la présence de la Chine en Afrique, des assimptions implicites existeraient et se manifestent bien souvent dans les différences au niveau des discours et récits véhiculés par les acteurs de l'occident et ceux du sud. Pour cela, la plupart des conclusions tirées de ces études ont besoin d'être réexplorées et soutenues par des recherches supplémentaires. Cela pourrait être fait, entre autres, par l'élargissement de la portée des analyses. De ce fait, les études doivent fournir un soutien plus empirique pour leurs assertions, à travers des données quantitatives et qualitatives fiables et des analyses bien fondées et plus objectives et, cela, dans un cadre qui considère davantage les dimensions culturelles, sociales et historiques africaines, voire même chinoises. L'analyse suggère également qu'une perspective institutionnelle apparait intéressante et pertinente pour mieux expliquer la présence et l'engagement croissant de la Chine en Afrique. L'originalité de cette recherche repose sur le fait qu'elle passe en revue une décennie de recherche sur la Chine en Afrique et donne ainsi un aperçu fort significatif de l'état actuel des connaissances dans le domaine. L'étude soulève également des préoccupations qui méritent d'être analysées par les recherches futures et propose en conséquence de nouvelles pistes de recherche pour mieux comprendre la présence de la Chine en Afrique.

Mots-clés : Coopération Afrique-Chine ; commerce intra-africain ; sino- ; controverse ; industrialisation ; ressources naturelles ; pays en développement ; subsaharien ; FOCAC ; politique commerciale chinoise
1.1 Introduction

The last decade saw a rise in China’s global ambitions, as well as an increase in research on China’s global growth. The emergence of Chinese internationalization has been carefully scrutinized, not only by academics and business leaders, but by press professionals as well (Wang, 2010). China’s increasingly strong foreign directives have been studied to determine the reasons, and regions, in which China is likely to selectively orientate its program of expansion (Sanfilippo, 2010). However, China’s entry into Africa is subject to numerous questions among the research community, frequently seeking to explain why, and on what basis, the country is investing in Africa. Many of the conclusions drawn by research exploring China’s presence in Africa are negative, particularly with regard to the consequences for the African economy (Chemingui & Bchir, 2010; Elu & Price, 2010; Wang, 2010). The few studies (Wu & Cheng, 2010; Yin & Vaschetto, 2011) that have identified positive benefits are vastly outweighed by the quantity of literature that asserts that Africa is being undermined by its Chinese counterparts. However, the results of many of these scientific studies vary, frequently because the studies adopt micro-orientated perspectives, not to mention that they are often conducted in very different environments within Africa. Consequently, their results, conclusions, and even recommendations vary, leading to a multiplicity of positions among scholars and practitioners across the disciplines (Okoro & Oyewole, 2011), which increasingly contribute to delicate controversies between many key stakeholders (Carmody & Van Dijk, 2011).

Despite numerous questions being raised in recent years, there is still a decided lack of empirical evidence that supports many of the key views. Speculation has become intense in academia, with China’s move towards Africa an emerging and sensitive topic. Wang (2010) has argued that many of the key ideas have only been explored by research papers of a low standard and press articles from partisan journalists. As a result, there have been numerous reports across the world, stating that China’s presence in Africa is substantially and negatively impacting the whole continent. Since few academic papers have rigorously dealt with the steps China has taken in its project of internationalization in Africa, many of the articles have originated in the business press and glossy magazines (Wang, 2010; Ajakaiye & Kaplinsky, 2009). Accordingly, many Africa-China controversies, such as the allegations that China employs prison labor in its construction projects, should be critically questioned. This is because “the information is anecdotal, and often highly prejudicial, generally generated by journalists from the West writing for an audience that is increasingly feeling the competitive pressure exerted by Chinese economic and political actors in Africa” (Ajakaiye & Kaplinsky, 2009, p. 479).
Many studies (Carolina & Murphey, 2009; Shinn, 2007, 2009; Taylor, 2006) also questionably regard China as an opportunistic ally, without self-reflecting on what Martin and Frost (1996) have referred to as a “struggle for intellectual dominance.” As a result, some authors may strategically intend to have their claims believed by major stakeholders for their own advantage. The consequent trend of supporting uncritical conclusions has already been noted, as succinctly highlighted by Mohan and Tan-Mullins (2009, p. 601) who state that “the figures are extremely speculative and lend themselves to inflation and purposeful misinterpretation,” and that these “naturalized statistics” need to be critically examined. For instance, Bräutigam (2009) has pointed out that in 2008, journalists “inadvertently” misled the World Bank. In an official report, the bank had referenced an inaccurate press article by the Dow Jones. The article had claimed that former Chinese Premier, Wen Jiabao, had announced that China had given $44 billion to Africa. However, the currency that Wen Jiabao had referred to was the Chinese Yuan (RMB), rather than the US dollar. So, instead of $44 billion in aid, the correctly converted amount was only $6 billion.

Various research findings, from an increasing number of scientific publications on China in Africa, do exist (Maswana, 2009; Morris & Einhorn, 2008; Shen, 2013; Wang, 2010). However, to date, there has not yet been a systematic analysis or evaluation of the significance and coverage of the literature. A complete evaluation of the most prominent studies should allow for a better understanding of the current state of research on China’s presence in Africa. This is all the more urgent, considering that “the actual developmental role and impact of Chinese investment is often either misunderstood or misrepresented” (Jing, 2009, p. 584). Research publications on the Chinese in Africa are mostly oriented toward findings that highlight a win-lose paradigm, precisely because earlier studies viewed Africa-China bilateral trade as having a negative impact on Africa’s development (Anshan, 2006).

Furthermore, a consensual view is emerging in the literature regarding the presence of China in Africa. This literature almost always argues that Chinese investments in Africa are frequently motivated by the exploitation of Africa’s natural resources – raw materials and oil – and that these are extracted to sustain only China’s development (Taylor, 2009). Methodologies used in these studies have tended to focus on data collected from a national level. In more recent years, studies on Chinese development in Africa have also tended to focus on isolated case studies, a methodology that is, at best, minimally representative (Yin, 2009). Despite these methodological limitations, research conclusions have been frequently generalized to many, if not all, of Africa’s countries (Mohan & Tan-Mullins, 2009). Accordingly, this paper focuses on, among other things, the tendency towards generalization implicit in the methodological approaches employed, and the implications thereof. With the above observations forming the basis of a systematic critique, this paper discusses some of the major and controversial trends in research on Africa-China business cooperation.
1.2 Research approach

This paper adopts a qualitative research approach. It is built upon an integrative and comprehensive literature review, as envisioned by Galvan (2006), who sees such an analysis as an exercise that should go beyond summarizing the relevant literature and include a critical analysis of the relationships between various studies. Congruently, Hart (1998) also regards a literature review as an exercise that should allow the researcher to assess the major issues and debates on a topic, and to analyze the merits of particular studies to evaluate whether the existing knowledge is rigorously structured and organized.

Our review is based on research analysis spanning a decade. To the best of our knowledge, all peer-reviewed articles published on China’s presence in Africa, from 2001 to 2011, have been identified for content analysis. China became a full member of the WTO in 2001, coinciding with its rapid move towards Africa. We collected all the publications related to Africa-China business cooperation through institutionally accessible research databases at the time of publication, and which were published between December 2001 and December 2011. To identify such publications, we conducted a general inquiry through EBSCOhost and ProQuest’s databases, listing all the peer-reviewed academic articles. From these databases, we then selected 110 of the most relevant articles. We used keywords and their associated synonyms (such as China, Chinese, Africa, African, Sino, Afro, Afr*, Chin*) to query publication titles, while ensuring that all the relevant papers were identified, and we applied all the techniques and tips suggested by every database’s search engine to exhaustively identify the relevant articles.

To maximize the reliability of the search, a database specialist from Laval University’s library was consulted to confirm the accuracy and completeness of the query. They identified the same set of articles. Based on the relevance of the papers’ abstracts, 41 articles were finally listed, among which 90% were published between 2008 and 2011. Furthermore, we performed a detailed content analysis by adopting the perspective of Lasswell (1977), who urged that researchers question “who says what to whom in what channel with what effect?” At this stage, all of the selected articles were classified by the specific concepts with which they used to refer to the main issues, in order to avoid bias in the categorization. After the papers were selected and categorized, the key authors’ findings, positions, and ideas were identified in each article. Finally, the views of each author were analyzed by examining the iteration of select controversies in the literature.

The 41 articles were classified according to the journal they were published in, the ranking of which was determined by three prestigious institutions: (1) the Australian Business Deans Council, (2) the Association of Business Schools, and (3) the “Comité National de la Recherche Scientifique.” Table 2 classifies the number of publications on China’s presence in Africa according to the journal of publication and its ranking, which
enabled us to determine whether the selected articles were published in high or low ranking journals, and to also evaluate their significance, primarily based on the journal’s rigorousness.

Table 2: Classification of published papers

<table>
<thead>
<tr>
<th>Article’s Origin by Journal Name</th>
<th>Rank/Institution</th>
<th>Number of Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Policy</td>
<td>A/ABDC</td>
<td>1</td>
</tr>
<tr>
<td>International Affairs</td>
<td>A/ABDC</td>
<td>1</td>
</tr>
<tr>
<td>World Economy</td>
<td>A/ABDC</td>
<td>1</td>
</tr>
<tr>
<td><strong>SUBTOTAL: CATEGORY A</strong></td>
<td></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>Global Economy Journal</td>
<td>B/ABDC</td>
<td>1</td>
</tr>
<tr>
<td>Competition and Change</td>
<td>B/ABS</td>
<td>1</td>
</tr>
<tr>
<td>Development and Change</td>
<td>B/ABDC</td>
<td>1</td>
</tr>
<tr>
<td>European Journal of Development Research</td>
<td>B/ABDC</td>
<td>8</td>
</tr>
<tr>
<td>International Finance</td>
<td>B/ABDC</td>
<td>1</td>
</tr>
<tr>
<td><strong>SUBTOTAL: CATEGORY B</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td>International Journal of Business Research</td>
<td>C/ABDC</td>
<td>2</td>
</tr>
<tr>
<td>Journal of Public Relations Research</td>
<td>C/ABDC</td>
<td>1</td>
</tr>
<tr>
<td><strong>SUBTOTAL: CATEGORY C</strong></td>
<td></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>African Development Review</td>
<td>D/CNRS</td>
<td>8</td>
</tr>
<tr>
<td>Governance</td>
<td>D/ABS</td>
<td>1</td>
</tr>
<tr>
<td><strong>SUBTOTAL: CATEGORY D</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>Chinese Economy</td>
<td>NR</td>
<td>4</td>
</tr>
<tr>
<td>Journal of World Economics and Politics</td>
<td>NR</td>
<td>1</td>
</tr>
<tr>
<td>The Journal of Modern African Studies</td>
<td>NR</td>
<td>3</td>
</tr>
<tr>
<td>Journal of International Affairs</td>
<td>NR</td>
<td>5</td>
</tr>
<tr>
<td>Copenhagen Journal of Asian Studies</td>
<td>NR</td>
<td>1</td>
</tr>
<tr>
<td><strong>SUBTOTAL: CATEGORY NR</strong></td>
<td></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>-</strong></td>
<td><strong>41</strong></td>
</tr>
</tbody>
</table>

ABS: Association of Business Schools (2010 ranking)
ABDC: Australian Business Deans Council (2010 ranking)
CNRS: Comité National de la Recherche Scientifique (2011 ranking)
NR: Not Ranked

1.3 Analysis and discussion

None of the most relevant articles had been published in the Financial Times’ top 45 journals. This fact provides the seed of speculation that during the last decade, very few high-quality research papers have been published on China’s presence in Africa. Moreover, the specialized journals focusing on international business do not generally appear interested in issues related to China in Africa. In fact, among all sources, there is no specialized international business (IB) journal that has published any paper on China’s presence in Africa. This
indicates how new, or at least how marginal, the research related to China’s engagement in Africa is. One of the reasons for such a lack of interest is likely related to the novelty of the topic, primarily because Chinese investments in African countries have only become significant in the last decade. Another reason for the lack of publications on the subject is the difficulty of conducting research in Africa, particularly when it comes to collecting accurate and current data from businesses. Chinese businesses are often reluctant to provide data related to their activities, even in China, and so, it is not at all surprising that they export such reticent behaviour and practices to Africa. This attitude has several consequences, among which is the fact that many published papers (other than the 41 articles we reviewed) are authored or co-authored by Chinese or African researchers, primarily because respondents are more likely to trust their Chinese or African counterparts when sharing sensitive or confidential information. Furthermore, in offering advice to Western researchers in Africa, Erinosho (2008) has commented on this challenge by suggesting that it is the researchers’ responsibility to adapt their methods to the cultural context of their research subject in order to obtain the necessary information. However, the reality is that many papers are not published in notable IB journals, but rather in African or Chinese journals that are neither internationally ranked nor accessible worldwide. Because very few papers have been published in ranked journals by some of the key actors, namely African and Chinese stakeholders, De Haan (2010) has underlined the numerous research opportunities focusing on Africa-China cooperation.

As a result, there are many questions about China’s presence in Africa that are yet to be answered. The current state of knowledge makes it difficult to provide definitive facts about China’s purpose for entering Africa, its internal processes, and the success or failure of its efforts. These recurrent questions support the idea that China’s efforts in Africa are still controversial, with little accurate information about China’s cooperation with African countries emerging.

1.4 China and Africa relationships: win-win or win-lose?

Many studies have argued that Africa-China cooperation is mutually advantageous (Aguilar & Goldstein, 2009; Carolina & Murphey, 2009; Jing, 2009; Wu & Cheng, 2010; Zhao, 2008). Yin and Veschetto (2011) explained that the interests of China and Africa have been reconciled through beneficial, exploratory, and win-win business partnerships. Benefits include the additional revenue that is generated, improved infrastructure in Africa and a boost in African social and economic development. Moreover, Africans have the opportunity to develop economically on their own terms.
In addition to these benefits, China is a member of the United Nations Assembly and has a seat on the Security Council. This makes it an invaluable ally, and allows many African countries to access an intermediate voice with which to make their concerns heard. Furthermore, and in recent years, China has cancelled the debts of several African countries that are of strategic importance to the Chinese economy (Yin & Vaschetto, 2011). China has also continued signing a number of unconditional loans and contracts with African states, in contrast with the traditionally tough conditional financing methods, such as International Monetary Fund loans and the World Bank’s structural adjustment programs that were largely imposed in the 1980s. Moreover, Africans have taken a strategic approach to negotiations with China and gained more bargaining power vis-à-vis its traditional creditors through China’s increasing role as Africa’s financier. In this regard, Shinn (2007, p. 56) has stated that “Africans are generally quick to criticize the conditionality of Western assistance and praise the Chinese...” Opportunistically, in the aftermath of the 2008 financial crisis that caused many traditional development partners to decrease their aid and official assistance to Africa, China announced (at the 2009-FOCAC) the cancellation of 168 debts owed by 33 African countries (Schiere, 2010b). These annulments translate into African leaders’ increasing trust and appreciation towards the Asian rescuer.

It is, however, legitimate to question whether the benefits of cooperating with China will be long lasting. On this issue, Cheru and Obi (2011) see economic advantages only in the short run, leaving Africa’s long-term plans either unknown or at risk. One of the World Bank’s economists, Levy (2011, p. 188), balances this view by arguing that “in an interdependent world, China’s involvement could turn out to be a valuable asset for African countries.” On a macro level, Wu and Cheng (2010) have argued that Africa could learn from some of China’s entrenched policies and practices. These include the government-led and development-oriented anti-poverty programs that have significantly contributed to reducing poverty in China.

The controversy surrounding the relationship between China and Africa as a win-win certainty cannot be solved when all of the African countries are aggregated. According to Schiere and Walkenhorst (2010), this is because the intensification of trade with China does not influence all African countries to the same extent, and the fact that 70% of Africa’s exports to China originate from only four countries (Angola, the Democratic Republic of the Congo, Sudan, and South Africa) differentiates the nature and scope of business relations across the continent.

As Chinese private and state-led investments do not follow the same strategy and patterns, neither do they impact the African economy in an equal way. However, many papers have failed to consider, or even notice this bias when presenting their research findings. As Yin (2009) has warned, concerning the risks inherent in generalizing case studies, any research framework that tends to theorize on the basis of mixing a number of
private and state-led businesses, across various sectors, risks generating controversial conclusions. Such biases are easily noted in research papers, such as the one published by Bräutigam and Xiaoyang (2009). Here, the authors drew their conclusions for an entire continent based solely on an analysis that focused on a few cases in the agricultural sector. They simply underestimated the risk associated with considering all investors, businesses, and economic sectors alike. In order to avoid such bias, it is necessary to differentiate the types of investors whenever discussing the outcome of Africa-China cooperation. To highlight such a risk, Figure 3 and Figure 4 show that the nature of Chinese investment is directly linked to the investor’s choice in deciding which specific sector to invest in.

![Government-led investment projects](image1)

**Figure 3**: Chinese public investments in Africa in 2011  
**Source of figure**: Shen (2013)

![Private-led investment projects](image2)

**Figure 4**: Chinese private investments in Africa in 2011  
**Source of figure**: Shen (2013)

Analysis from data generated by researchers like Bräutigam (2009) has indicated that China is actually “winning” the economic and political game in Africa since it has already taken the place of most of the major Western players with interests on the continent. In this regard, China is expected to achieve in 10 years (2010-2020) what was initially expected to be achieved in 20 years, and that it will come to dominate Africa in terms
of business gains (Chemingui & Bchir, 2010). The growing importance of China in Africa caused McKinnon (2010) to state that the “Beijing consensus” has displaced the “Washington consensus” through the comprehensive Chinese policy towards Africa that counterbalances the influence of Western financiers. There is no doubt that during the last decade, a sensitive issue that continues to embarrass Africans is the sermon-like approach of Western leaders, as evidenced by the paternalistic attitude of former French President Nicolas Sarkozy, who, during his visit to Senegal in 2007, asserted that Africa is underdeveloped because of Africans’ incapacities (Jeune Afrique, 2012).

The Chinese are keenly aware of the failures of the Western approach, and accordingly, deal with Africa in a more pragmatic manner. With respect to Bräutigam’s (2009) analysis, the major criticisms against China’s presence in Africa are frequently based on Western countries’ aspirational and ideological standards. These include, but are not limited to, how aid should be delivered, how donors should engage developing countries, and how private companies should conduct international business. Furthermore, based on these same criticisms, Bräutigam has noted that there is no clear evidence of how many and to what extent non-Chinese investors and donors have adopted acceptable standards when doing business in Africa, despite the fact that major criticisms are frequently addressed to China’s investment in Africa. More critically, some scholars, such as Wissenbach (2009), have even argued that China’s policy towards Africa is not fundamentally different from that of Western world. This is because it is based on economic and strategic considerations that follow the same logic of Western capitalism operating in an interdependent world (Taylor, 2006), ultimately with the North competing with the South in African countries.

Regarding the long-term viability of this win-win perspective, it is not clear whether China’s engagement will substantially improve Africa’s prospects for development (Tull, 2006). This is despite the fact that China’s engagement in Africa mostly takes place through permanent entry modes, thus supporting the idea that China has both long-term ambitions and a strategic approach to Africa. Based on a survey of 35 Chinese contractors operating in Africa, short-term entry modes were not China’s most frequently used means of entering into African countries (Chuan & Orr, 2009). China, rather, prefers long-term engagements using large state-owned enterprises to sustain its strategic advantage in Africa (Kaplinsky & Morris, 2009). However, in supporting these views, Cheru and Obi (2011) have argued that it is too early to conclude whether China’s growing interest in Africa will constitute a new, dynamic model of South-South relations. This is in spite of researchers, such as Bansal (2011), seeing Africa-China cooperation as a new and fascinating path towards an emerging program for South-South relations. According to Cheru and Obi (2011), the basic condition for Africa to entertain a win-win business partnership with China depends on the African leadership defining thoughtful frameworks for bilateral, fair, and balanced cooperation. This idea is even more defensible when it appears
that Africa does not have a single and coherent policy for cooperating with China at this stage, while the latter has a clear and goal-oriented policy to its presence in Africa (Kaplinsky & Morris, 2009). Extending these questions to Africa’s readiness to engage in sustainable partnerships with China, Bansal (2011) has broached the issue of how well equipped African institutions are to work with Chinese companies. Moreover, Schiere and Walkenhorst (2010) have suggested that in order to have a mutually beneficial partnership with China, Africa needs to develop its own domestic policy framework. Table 3 summarizes the major observations about China in Africa.
Table 3: Current literature on Africa-China cooperation: Summary of the studies’ major conclusions

<table>
<thead>
<tr>
<th>Authors (2011-2001)</th>
<th>Win-win or win-lose cooperation: major positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yin and Vascarretto (2011)</td>
<td>Mutually beneficial, but only if Africa capitalizes on previous partnerships with Western powers</td>
</tr>
<tr>
<td>Chemingui and Bchir (2010)</td>
<td>Even with more open trade, China-Africa cooperation will be a win-lose situation</td>
</tr>
<tr>
<td>Brenton and Walkenhorst (2010)</td>
<td>African companies cannot have a win-win partnership if the African partner is not subsidized</td>
</tr>
<tr>
<td>Elu and Price (2010)</td>
<td>Increasing trade with China does not lead to win-win cooperation</td>
</tr>
<tr>
<td>Sanfilippo (2010)</td>
<td>China is concerned only with its own interests in Africa; win-lose</td>
</tr>
<tr>
<td>Schiere (2010b)</td>
<td>Huge potentialities for a win-win deal, but complementarities need to be built</td>
</tr>
<tr>
<td>Wu and Cheng (2010)</td>
<td>Africa wins in learning from China’s policies on poverty alleviation</td>
</tr>
<tr>
<td>McKinnon (2010)</td>
<td>China is using a financial strategy to cooperate with Africa; win-lose</td>
</tr>
<tr>
<td>Jing (2009)</td>
<td>Africa gains skills and technology transfers, but African elites are not aware of China’s ambitions</td>
</tr>
<tr>
<td>Adisu et al. (2010)</td>
<td>Africa is winning, but China wins more; Africa should renegotiate</td>
</tr>
<tr>
<td>Aguilar and Goldstein (2009)</td>
<td>Win-win only for African political leaders and China</td>
</tr>
<tr>
<td>Ajakaiye and Kaplinsky (2009)</td>
<td>China’s potential impact is dangerously harmful to Africa’s economy</td>
</tr>
<tr>
<td>Ademola et al. (2009)</td>
<td>China wins over Africa in the long run</td>
</tr>
<tr>
<td>Giovannetti and Sanfilippo (2009)</td>
<td>China exports more than Africa; Africa is vulnerable to China’s competitive threat in textile and manufacturing industries; win-lose</td>
</tr>
<tr>
<td>Kaplinsky and Morris (2009)</td>
<td>To enjoy a win-win situation, Africa needs an integrated response</td>
</tr>
<tr>
<td>Mohan and Tan-Mullins (2009)</td>
<td>Chinese have moved from investors to agents of modernization in Africa</td>
</tr>
<tr>
<td>Desta (2009)</td>
<td>Win-win, but Africa can do better with a more efficient response</td>
</tr>
<tr>
<td>Maswana (2009)</td>
<td>China is an engine of growth, and an export destination for Africa; win-win</td>
</tr>
<tr>
<td>Shinn (2009)</td>
<td>Mutually beneficial, and China is not dictating Africa’s behavior; win-win</td>
</tr>
<tr>
<td>Sperbee (2009)</td>
<td>Win-lose; but equal-to-equal principle in China-Africa negotiations</td>
</tr>
<tr>
<td>Carolina and Murphey (2009)</td>
<td>Complementary business partners; win-win</td>
</tr>
<tr>
<td>Morris and Einhorn (2008)</td>
<td>Towards a win-win situation in the long-term</td>
</tr>
<tr>
<td>Zhao (2008)</td>
<td>China’s engagement takes into account the interests of Africans; win-win</td>
</tr>
<tr>
<td>Geda and Meskel (2008)</td>
<td>Co-operation between China and South Africa a real win-win with an even higher competitive advantage against China</td>
</tr>
<tr>
<td>Taylor (2006)</td>
<td>China has an oil diplomacy in Africa; win-lose</td>
</tr>
</tbody>
</table>

From a broad perspective, to better understand and solve the key equations of win-win or win-lose cooperation, we need to answer the following questions:
1. Does China trade with Africa only to exploit the continent's natural resources, and does it have colonial ambitions?
2. Does China care about human rights, and does it use soft power strategies in Africa?
3. Does China favor Africa’s industrialization rather than the weakening of local economies?

These questions need to be rigorously analyzed in order to draw a systematic understanding of China's activities in Africa, and to underline the (often implicit) positions amongst researchers.

1.5 China and Africa’s natural resources

China’s rapid development has been characterized by a vital need for natural and energy resources to sustain its growth. In its international quest for oil and mineral resources, China has increasingly invested in many of the African countries that may possess these resources (Sanfilippo, 2010). Consequently, China’s involvement in Africa is often seen as a rush to secure imports and commodities for the expansion of its own manufacturing sector (Schiere, 2010a). Empirically investigating the determinants of Chinese FDI in and across 41 African countries between 1998 and 2007, and based on an econometric analysis, Sanfilippo (2010) directly engaged with this issue. The research provided strong empirical evidence that favored the controversial idea that Chinese FDI to Africa is driven by the two factors of natural resource endowment and market opportunities.

More specifically, Wang (2010) investigated the key determinants of China’s investment strategy by analyzing the country’s outward FDI flow to Africa between 2002 and 2007. Wang identified oil supply as the primary determinant in shaping Chinese FDI. In fact, out of all African countries, China has thus far invested in all 45 nations that have large sources of oil, coal, and gas. According to data published by the US Energy Information Administration, the remaining countries did not possess enough strategic natural resources to make Chinese investment sustainable. Through FDI into Africa, particularly in the mining, infrastructure, and technology sectors, China has considerably increased its partnerships with African counterparts. Accordingly, at least 35 African countries have engaged with China to confirm infrastructure deals, with the biggest recipients being Nigeria, Angola, Ethiopia, and Sudan (McKinnon, 2010). China’s investment strategy has been formulated on a project-by-project basis, rather than a general policy basis traditionally preferred by Western countries (Levy, 2011). Yet, despite the resulting financial and technical aid that has been given by the Chinese government to help African economies develop their full potential (Yin & Vaschetto, 2011), the Chinese way of doing business with Africa has been constantly subject to criticism by Western partners. This is especially visible in the mining sector.
We see this approach as a strategic attempt by Western nations to depict China as an unpleasant partner in the eyes of Africans. This can be seen, for instance, in an observation based on a survey of impediments to FDI that has stated that, “unlike many Western investors, corruption, crime and bureaucracy did not seem to disturb Chinese investors particularly” (Jing, 2009, p. 578). Michel (2008, p. 45) mentioned that “China seems to have difficulty maneuvering in countries more democratic than itself.” Ironically, Broadman (2010) has pointed out that it appears to be even more surprising to Western commentators when China continues to invest in big projects, while many Western partners still consider Africa a risky and even dangerous place to make such large investments. From an institutional theory perspective, the relative institutional advantage of developing-country multinational enterprises (Cuervo-Cazurra & Genc, 2008; Peng, Wang, & Jiang, 2008; Wang et al., 2012) frequently appears to be relevant in explaining the success of Chinese firms in Africa. Indeed, the gap in institutional frameworks between China and African countries is smaller than that of between developed Western countries and those in Africa. As a result, Chinese multinationals tend to have more experience in navigating through the institutional environment of African countries, while multinational enterprises from the West see this same environment as too risky. Moreover, China’s success as a developing country in reducing poverty and achieving rapid economic growth makes it an attractive and credible business partner for African countries that follow similar development trajectories (Bräutigam, 2009). It is thus understandable that these shared institutional systems bring Africans and the Chinese even closer. This advantage translates into what Wu and Cheng (2010) have referred to as Africa’s opportunity to learn from the Chinese experience. This is both in terms of development policies and business practices, and appears to be an additional and important reason for Africa to welcome Chinese investment. Over and above this, Yin and Vaschetto (2011) have asserted that China has demonstrated an increasing awareness of the humanitarian implications of doing business with authoritarian and marginalized regimes such as Sudan, Zimbabwe, and Equatorial Guinea. Consequently, China has been acting in concert with international institutions, including the United Nations. Thus, it has started to more pragmatically consider international decisions by making efforts to control, for instance, the Sudanese crisis, while limiting its help to the Zimbabwean government.

While the academic literature frequently argues that the main reason China has invested in Africa appears to be its need to secure natural resources for its domestic market, a more fundamental question often arises in both the academic and general media: Does China harbor colonial ambitions towards Africa?

Describing Chinese presence and ambition in Africa, Cheru’s and Obi’s (2011) analysis speculated that it would result in a form of modern colonization in many of the African countries where China had invested. In a study of ten African countries, Jauch (2011) also argued that despite some structural differences between Chinese and Western investments in Africa, Chinese businesses have mostly adopted a neocolonialist
approach to resource extraction. This has included labor exploitation and the deployment of infrastructural projects that have not encouraged local development or the improvement of Africa’s industrial and competitive capacity. Taking this into account, Jauch has further argued that China’s increasing presence in Africa can be seen as a new trend towards the process of the re-colonization of the continent. While this contemporary re-colonization may be different to that of the past, it has the very similar aim of exploiting the continent. For Bräutigam and Xiaoyang (2011), this exploitation is partly embodied by the special economic zones set up by China in many African countries, such as Nigeria and Kenya. Aligning their argument to the colonial thesis, Cheru and Obi (2011, p. 16) have concluded that “in the absence of visionary African leadership, concerted and well-thought-out African action, the relationship with the emerging Southern powers could turn out to be colonialism by invitation.” This idea is further supported by former US Secretary of State Hillary Clinton’s statement during the 10th Africa Growth Opportunity Act (AGOA-2011) forum in Lusaka where she asserted that Africans should be aware of China’s neocolonialist ambitions and practices in Africa. Following this, African leaders have frequently rethought their current ties with China. In fact, during the 5th FOCAC meeting, the South African president, Jacob Zuma, warned that the current Sino-African way of doing business was unsustainable and that Africa’s past experience with Europe should dictate a need for cautious cooperation.

From an opposing perspective, Yin and Vaschetto (2011), in comparing Western and Chinese business strategies in Africa, have argued that China’s well-coordinated trade, investment, and aid activities have been instrumental in building the infrastructure needed for sustainable economic growth in Africa. Thus, for these authors, the Chinese are creating their own rapid development, while showing their desire to help Africa increase its own prosperity. This idea is also supported by Kurlantzick (2007), who has concluded that China does not aim solely to exploit Africa, but rather to exploit the potentialities of mutual cooperation. Analyzing the business relationships that Africa has with its Western and Chinese counterparts, and based on a comparison between the colonial and post-colonial eras, Yin and Vaschetto (2011) found that China’s strategy of noninterference and mutual growth has been largely successful. Accordingly, China’s recent success in Africa is a product of both parties’ interests in mutually beneficial relationships. This is particularly seen in China’s political motivated self-marketing program of being a “like-minded ally.” This is based on the idea that it shares a similar history of colonization with many of Africa’s countries, and because of this respects their all-important sovereignty. Overall, it is difficult to draw any firm conclusions regarding whether China is acting as a neocolonial ruler in Africa.
1.6 China and human rights in Africa

Based on a study of ten African countries, Jauch (2011) focused on the labor conditions at Chinese companies on the continent. His study underlined the fact that, despite some discrepancies amongst the African countries and industries regarding working conditions in Chinese companies in Africa, there are numerous common practices and trends that characterize them. These traits include tense labor/trade relations, hostile attitudes of Chinese employers towards African trade unions, frequent violation of workers’ rights, poor working conditions, and many other questionable labor practices. Jauch’s conclusions highlight evidence of the tough Chinese business practices that have been implemented in Africa, partly because of Africa’s limited bargaining power. This has also resulted in Chinese businesses unilaterally determining wages and working contracts, which often negatively affect workers’ rights and social security needs. There seems to exist a tacit consensus that Chinese companies are amongst the lowest-paying companies in Africa, especially when compared to other foreign companies, including those from developing countries such as India and Brazil (Broadman, 2010).

Fundamentally, Jauch’s study has argued that there is a salary discrepancy between Chinese and African employees, in that Chinese employees enjoy significantly higher wages and more benefits than their African counterparts, even when they undertake the same labor. In extreme instances, some studies, such as the research conducted by Baah and Jauch (2009), have argued that many Chinese employers violate workers’ fundamental rights and the basic conventions of the International Labor Organization. This fact has been further highlighted by Jauch (2011), who has argued that Chinese companies frequently tend to only hire African workers for the most basic of tasks, at very low salaries, while importing Chinese managers and supervisors for higher paid positions. This is despite the availability of skilled Africans. Concluding his analysis, Jauch posits that Africa’s ambition to attract more FDI from China is contributing to the destruction of national/international labor and environmental standards.

However, human rights in Africa are still only marginally respected, and this does not necessarily correlate with the increasing presence of China in African countries. Indeed, authors such as Jauch have indicated that Western and Chinese companies have very similar aims in the exploitation of the continent’s business opportunities. Yin and Vaschetto (2011) have argued that China’s turbulent history with human rights issues made it more understanding of Africa’s desire to deal with internal issues, without external intervention. Furthermore, Tan-Mullins, Mohan, and Power (2010) have concluded that the nature of Chinese labor practices in many African countries are frequently exaggerated, although they did note that some of these assumptions are applicable to large state-owned Chinese enterprises. For example, in several Chinese companies, more than 90% of their workforce is made up of African employees (Jing, 2009), and in many countries these businesses do affect the larger institutional environment. This is exemplified by South Africa,
which has signed agreements to limit labor imports from China (Adisu, Sharkey, & Okoroafo, 2010), and Egypt, which negotiated a ratio of one Chinese employee for every nine Egyptians in Sino-Egyptian contracts (Bräutigam & Xiaoyang, 2011). Overall however, existing studies on the issue of human and employees’ rights are based on incomplete evidence, since very few of the papers provided sufficient or undeniable data regarding Chinese labor practices in Africa.

The concern with human rights associated with China’s developmental approach to Africa is frequently emphasized. This is linked to what researchers such as Aguilar and Goldstein (2009) refer to as China’s soft power strategy. Implicit in such research is a sub-question that concerns human rights issues, and can be expressed thus: Does China use soft power strategies in Africa?

Soft power refers to an indirect influence that a nation exerts on the conduct or interests of another nation, and takes place through cultural or ideological means without using force or coercion (Kurlantznick, 2007). It thus differs significantly from hard power tactics, such as military or economic intervention. In this sense, researchers such as Taylor (2006) have concluded that China is using soft power strategies in Africa to internationalize its practices, values, culture, and position towards African countries. Among other assertions listed, Yin and Vaschetto (2011) have argued that China’s means of exerting soft power include the deployment of numerous Chinese medical teams to Africa, sending experts to deliver professional training, and supplying agricultural support to increase self-reliance. Most importantly, researchers, such as Adisu, Sharkey, and Okoroafo (2010), see China as exerting its soft power through infrastructural improvement projects, such as those undertaken at the AU headquarters in Addis Ababa, which is decorated with traditional Chinese art. Another strategy is based on the principle of non-interference, in which China has frequently taken advantage of the discord sown in Africa by developed countries' paternalistic approach to the continent. China has proposed new perspectives and understandings to African nations, such as Angola, Sudan, Zimbabwe, and the Democratic Republic of Congo.

This soft power approach is also advanced through the Chinese promotion of the concept of a “like-minded ally” (Yin & Vaschetto, 2011). The concept describes the perception of Africans feeling comfortable in dealing with a developing country that understands their history, realities, and needs, despite the risk that Aguilar and Goldstein (2009) have described as the “Chinisation of Africa.” Regarding the soft power controversy, McKinnon (2010) has even argued that African countries have responded by trying to emulate China’s economic regime and thus become more closely aligned to a common Chinese vision of development. Our view on this issue is that soft power remains abstract, and thus its use is difficult to prove. However, we do
believe that China is trying to influence Africa through multiple means including, for instance, cultural ones. This strategy is not necessarily specific to Africa however.

The last sub-question is related to the role of China in the industrialization of the African continent. Often contentious, the controversy revolves around whether China’s attitude is helpful in accelerating Africa’s industrial development, and to what extent this has impacted local economies.

1.7 China’s role in the industrialization of Africa

Several studies (Chemingui & Bchir, 2010; Giovannetti & Sanfilippo, 2009; Sperbee, 2009) have concluded that China is not willing to help Africa industrialize. In this regard, and to encourage African development, Robert Zoellick (the former president of the World Bank) requested that China attempt to direct its investments and partnerships towards more sustainable programs. In particular, he suggested that Chinese investments in Africa should go beyond the traditional scope of building infrastructure and begin to include the development of the African manufacturing industry. However, as stated by Ozawa and Bellak (2011), China’s capacity to transform sub-Saharan countries into industrialized manufacturing economies through FDI remains unrealistic, underdeveloped, and quite restricted. These researchers have asserted that, currently, Africa’s industrialization is dependent on attracting Western companies that are specifically interested in cheap labor sources, rather than Chinese investment. Indeed, many Chinese companies have started relocating their activities to African countries, like Ethiopia, to benefit from cheaper labor. However, based on micro-level data from five sub-Saharan countries, Elu and Price (2010) found that increasing trade openness with China had no direct effect on the growth of the total productivity in the country. This is despite the fact that productivity and growth are a crucial determinant of the economic success of a country in the long run. Indeed, their results suggested that increasing trade openness with China is not a long-term or viable source of development for many African countries. The same study revealed that for sub-Saharan manufacturing firms, increasing their trade openness with China does not, in general, lead to a transfer of technology and skills that enhance firm-level productivity. Moreover, they concluded that in some cases it may even negatively affect total productivity, making it harder for Africans to work towards industrialization. Chemingui and Bchir (2010) have further added that even if China should offer more market access to African goods, the resulting trade potential will not significantly improve many countries that suffer from insufficient productive capacity and limited economic diversification.

We do think, however, that Elu and Price’s conclusions seem rather limited, precisely because an analysis of African industrialization based solely on offshore driven possibilities, themselves driven by low labor costs, seems restricted. In fact, African industrialization could occur through many means other than the exploitation
of its labor pool. The potential for African industrialization should be primarily based on strategic investments in a number of key sectors. Thus, by establishing specific investment partnerships with China, African countries can stimulate local industrialization without requiring that China relocate its industries to Africa, all without mentioning that African labor costs are lower than those of many urban Chinese. Regarding the larger issue of Africa’s industrialization, researchers and practitioners often question whether Chinese businesses are harming Africa’s local economy and its development. To this question we now turn.

Before engaging in the analysis, the figures below illustrate the context of China’s economic engagement with Africa, as compared with other investing nations. During the last decade, various studies (Maswana, 2009; Morris & Einhorn, 2008; Shen, 2013; Taylor, 2009; Wang, 2010) queried China’s reasons for entering Africa. In this regard, Anshan (2006) argued that one of the key reasons was that Africa’s business environment had recently shown a high rate of growth and had thus attracted more foreign investment – particularly from China – than ever before. Disregarding for the moment the question of what the motives of the Chinese might be, a recent report from the Direction of Trade Statistics (IMF, 2013) stated that China has already taken the lead amongst Africa’s top import and export partners, as shown in Figure 5 and Figure 6.

![Figure 5: Africa’s major import partners (US $, Millions)](image-url)
Source of figure: Adapted data from the Direction of Trade Statistics (DOTS, IMF Data Warehouse)
Such statistics awaken a researcher’s curiosity. Accordingly, various papers (Brenton & Walkenhorst, 2010; Geda & Meskel, 2008; Jing, 2009; Schiere, 2010b) have questioned this increase in trade, as well as its impact on local African economies.

In a study on China’s impact on intra-African trade, Montinari and Prodi (2011) used what they termed the “gravity model” to question whether intra-African trade is being significantly impacted on by commercial exchanges with China. Their results have suggested that sub-Saharan Africa’s exports to China have had a negative effect on intra-African trade at the macro-economic level, but a positive effect at the micro-economic level. Another key finding of the study was that Africa’s biggest oil exporters tended to marginalize Africa’s internal market as their exports to China increased. However, for African countries that are not oil exporters, the study found an increase in the correlation between intra-African trade and increased commercial cooperation with China. Montinari and Prodi explained this observation, in part, by the wealth-effect that leads non-oil producing countries to trade more substantially with other sub-Saharan African countries, thus increasing the level of intra-African trade. Overall, even though China’s presence is affecting the flow of bilateral trade between sub-Saharan African countries, there is no uniform effect on the development of domestic multilateral markets in Africa.

From a more business-oriented perspective, Yin and Vaschetto (2011) presented a nuanced view of Sino-African business exchanges. China provides goods that Africans need, at a lower price than Western-made goods, which positively impacts Africans’ living conditions. A side effect, however, is that the cheap Chinese
products (particularly textiles) are competing with locally made goods, and Africans do not have a sufficiently strong competitive advantage to face Chinese competitors. Chinese companies are then displacing African enterprises in local markets, while creating fewer jobs for local communities (Cheru & Obi, 2011). However, in analyzing the possible cost adjustments, Brenton and Walkenhorst (2010) have emphasized that China’s ascent (particularly in North Africa) cannot be seen only as a growing threat to competition in Africa, but should also be seen as an opportunity for local African businesses to enter into mutually beneficial ventures with Chinese firms.

Based on the arguments that we examined from the various authors, and in the context of the analyses of existing studies, it is clear that definitive answers dealing with China’s presence in Africa remain mostly controversial. Table 4 presents the major positions, articulated by the research articles, dealing with the aforementioned controversies.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer according to the positions of the literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is China-Africa a win-win cooperation?</td>
<td>Controversial</td>
</tr>
<tr>
<td>Does China only go to Africa for natural resources?</td>
<td>Yes</td>
</tr>
<tr>
<td>Does China have colonialist ambitions?</td>
<td>Controversial</td>
</tr>
<tr>
<td>Does China care about human rights?</td>
<td>No</td>
</tr>
<tr>
<td>Does China use a soft power strategy?</td>
<td>Yes</td>
</tr>
<tr>
<td>Does China encourage African industrialization?</td>
<td>Controversial</td>
</tr>
<tr>
<td>Does China’s presence in Africa harm the local economy?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

1.8 Conclusion

Despite the fact that we have had to omit some of the studies on Africa-China relations that were published in journals not yet accessible in Western libraries, this research review has undertaken a thorough exploration of the current state of knowledge on China’s presence in African countries. The paper suggests that many of the research conclusions, in describing China’s presence in Africa, frequently generalize specific issues affecting the whole continent. Publications on China in Africa are frequently oriented toward win-lose findings, although many lack substantive methodological rigor. We realize that many of the controversial topics are legitimate, however many of the conclusions are neither evidence-based nor rigorous in their argumentation. Consequently, on one hand, it is a necessity that authors undertake more objective and less ideologically partisan research that requires them to moderate any desire of pursuing intellectual dominance. Even with this in mind, the key questions of whether the relationship between China and Africa is win-win or win-lose need to
be addressed through further micro-level studies that focus on what local African enterprises have gained from the cooperation. These should be placed in contrast to macro-level studies. Furthermore, future undertakings need to expand and explore new research avenues. A primary concern is the concerted attempt to explain the increasing cooperation between China and Africa on the sole basis of inconsistently aggregated numbers and approaches that focus solely on China’s need of Africa’s natural resources. Researchers should, rather, focus on more institutional and theoretically demanding perspectives that explore the similarities and patterns of cooperation between the two partners. Studies should furthermore engage in researching the mutual trust and alliances between China and Africa, especially when China has alternative options by which to extract natural resources, such as in Western countries. Finally, in order to overcome the major weaknesses discussed through this paper, researchers also need to consider the following directions in future research:

More empirically based studies: Most positions are frequently the author(s) own views. There is no strong empirical evidence to many of the claims. No quantitative data (Aguilar and Goldstein, 2009), and no unquestionable statistical analyses at the macro-level on Africa exist at this stage. Despite the warning from authors like Yin (2009), many of the generalized conclusions are based on only a single case study, individual country analysis, or news media sources, and are frequently published in journals that are neither ranked nor IB-focused.

More culturally aware researchers: Many important papers, which are published and cited in ranked journals, are authored by researchers who frequently marginalize, or somehow do not understand, the realities of a developing nation’s cultures and values. Authors also need to moderate any desire for intellectual dominance because such motivation makes research analyses and conclusions questionable and ultimately biased, especially considering the current climate of speculation with regard to Chinese and African cooperation. Therefore, in line with De Haan (2010), we argue that in order to effectively understand China’s presence in Africa, researchers need to develop an in-depth understanding of both parties’ critical paths towards industrialization. Accordingly, researchers need to prioritize the cultural, social, and historical dimensions of Sino-African cooperation.

More longitudinal approaches: In order to define the relationship between China and Africa, research should be based on reasonable periods of time, as it took decades to conclude that some African countries were being undermined by their cooperation with the Western world. Thus, we strongly suggest that it is only in the long-term that studies can really discover whether Africa’s cooperation with China is different from its cooperation with Western and former colonialist powers.
1.9 References


2. Chapter 2: Knowledge Control in International Joint Ventures: How Chinese Power Operates in Africa

Abstract
This paper investigates Chinese knowledge control practices in JVs with African partners by examining 29 Sino-African JVs in twelve countries. This study provides insights into knowledge transfer and power dynamics in emerging country alliances. The results identify five strategies Chinese partners employ to control knowledge assets depending on the type of knowledge and the nature of the power available. We propose a dynamic conceptual model of knowledge control strategies within JVs. This paper represents the first insightful perspective and analysis of power and knowledge interactions in the context of increasing and controversial Africa-China rapprochement.

Keywords: Knowledge transfer; alliance; joint venture; Africa; China; power
Chapitre 2 : Monopolisation des connaissances dans les coentreprises internationales : comment le pouvoir chinois opère en Afrique

Résumé
Cet article étudie les pratiques chinoises de monopolisation de connaissances dans des coentreprises avec des partenaires africains en examinant 29 coentreprises sino-africaines dans 12 pays d’Afrique. Cette étude permet de mieux comprendre les dynamiques de pouvoir et de transfert de connaissances dans les alliances entre des partenaires des pays émergents. L’analyse a identifié cinq stratégies que les partenaires chinois emploient pour monopoliser leurs actifs intangibles en matière de connaissances, et cela, selon la nature du pouvoir disponible et le type de connaissances. Nous proposons un modèle conceptuel dynamique de stratégies de gestion des connaissances au sein des coentreprises internationales particulièrement dans le cas sino-africain. Cet article est le premier à adopter une telle perspective dynamique d’analyse d’interactions entre le pouvoir et la gestion des connaissances dans le contexte actuel de rapprochement croissant et controversé entre la Chine et l’Afrique.

Mots-clés : Transfert de connaissances ; alliance ; coentreprise ; Afrique ; Chine ; pouvoir
2.1 Introduction

Learning opportunities, both internally and from other organizations, are significant for businesses. IJVs are sophisticated channels for transferring explicit and tacit knowledge (Khan, Shenkar, & Lew, 2015; Shenkar & Li, 1999). Firms can use IJVs to strategically develop a competitive advantage by internalizing knowledge or skills otherwise unavailable or inaccessible from market transactions (Hamel, 1991; Kogut, 1988; Minbaeva, Pedersen, Björkman, Fey, & Park, 2014). Therefore, a collaborative learning dynamic can ensure the success of a JV in terms of the partners’ initial learning goals. Tinlot and Mothe (2005) argue that JV success depends significantly on the balance of power between partners. Moreover, Inkpen and Beamish’s (1997) findings show that JV success also depends on the inter-partner dynamics in organizational learning. For Malo and Elkouzi (2001), organizations need to learn as this allows them to survive and evolve, and IJVs can meet that need. However, once JV partners have gained sufficient knowledge, particularly through organizational learning, a new tacit redistribution of power emerges in the configuration and management of the alliance (Khan et al., 2015; Minbaeva et al., 2014; Tinlot & Mothe, 2005; Yan & Gray, 1994). For Hamel (1991), organizational learning is a source of opportunity and opportunism because some partners often race to internalize previously unavailable knowledge and skills in order to gain power and eventually change the JV’s overall structure and management.

Power is one the most strategic tools for exercising control over a JV and for monitoring the processes of learning and knowledge transfer at the individual and organizational levels. There are diverse interactions between the sources of power and individual/organizational behaviors within a JV. To our knowledge, the relationships among power, learning, and knowledge transfer in JVs in Africa has not yet been deeply studied, despite economic improvements in many African countries that have stimulated the creation of more Sino-African JVs (Elu & Price, 2010; Wang, 2012; Wu & Cheng, 2010; Yin & Vaschetto, 2011). Whether current research findings concerning Western companies are generalizable to Africa-China JVs is debatable. Since 2012, China has become Africa’s first trading partner, displacing all traditional Western allies. This is evident in the increasing number of Africa-China JVs that provide interesting research opportunities in the area of learning and knowledge transfer. The meagre literature on developing country JVs has often adopted the (frequently Western) foreign partners’ perspective (Maswana, 2009; Morris & Einhorn, 2008; Shen, 2013; Wang, 2012), marginalizing the perspective of the knowledge-seeking partners, who are frequently from developing nations (Haas & Cummings, 2014; Yan & Gray, 1994). The current literature outlines that organizations in general want to protect their key knowledge assets for strategic and competitiveness reasons (Roper & Arvanitis, 2012). But in an alliance context, knowledge sharing between partners is often a regular expectation especially when initial alliance objectives include learning goals. Unfortunately, such partners' knowledge sharing expectation is not always met. Moreover, to the best our knowledge, studies on how
alliance partners strategize to protect their knowledge assets are rare and, in the context of Africa-China JVs, quite inexistent.

This study highlights such phenomenon by exploring the Chinese partners’ knowledge control strategies from an African standpoint. The research explores learning and knowledge transfer from an African knowledge-seeking perspective using qualitative data collected from 29 case studies of Africa-China JVs. In this paper, we specifically focus on the predominantly unsuccessful cases of knowledge transfer. Indeed, our data clearly indicated that in the majority of the cases, African partners did not achieve their learning targets. In those predominant cases, African partners appeared to have a hard time in learning and in transferring knowledge from the Chinese partners. We empirically identified five strategies used by Chinese partners at both the individual and organizational levels to prevent knowledge transfer to Africans and propose a model for controlling knowledge transfer. The results contribute to the literature related to knowledge-based view by providing more insights in better understanding the significance of power, particularly the informal or unofficial power, in the strategic management of knowledge. From a practice perspective, the findings allow knowledge-seeking partners to understand the dynamics between their bargaining power and opportunities to gain knowledge. We recommend that partners seeking knowledge should first gain more power through various organizational mechanisms.

### 2.2 Theoretical framework

#### 2.2.1 Knowledge transfer and learning

Knowledge ownership is a major source of competitive advantage, so JV partners aim to control their strategic knowledge to monopolize this competitive asset. Strategic knowledge has a specialized and distinctive nature. According to Hong and Nguyen (2009), strategic knowledge is knowledge that has a significant impact on how an entire organization functions, such as explaining the industry business model and competitiveness or the firm’s market strategies. Strategic knowledge is also associated with top managers’ cognitive framework, meaning structures, and the relationships between critical organizational components and their operations. Hong and Nguyen (2009) state that strategic knowledge is acquired in the course of leading a JV within a unique set of institutional rules in the host environment. Managers with access to this type of knowledge can better understand the strategic issues that have major consequences for their interests.

Strategic knowledge is specific, systemic, complex, and uncodified and usually affects the learner’s operations once obtained (Wong, Ho, & Lee, 2008). According to Grant (1996), gaining strategic knowledge in a JV requires a flatter structure to better articulate tacit and complex knowledge and decentralized knowledge-related decision-making processes. According to Mar Benavides-Espinosa (2012), successfully diffusing
knowledge in a JV requires greater decentralization and must permit skilled workers to act with a high degree of autonomy. Nonaka (1994) argues that such autonomy empowers employees, strengthening their personal commitment by allowing them to take initiative and make decisions that solve complex problems and result in learning. Strategic knowledge is unique because the resource is rare outside the organization and its possession confers a strategic advantage on the owner as a source of added-value (Roper & Arvanitis, 2012). The resource-based view considers strategic knowledge an asset that is difficult to imitate or substitute, imperfectly mobile, and durable (Peteraf, 1993). Strategic knowledge is difficult to obtain, and once its significant components are acquired, the new holder can permanently adjust and exploit the knowledge without radical changes. Carlos Bou-Llusar and Segarra-Ciprés (2006) agree, stating that while strategic knowledge is difficult to imitate and substitute, there are also obstacles to its transfer that can be removed with appropriate mechanisms such as coordination, communication, and affinity among units, individuals and between partners. To transfer strategic knowledge, partners must make the knowledge more explicit, codified, and available while developing a common language within the JV. However, these efforts are not in the holders’ best interests if they are unwilling to share that knowledge, particularly if it incurs additional costs to create new learning and transfer processes.

On the other hand, operational knowledge is knowledge required in a specific setting to effectively advance the goals of a specific task (Bransford, Brown, & Cocking, 1999) and is often experiential, practical, and easy to learn and codify. Operational knowledge is simple, routine-based, and typically more tangible than strategic knowledge. It does not require strong analytical skills and is often encapsulated and learned at lower organizational levels during hands-on tasks, physical tasks, and other repetitive activities. Table 5 summarizes the conceptual approaches of previous knowledge studies.
Table 5: Knowledge distinction

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Strategic</th>
<th>Operational</th>
<th>Study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Specialized and distinctive</td>
<td>- More practical and tangible</td>
<td>Lupton and Beamish (2014)</td>
</tr>
<tr>
<td></td>
<td>- Uniqueness and inimitability</td>
<td>- Experience-based</td>
<td>Peteraf (1993)</td>
</tr>
<tr>
<td></td>
<td>- Imperfect mobility</td>
<td>- Disaggregated</td>
<td>Wong et al. (2008)</td>
</tr>
<tr>
<td></td>
<td>- Durability and complexity</td>
<td>- Present at lower organizational levels</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Hard “codifiability”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Critical relationships in its components</td>
<td>- Codified, single components</td>
<td>Nonaka (1994)</td>
</tr>
<tr>
<td></td>
<td>- Higher transfer obstacles</td>
<td>- Easy to learn and codify</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Lower transfer obstacles</td>
<td></td>
</tr>
<tr>
<td>Prerequisites</td>
<td>- Flatter structures</td>
<td>- Co-presence</td>
<td>Boisot (1998)</td>
</tr>
<tr>
<td></td>
<td>- Decentralization</td>
<td>- Joint trial</td>
<td>Grant (1996)</td>
</tr>
<tr>
<td></td>
<td>- Autonomous employees</td>
<td>- Direct communication</td>
<td>Nam (2011)</td>
</tr>
<tr>
<td></td>
<td>- Clear transfer mechanisms</td>
<td>- Intense labor/hand work</td>
<td>Nonaka (1994)</td>
</tr>
<tr>
<td>Required level</td>
<td>High</td>
<td>Low</td>
<td>Bransford et al. (1999)</td>
</tr>
<tr>
<td>of analytical skills</td>
<td></td>
<td></td>
<td>Krogh (2009)</td>
</tr>
<tr>
<td>and mindset</td>
<td></td>
<td></td>
<td>Nonaka and von Krogh (2009)</td>
</tr>
<tr>
<td>Advantage and</td>
<td>- Generates higher value</td>
<td>- Boosts technical skill gain</td>
<td>Dhanaraj, Lyles, Steensma, and Tihanyi (2004)</td>
</tr>
<tr>
<td>impact on business</td>
<td>- Creates competitiveness</td>
<td>- Improves specific skills</td>
<td>Hong and Nguyen (2009)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Roper and Arvanitis (2012)</td>
</tr>
</tbody>
</table>

There are several perspectives on knowledge transfer and learning theories. Some focus on the process and others on the result. Chrysostome and Su’s (2002) definition reconciles these perspectives, defining learning as the process of acquiring or creating new knowledge through interactions among individuals. This new knowledge is applied to develop skills that meet the specific requirements of the environment and improve the efficiency of the organization and their partners. Addressing organizational learning, Fiol and Lyles (1985) considers learning as the process of improving actions with better knowledge and understanding, distinguishing between higher-level learning, or strategic knowledge and lower-level learning, or operational knowledge. Nonaka (1994) proposes managing the dynamic aspects of the knowledge creation process based on the idea that knowledge is created through continuous dialogue between tacit and explicit knowledge (see also Nonaka & von Krogh, 2009): while individuals develop new knowledge, organizations play a crucial role in articulating and amplifying that knowledge. Thus, knowledge can be simultaneously enhanced and expanded through the spiral of knowledge creation and the interactive amplification of explicit and tacit knowledge through partner networks. Following Spender (1996) in distinguishing knowledge types, Claus (2001)
emphasizes that explicit knowledge is easier to disseminate, whereas implicit knowledge is complex and difficult to transfer within and between organizations.

When an IJV is created, the partners’ organizational boundaries become permeable or even porous (Inkpen & Crossan, 1995; Kogut, 1988; Parkhe, 1991), opening a channel through which each partner learns and discovers their counterparts’ knowledge and capacities (Hamel, Doz, & Prahalad, 1989). Huber (1991) supported this view by arguing that firms can learn from IJV partners, particularly through interactions between individuals from their parent companies. Yan and Gray (1994) studied organizational learning in IJVs and indicated that firms from emerging countries mainly seek to gain knowledge, preferably by accessing the most advanced technologies of their foreign partners, a premise supported in most literature, regardless of the partner’s country of origin (Nam, 2011). African partners’ desire to gain knowledge is a recurrent motivation for their engagement with IJVs, and the few reports that exist on the subject show that African partners often have clear learning goals. Table 6 summarizes the literature highlighting the most important determinants of learning for both the individual and the organization.

Table 6: Learning and determinants

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning</td>
<td></td>
</tr>
<tr>
<td>Acquisition of new knowledge</td>
<td>Beamish and Inkpen (1995); Inkpen (2008)</td>
</tr>
<tr>
<td>Joint knowledge creation</td>
<td>Nonaka (1994); Nonaka and Peltokorpi (2006); Nonaka and von Krogh (2009)</td>
</tr>
<tr>
<td>Motivation</td>
<td>Lee and Beamish (1995); Song (2014)</td>
</tr>
<tr>
<td>Skills</td>
<td>Lyles and Salk (1996)</td>
</tr>
<tr>
<td>Knowledge specificities</td>
<td>Claus (2001); Mar Benavides-Espinosa (2012)</td>
</tr>
<tr>
<td>Mechanisms and structure</td>
<td>Grant (1996); Grosse (1996); Inkpen (2008); Inkpen and Tsang (2005)</td>
</tr>
<tr>
<td>Power dynamics and power relations</td>
<td>Crozier and Friedberg (1977); Ingham (1994); Ingham and Thompson (1994); Kogut and Zander (1992); Yan and Gray (1994)</td>
</tr>
<tr>
<td>Communication framework and collaboration between partners</td>
<td>Chrysostome and Su (2002); Hamel (1991)</td>
</tr>
<tr>
<td>Organizational culture and cultural synergies</td>
<td>Hofstede (1991); Yan and Gray (1994)</td>
</tr>
</tbody>
</table>

Among the determinants, some are more crucial in effective learning and knowledge transfer within IJVs. For instance, power dynamics is a recurrent subject in the study of inter-partner relations in IJVs and its effects on individual and organizational learning within and outside the organization (Yan and Gray, 1994).
2.2.2 Power and knowledge control in IJVs

Yan and Gray (1994) defined bargaining power as the ability to win accommodations from another party towards a desired outcome. However, others define bargaining power as the power dynamics generated from the organizational structure of an entity such as an IJV (Ingham, 1994; Ingham & Thompson, 1994; Kogut & Zander, 1992). Therefore, balancing the bargaining power between partners facilitates learning. Power shows in the consultations and negotiations that occur during learning and knowledge transfer decision making. The knowledge holder as the power holder can select the knowledge to divulge to the partner while concomitantly monopolizing the knowledge that is deemed strategic and non-shareable for various reasons related to competitiveness.

This position represents control over uncertainties, a notion that Crozier and Friedberg (1977) analyzed in terms of strategic knowledge sharing and organizational learning in IJVs. From this perspective, only if the knowledge holder is willing to consult and negotiate, and if the learning partner has a margin of maneuverability in the learning decision process, can a better knowledge transfer mechanism exist. The negotiation perspective suggests that relative bargaining power shapes an IJV’s knowledge management structure (Yan & Gray, 1994). A greater balance of power in an IJV confers advantages because IJV management requires controlling organizational uncertainties. As a party with more power is equipped to control those uncertainties and achieve goals, it is important to understand the dynamics of organizational uncertainties. IJVs have high uncertainty and opportunistic behaviors during partner interactions, including control struggles related to uncertainties, particularly the possession and monopolization of key knowledge. The struggle occurs around the type of knowledge to control, whether it is strategic or operational, complex or simple, tacit or explicit. From Crozier and Friedberg’s (1977) power analysis perspective, controlling uncertainties relates to the structure of power distribution and the strategic knowledge sharing possibilities within and throughout the IJV. Crozier and Friedberg (1977) define power in organizations as the central and inevitable regulatory mechanism of individual and collective actions where there are joint negotiations and mediations of divergent strategies, be it for knowledge or other purposes, based on the sources of uncertainty that each IJV partner can control.

However, in addition to power, culture is another significant factor that determines organizational interactions and learning. Culture shapes the inter-personal and inter-organizational interactive context in which partners exchange information and experience mutual learning. Organizationally, IJVs contain cultural interactions and communication challenges. Individuals with diverse cultural predispositions collaborate in an IJV regardless of personal, organizational, and national differences to exchange knowledge and learn within a desirably unified organizational framework. Establishing an IJV often implies the merging of two or more facets of parent company cultures, which creates challenges in terms of knowledge creation and sharing, organizational learning, and adapting individual and organizational characteristics to the IJV’s specificities. According to
Weick (1995), knowledge acceptance from the individual and organizational standpoint is different depending on the person, the entity, and the context. Feldman (1991) supported this by stating that meaning and interpretation varies depending on individuals and the historical, biographical, and sociological context. For IJVs, each partner attempts to influence the alliance and dominate the construction of the JV’s practices, organizational culture, and identity, particularly by controlling areas of uncertainty. According to Crozier and Friedberg (1977), uncertainties are a valuable source of power because some areas of the JV’s strategic knowledge are monopolized. Overall, learning depends on the balance of power, culture, organizational context, and partners’ capacity to demonstrate cooperation and a high level of mutual trust (Inkpen & Currall, 2004; Ingham & Mothe, 2003; Zimmermann & Ravishankar, 2014). Table 7 describes the existing power and knowledge conceptions.

Table 7: Power conceptions in learning and knowledge transfer research

<table>
<thead>
<tr>
<th>Conception</th>
<th>Target</th>
<th>Manifestation</th>
<th>Enabler</th>
<th>Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bargaining power Opportunities</td>
<td>Achieve a desired outcome</td>
<td>Consultations and negotiations</td>
<td>Context</td>
<td>Yan and Gray (1994)</td>
</tr>
<tr>
<td>Formal power</td>
<td></td>
<td>Management control</td>
<td>Resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Formalities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inter-personal and inter-organizational dynamics</td>
<td>Possess and monopolize key knowledge</td>
<td>Inter-organizational interactions</td>
<td>Cultural advantage</td>
<td>Ingham and Thompson (1994);</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cultural power</td>
<td>Inkpen and Currall (2004);</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Organizational context</td>
<td>Kogut and Zander (1992);</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Capacity of partners</td>
<td>Zimmermann and Ravishankar (2014)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Spirit of cooperation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mutual trust</td>
<td></td>
</tr>
<tr>
<td>Controlling organizational uncertainties</td>
<td>Dominate the power distribution structure</td>
<td>Order Submission</td>
<td>Personal interpretations</td>
<td>Crozier and Friedberg (1977);</td>
</tr>
<tr>
<td>Informal power Opportunism</td>
<td></td>
<td>Inter-organizational struggles</td>
<td>Making sense of knowledge based on personality/context</td>
<td>Weick (1995); Feldman (1991);</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Wong et al. (2008)</td>
</tr>
<tr>
<td>Static configurations</td>
<td>Gain more power</td>
<td></td>
<td></td>
<td>Inkpen and Currall (2004); Nonaka and von Krog (2009); Weick (1995)</td>
</tr>
</tbody>
</table>
Building upon a combination of the various theoretical and conceptual perspectives, this study examines how Chinese partners, based on their bargaining power privileges, practices, and management control patterns prevented their African partners within Africa-China JVs from gaining significant strategic and operational knowledge.

2.3 Methodology

This study uses a multiple case study approach that focuses empirically on a contemporary phenomenon within its real context while spanning several investigative sites (Yin, 2011). Given the exploratory nature of this research, this method has the advantage of allowing methodological adjustments during the research process. Another advantage is that a holistic approach based on various information sources (statements, speeches, and official documents) enables a thorough review of the phenomenon’s complexities (Denzin & Lincoln, 1994). Few scientific studies examined alliances, such as IJVs in Africa (Beamish & Lupton, 2009; Uzo & Mair, 2014). However, IJV arrangements have recently become more prevalent on the African continent, particularly with other emerging economy partners such as China. Therefore, the novelty of the scope of this research justifies an exploratory case study approach. Hence, this research uniquely highlights strategies used by Chinese partners to control knowledge during collaborations from an African standpoint, taking a knowledge-based view and the power perspective. Table 8 describes the characteristics of the IJVs under study.

Table 8: Characteristics of the 29 JVs

<table>
<thead>
<tr>
<th>Age: Years of existence - YE</th>
<th>YE &lt; 5</th>
<th>5 &lt; YE &lt; 10</th>
<th>YE &gt; 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees involved - EI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL &lt; 100</td>
<td>100 &lt; EI &lt; 500</td>
<td>EI &gt; 500</td>
<td></td>
</tr>
<tr>
<td>Localization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Africa</td>
<td>15</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Control/ownership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese-dominated</td>
<td>26</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>African-dominated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees ratio</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese-dominated</td>
<td>10</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>African-dominated</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The study includes 29 Africa-China JVs located in twelve African countries – Benin, Burundi, Cameroon, Chad, the Democratic Republic of Congo, Ghana, the Ivory Coast, Niger, Nigeria, the Republic of Congo, Rwanda, and Togo. The JVs include only African and Chinese partners and have existed for at least four years, which is more than the three years considered necessary for significant organizational learning to occur (Ingham, 1994; Lyles & Salk, 1996). The JVs operate in the following sectors: 10 in telecom/media, three in aviation services,
four in mining/refining, one in water sanitation, two in manufacturing, three in power and energy (thermal, biomass, and renewables), three in construction, and three in textiles.

The fieldwork was conducted in 2013 and 2014 in China and Africa. During a six-month period, the interviewer traveled to all 12 African countries to perform face-to-face, semi-structured interviews, which are appropriate for processes that evolve in naturalistic settings (Patton, 1990). We visited China and collected key investor-related information from Chinese sources concerning the JVs of interest before visiting Africa for the interviews and remaining fieldwork. Based on rigorous selection criteria, we contacted participants in the field through several channels, including LinkedIn profiles, through a snowball effect, and through our personal network because we have participated in similar projects in China in 2009. In some cases, during the fieldwork, JV employees introduced the interviewer to individuals who fit the participant selection criteria. We conducted interviews only with Africans particularly with (1) Africans working in the JVs (that are either 100% private or partially state-owned), (2) Africans working for the African parent companies, and (3) Africans working in host country government ministries and agencies, such as local government officials participating in the negotiation, establishment, and management of the JVs as this study focuses on the African perspective. Many of the JVs involved several African government partners. Thus, in all twelve African countries, we visited individuals directly managing the JVs at the ministries and agencies that signed or monitored the JV agreement. Relevant country ministries included ministries of infrastructure and transport; economy and commerce; foreign affairs; industry and commerce; mining and energy; petroleum; planning, and other significant government coordinating agencies. In some cases, we interviewed consultants and major shareholders. We also conducted interviews with a major multi-lateral financing organization in charge of Chinese investments in Africa. The interviewer met with at least two individuals from each JV. Participants included engineers, operators, technicians, managers, managing directors, ministers or their deputies, CEOs, translators/interpreters, and members of the board of directors. Some participants occupied multiple positions simultaneously because they worked for both the government and the company. Therefore, in some cases, participants were appointed to their position by their government but sometimes independently by the parent companies or the JV. In total, we contacted 86 individuals for interviews; 11 refused to participate. The Chinese partners were often reluctant to allow local participants to be interviewed. Such opposition did not surprise us because collecting data in Africa is extremely challenging, particularly when the project requires several local trips in an African environment that is not research-collaborative (Rogerson & Rogerson, 2010; Lages, Pfajfar, & Shoham, 2015). Table 9 describes all respondents’ profiles.
Table 9: Respondents’ profiles

<table>
<thead>
<tr>
<th>Respondents’ titles</th>
<th>Number</th>
<th>Appointment status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government ministers</td>
<td>2</td>
<td>Government</td>
</tr>
<tr>
<td>Deputy government ministers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Government counselors</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Ministerial directors</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CEOs</td>
<td>3</td>
<td>Government / private</td>
</tr>
<tr>
<td>Managing directors</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Senior managers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Department heads</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Human resources officers</td>
<td>3</td>
<td>Private</td>
</tr>
<tr>
<td>Engineers</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Technicians/Operators</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Administrative officers</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>HR delegates</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Translators/interpreters</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Consultants</td>
<td>3</td>
<td>Government / private</td>
</tr>
<tr>
<td>Shareholder representatives</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>--</strong></td>
</tr>
</tbody>
</table>

Overall, we interviewed 75 consenting people and obtained contributions from all twelve African countries. Many of the individuals and companies requested strict confidentiality. Fourteen interviewees did not authorize a recording of their interview, but did allow note taking. In total, we tape-recorded and transcribed 61 interviews. Each interview lasted from 40 to 100 minutes. Participants possessed between 5 and 19 years of work experience. All participants worked for at least three years within a JV environment with Chinese employees who acted as either their colleagues or superiors.

In addition, we used official documents such as the terms of the JV, agreements signed by both Chinese and African partners, corporate brochures and annual reports, newspaper reports, and other documented, specific collaborative arrangements as relevant sources of information to provide a more rigorous analysis. We used these various data sources for triangulations, particularly when certain interviewees provided problematic, questionable, or incomplete information. To ensure data reliability, we asked interviewees to confirm our transcripts' accuracy (Lincoln & Guba, 1985). We used a qualitative approach to analyze interview transcripts through reduction (coding), reorganization, and comparison (Miles & Huberman, 1994). A precise coding scheme improved the sensitivity of the collected data based on content analysis procedures (Lincoln & Guba, 1985; Taylor & Bogdan, 1984). We then used thematic categorization based on the six discussion dimensions of our questionnaire: (1) acquisition of new knowledge; (2) joint creation of knowledge; (3) motivation, skills, absorption capacity, and specificity of knowledge; (4) structure, transfer of knowledge, and power relations; (5) organizational and individual communications; and (6) determinants of successful learning. We were conscious of possible bias in our own cultural beliefs in interpreting the data, which prompted an objective
analysis of the transcripts. This study involved several researchers from different international backgrounds, which helped us control for cultural and interpretative biases in the data analysis. Finally, we organized all data based on our questionnaire’s theoretical framework and through a rigorous content analysis method (Strauss, 1987). In our pre-defined analytical framework, we categorized the data based on the contribution, bargaining power, and initial objectives of each partner, management structure and configurations, achievement of initial objectives, and partner behaviors, relationships and the context. Overall, we defined five categories from which other sub-categories are extracted. Table 10 describes the early stages of the categorization process.

Table 10: Sample of the data categorization method

<table>
<thead>
<tr>
<th>Category (Concept classification)</th>
<th>Transcript extract (Practical manifestation)</th>
<th>Major sources of relevant power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution and bargaining power</td>
<td>Local partner contributed 40% of the capital, with partial financing with a loan obtained from the Chinese.</td>
<td>Shares</td>
</tr>
<tr>
<td>Initial objectives and achievement of knowledge target</td>
<td>Local partner had the primary objective of transferring technologies and controlling the JV over a negotiated period of time.</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>Local engineers did not learn and regularly complain about not achieving training objectives.</td>
<td></td>
</tr>
<tr>
<td>Management structure and configurations</td>
<td>Most key technical and managerial positions are held by the Chinese.</td>
<td>Positions Experiences</td>
</tr>
<tr>
<td></td>
<td>There is no learning structure in place.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Locals hired at entry level; Chinese employees occupy top positions.</td>
<td></td>
</tr>
<tr>
<td>Consultation and negotiation in decision-making</td>
<td>Major decisions always needed to be approved by the Chinese.</td>
<td>Positions Shares</td>
</tr>
<tr>
<td></td>
<td>Chinese have the final say.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>On certain decisions, you don’t vote but only suggest.</td>
<td></td>
</tr>
<tr>
<td>Behaviors, relationships and knowledge type (strategic, operational)</td>
<td>The Chinese partners unilaterally take decisions and dictate them to other employees.</td>
<td>Experiences Positions</td>
</tr>
<tr>
<td></td>
<td>The Chinese partners design the organizational structure and establish zones to which only Chinese employees have access.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chinese partners have experience retaining strategic knowledge, forming JVs, and learning.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chinese isolate locals when performing technical task.</td>
<td></td>
</tr>
</tbody>
</table>
2.4 Findings

Our analysis suggests that Chinese partners have developed five knowledge management strategies to control both strategic and non-strategic knowledge: blocking, isolating, threatening, manipulating, and sharing. All strategies emerged empirically from our data and work through official and unofficial power held by the Chinese partner and according to whether the knowledge is strategic or operational. We propose a conceptual matrix that categorizes the typologies of behavioral strategies employed by Chinese partners to control their most important knowledge assets. The questionnaire component “achievement of objectives” showed that most African JV partners stated that they did not achieve their initial learning objectives for the JV, indicating that these strategies are effective. Figure 7 presents a matrix of the five strategies in relation to the type of knowledge at stake and the nature of power available and mobilized by the Chinese partners.

![Knowledge management strategy matrix](image)

Figure 7: Knowledge management strategy matrix
Figure by Ado Abdoukadre

This matrix operates through a mobilization of power by the Chinese partners to control knowledge transfer, ranging from official power to unofficial power to monopolize key knowledge. Sustaining those strategies requires maintaining an advantage in terms of the factors and resources that provide both official and unofficial power.
2.4.1 Blocking strategy

When the knowledge was of strategic importance, the Chinese partners leveraged official power using a blocking strategy. As power allows the holder to exercise authority over the implementation of the knowledge transfer processes (Wong et al., 2008; Yan & Gray, 1994), the Chinese partners blocked local partners from learning and gaining knowledge because they controlled most of the strategic decision spheres and occupied key management positions. Authoritative behavior and dictatorial attitudes were evident in the Chinese partners’ employees.

Their relational behavior is disheartening … they are a little dictatorial. If he wants something, it’s that or nothing, you can jump, go, and come back, but it is his view that dominates … whether he is your colleague or superior, it is the same story, I experienced both situations … Because they already come here with a professional-superiority complex, they always favor their own point of view. [Benin I-49; July 16, 2014].

The blocking strategy required Chinese partners to mobilize their greater power. In fact, the Chinese partner often refused to train or to establish language programs that would allow locals to learn Mandarin. Such initiatives have to be approved by the JV’s top management, but it appears that the Chinese partners rejected several propositions, making communication among the employees difficult. This was exacerbated by Chinese colleagues who could not or refused to speak English, the JV’s official language. Some Chinese employees even refused to attend the management-approved English language training without penalty. Some locals stated that they were initially very motivated to learn Mandarin but, at some point, the Chinese employees displayed negative attitudes, such as refusing to occasionally practice with them, which discouraged locals from learning Mandarin. Moreover, because the Chinese partners regularly exercised their power, the locals became intimidated and began to refer to their Chinese colleagues as “masters” cementing the Chinese strategy of domination.

When the Chinese organize meetings, all that is important, essential, they do it in private, closed doors … They come and just give you orders like - these are the things for you to do- … so, you do it without really knowing what it is or why. Open this, close this. [Congo I-33; August 23, 2014].

With such power, the Chinese partner imposed certain conditions, such as dictating personnel transport constraints that forced locals to leave the office at a scheduled bus time so they could not stay at the office longer. African partners could have used this time to learn by watching or practicing. Some locals stated that the Chinese partners dictated to others and that non-Chinese employees had no power in changing attitudes or decisions.
We try to bring them back to reason but they have dogmatic ideas. I do not know if this comes from Confucianism, but they are frozen ... when a Chinese is told 2 + 2 = 4, if you suggest that 3 + 1 = 4, he will not accept. For him, it is only 2 + 2 that gives 4 ... they are extremely refractory to any truth other than their own. [Congo I-33; August 23, 2014].

Sometimes, if I write down something I learned, the Chinese master asks me why I am interrupting my work, that I have to stop writing...We are just receiving orders ...They impose our work conditions... Chinese have power over our work. [Cameroon I-58; August 18, 2014].

Some employees implied that they were intimidated by Chinese partners’ authoritative and military-like communication and their unjustifiable refusal to answer questions. This was even more intimidating when, in the case of many JVs, our inquiries found that the Chinese CEOs occupied simultaneously the technical directors’ positions. Top management decided who should have access to where, and several locals complained that strategic machines and zone passwords were held only by the Chinese partner. Such restricted access gave locals only the knowledge that the Chinese partners were willing to share. An engineer emphasized:

Once, I asked the chief supervisor to show me how to start a heat exchanger. He told me he did not have that document. And, out of curiosity, I searched in his office and ended up finding it. I even filmed the document ... the attitude of the Chinese is that we will learn what they want us to learn, not what we want to learn. [Chad I-44; August 15, 2014].

The Chinese partners also often blocked local initiatives to establish trade unions that would defend knowledge transfer. Key decisions, particularly those concerning training, remained exclusively under the auspices of Chinese partner headquarters. Strong unions potentially provide locals with the power to negotiate better learning practices, an initiative that Africans considered unsupported by the Chinese senior staff in most of the JVs.

Since this company was established, we have not been able to create a single labor union. There has always been interference by the JV with our attempts to create a union. Currently, there is no union, only fake delegates of staff. [Chad I-47; August 13, 2014].

With respect to the communications barrier, the Chinese partner often refused to translate Chinese documents into English, making codified knowledge inaccessible or even unavailable in English. This created blurred and partial document translations and contract terms that encouraged opportunistic behavior by the Chinese partner, who exerted unofficial power over the locals. Locals complained about restrictions over the number of field translators the Chinese partners permitted, resulting in ineffective face-to-face communication. In some cases, engineers stated that the Chinese imposed reduced internet speed to limit locals’ access to online information when at work.
The Chinese, to discourage further research on our part, slowed the Wi-Fi connection. So, we have to search online using our own mobile phones to clarify and widen our knowledge. [Chad I-44; August 15, 2014].

Several locals indicated that they used online information to improve their knowledge either when they encountered a new situation or when the Chinese partner refused to answer their questions. However, these opportunities were prohibited because the restricted internet speed was too slow for live searching and many locals could not afford personal internet data packages.

2.4.2 Isolation strategy
When the knowledge was of operational importance, the Chinese partners leveraged official power and applied an isolation strategy to prevent knowledge transfer and learning opportunities for the African employees. In this case, to learn a new skill, the learner requires the “physical co-presence” (Boisot, 1998, p. 46) of the “teacher”. One recurrent tactic described by many African partners was sending local engineers to training with generous per diems during maintenance and sensitive activities, so the Chinese partner could conduct technical activities involving significant operational knowledge in their absence. In addition, Chinese partners carefully controlled activities that may have presented opportunities for knowledge spin-off for local partners. For instance, the maintenance of JV equipment was conducted only by Chinese employees, and JV outsourcing was limited to Chinese companies. Moreover, the geographical restrictions such as “no-go areas” for locals or “special Chinese zones” kept locals away from learning situations and the possibility of “co-presence” with the Chinese during important technical work.

There are too many rooms labeled ‘authorized personnel only’ and often, it’s only the Chinese that are authorized to enter. So, if I don’t belong to that club, I cannot access despite the fact that I’m working for the company…the Chinese don’t give us such learning opportunities. [Ghana I-52; June 17, 2014].

When a Chinese colleague needs to do important work, they ask you either to go home ... or he purposely asks you to fetch something. Meanwhile, he does what he has to do. [Chad I-47; August 13, 2014].

This situation is even more challenging as signs on machinery and for software operation were provided only in the Chinese alphabet. This explains why in several JVs, particularly those with a majority of Chinese shareholders, there was justification for regularly importing Chinese laborers because they were the only individuals who could operate the equipment. Additionally, the reputation that Chinese companies had for paying lower wages for locals’ alleged low productivity was a discouraging factor for many highly qualified
Africans who, because they aspire to higher salaries and positions, became permanently isolated. Therefore, many Africans left the JV for a better paying company.

The Chinese do not value your work enough ... and when the ‘expected promotion’ does not come, you lose motivation ... After three years, I did not progress, plus I was not ok with my director. He had a management style of constant threatening. ...and as soon as I had the opportunity, I left. [Democratic Republic of Congo I-40; August 28, 2014].

For JVs that operated in technology and electronic-intensive sectors, during normal working hours, the Chinese allowed Africans to take breaks and to pray, depending on individual faiths, while the Chinese continued to work. The absence of Africans represented an opportunity for the Chinese partners to perform technical tasks that required key operational knowledge. This same opportunistic attitude was evident during weekends and local holidays when the Chinese continued to work while locals were absent. In extreme cases, engineers at some JVs witnessed heavy project advancement after they returned from a strike, suggesting that Chinese partners exploited locals’ strikes to perform strategic tasks. Chinese partners also eliminated opportunities for local spin-offs by isolating local control missions that were supposed to closely monitor work. Many government officials stated that their Chinese partners categorically refused to instate Africans as controllers in favor of Chinese controllers. Additionally, African employees tended to use separate restaurants and lived in separate residences from Chinese employees, and thus, there were fewer opportunities to socialize. Often, the Chinese partners tended to marginalize African employees, particularly those who were competent, fast learners, and who had studied in prestigious Chinese schools. Isolating such Africans from friendly interactions prevented socialization and additional learning opportunities. Two employees, including one who graduated from China’s Tsinghua University, stated:

They are afraid of us because they know that the more we are in the company, the more they are exposed. Therefore, they try to evict us and work with locals who do not know them and who do not understand their language so that they reign ... China does not trust the Africans it trained because once you get your degree and come back here, the Chinese still doubt your skills. [Congo I-33; August 23, 2014].

The Chinese are not allowed to come into town ... as soon as they leave the plant, they head directly to the airport and leave for China ... They are much more suspicious of us than we are of them ... they perceive even a small gift as a means of corruption and favoritism. They refuse any type of gift. [Chad I-47; August 13, 2014].

Hedlund (1994) argued that transferring knowledge requires intimacy and permanence between collaborating parties. The Chinese partners’ behavior implies a tendency to create conditions that disturb intimacy and permanence. According to the locals, it was typical for a Chinese superior to assign or send an employee elsewhere when performing technical tasks. Moreover, at some JVs, such as those in Ghana, local employees
were not involved in the initial project stages, such as installing equipment for a turnkey plant JV. Moreover, the African custom of not working at night was advantageous for Chinese partners because local employees were absent at night. A member of a local control mission stated:

The activities that are a bit unusual are done at night. For every 24 hours, the Chinese generally work three times eight while our local monitoring missions work two times eight, even one times eight sometimes … But the Chinese perform the most technical activities at night as we often do notice huge progress in the morning. [Congo I-42; August 24, 2014].

Africans also noted Chinese opacity. Following a Sino-African two-party meeting, the Chinese partner organized parallel meetings to which only Chinese nationals were invited. Local partners mentioned that they had no choice but to accept the Chinese work style.

There are certain meetings that you cannot attend as local staff because it is between them… it is a government movement, not an individual’s. It happens that I’m not allowed to attend a meeting, and I don’t mind, it is their government, it is confidential …because the business is controlled from Beijing. …and our local laws and policies are just so weak for them that they tend to exploit every single loophole. [Ghana I-34; June 24, 2014].

We do not have much choice. We need foreign investment, and the Chinese are the only investors who show interest in textiles… That’s why they rule in here …they are very meticulous, trying to enjoy the slightest flaw. …they have no administrative orthodoxy. …in terms of transparency, they still have a long way to go. But the reality is that the Chinese do not transfer knowledge easily, we should be patient. [Benin I-48; July 16, 2014].

The Chinese partners’ industrious attitude was a natural advantage because they arrived at work earlier or left later than their African counterparts, depending on the situation. Because locals arrived later or left earlier, interviewees argued that the Chinese partners performed strategic tasks before the locals arrived or after they had left the office. Chinese employees are reluctant to complain and do not voice objections or other concerns about African employees’ work schedules. Whether the African norms concerning work hours assist in concealing key knowledge is speculative. In many cases, although local Africans left work at the end of the day, Chinese employees could easily return to work later because they resided within the company perimeter and could also work remotely, which was not the case for Africans. The board of directors also imposed restrictions on locals because the Chinese partners were major shareholders and dominated the vote. For instance, locals at several JVs were isolated from their parent company’s network because they were prohibited from working for both the JV and the African parent company. Moreover, Chinese nationals who occasionally or unofficially taught locals were transferred to China, and locals speculated that this could only be because they shared knowledge with African employees. The isolation strategy led to a dearth in learning
opportunities and created a high turnover among talented Africans who dealt with poor working conditions with no career progression.

2.4.3 Manipulation strategy
When the knowledge was of operational importance, Chinese partners exploited unofficial power to support the strategy of manipulation. For instance, a lack of clarity in the rules, particularly among workers, blurred the decision hierarchy and benefitted the Chinese partner. The manipulation strategy was less obvious to detect. Common practices included joint agreement on a training program for Africans, but provided by experts who were fresh graduates. Africans described this practice as problematic, because the Chinese partner did not introduce the parent company’s experts but external people who lacked sufficient practical experience and training. Many Africans believed that some of the Chinese partners’ employees were unqualified for their positions and could not interact with colleagues in English or any local language. A local officer commented:

As you are not authorized to do some specific work, you just stop at the level that you are asked to. Actually, our Chadian engineers complain regularly that they are even more qualified than their Chinese supervisors. So, they argue that Chinese engineers came to Chad just to get a good job and enjoy higher wages ... sometimes, even the person who should give you the information isn’t allowed by his direct supervisor. Then, it becomes a chain that hides information. [Chad I-36; August 14, 2014].

Conversely, when training was conducted overseas, particularly in China, many Africans complained that their Chinese partners unilaterally selected or changed the names of the training beneficiaries. At some JVs, training programs were rare, and the content was often unilaterally determined or changed by the Chinese partner once the African trainees arrived in China. In extreme cases, locals stated that the Africans selected were not qualified for, or particularly interested in, the training.

Recently, we went to China, 50 people, for training. I saw the Chinese refinery only once. It is clear to me that they had carefully planned their version of the training because we left Niger with a program and, once in China, we noticed that the content had been significantly changed. [Niger I-54; August 5, 2014].

At some JVs, the gap between Chinese partners’ discourse and practice was explicit, as top management designated a few local employees as trainers, though their local colleagues described them as unqualified. Some employees questioned why the Chinese partner refused to lead the training in favor of controversial local employees. African partners, particularly government representatives, often accused Chinese partners of having manipulative attitudes. A government official from Benin commented, “When a Chinese employee tells you he is going right, actually, in his head, he is going straight.” Another suspicious recruitment approach was
through inconsistent hiring methods, where locals were placed in positions for which they lacked the required skills and qualifications. One military security officer described this irony, noting that “the Chinese hire you as a car cleaner while you have a degree in preparing tea”. Local employees who began to learn, develop, and master knowledge were transferred in an inexplicable and unjustified manner. Some respondents noted that they vainly tried to assert their qualifications to claim an appropriate position. Another recurrent comment from African partners was that managers from the Chinese partner preferred not to attract highly qualified Africans because the Chinese opportunistically refused to advertise jobs nationally. Even when nationally advertised, after a scrupulous recruitment process, African partners affirmed that highly skilled locals were ultimately eliminated. Additionally, locals characterized their Chinese colleagues as “soft” diplomats. When Africans asked for an explanation on a specific knowledge subject, their Chinese colleagues would often avoid a crude “No” by, for example, answering “Next time.” Two local technicians described such a situation.

The Chinese do not categorically refuse; it is more ‘I don’t know, or I don’t understand,’ but not ‘I refuse’ or ‘I’m not telling you.’ They are a little bit like politicians. They have a polite and diplomatic way to get rid of you if they think you’re annoying. [Rwanda I-61; August 31, 2014].

The harsh Chinese worker might just tell you ‘No, don’t worry, I’ll do it.’ In that case, he doesn’t want you to learn that specific skill. But the intermediaries will say, ‘I’m busy, later,’ and later he doesn’t teach you. [Nigeria I-50; July 22, 2014].

In some cases, local employees stated that, without an objective reason, they were either promoted or discredited and then completely removed from a position that is technically strategic for learning and transferring knowledge. In terms of face-to-face interactions or during meetings, the Chinese partners favored their fellow country translator over an African translator, even when the latter was better qualified. The locals described these diversionary tactics as “cheating.” In fact, contrary to the Chinese internet slowing tactic in other JVs, local partners mentioned that African employees were sometimes distracted by free internet access in specific zones and therefore were not focused on learning once at work. From a human interaction standpoint, many locals indicated that the Chinese partners tended to play with their emotions through what they described as “racist behaviors” or repressive attitudes that caused them to lose focus in a learning context or during joint training. For example, several employees testified that locals were sometimes upset when Chinese employees behaved as though they did not understand the locals who spoke Chinese. This was consistent with a common tactic of traumatizing and demotivating locals by, for instance, displaying signs of mistrust, and demoralizing and blaming locals for any dysfunction or conflict within the JV. Some employees stated:

If you ask questions, there are some Chinese who get irritated. Now, when one of them says you are a troublemaker, his whole entourage will consider you as such … once you have a problem
with one Chinese, he tells his other friends that you’re a problem guy and to be careful with you. So, the more you have problems with them, the more your collaboration becomes difficult inside the company. [Niger I-55; August 5, 2014].

Among the Chinese, whether you have a PhD or not, it’s not their problem. Even a simple Chinese worker makes fun of you because he feels that his country mates consider him more than you, in all regards … and transparency is not his priority. [Congo I-24; August 21, 2014].

Such discouraging attitudes tended to lower learning motivation and Africans’ self-esteem, and there is sufficient evidence that failing to empower employees decreases learning initiatives (Peiro & Melia, 2003; Song, 2014; Zimmermann & Ravishankar, 2014). These factors contributed to a lower promotion rate among African employees, poor employee retention rates and career plans, and no financial incentives for learning. The situation was exacerbated by Chinese partners’ unwillingness to teach and transfer knowledge, which was noted by many locals.

2.4.4 Threat strategy

When the knowledge was of strategic importance, the Chinese partners exploited unofficial power by applying a threat strategy. Chinese partners often argued that the project deadlines required them to increase their speed of execution, which served as justification for the Chinese to import additional Chinese labor because they believe that Chinese laborers are more disciplined and productive. The Chinese partners argued that African employees caused project delays that increased the JV’s costs. This raised the pressure on African partners to agree to import Chinese labor to meet project timeframes. With more Chinese labor and close deadlines, Chinese partners executed their tasks with a speed that did not allow locals to carefully watch and learn. The locals were constantly missing knowledge segments because of their limited number and absence during some working hours. For local partners, including governments that attempted to counterbalance the threat by suggesting hiring more qualified Africans, the Chinese partner imposed the condition that if they recruited local labor, they would offer shorter guarantees and costly maintenance services. Often, the Chinese did not provide an option to African partners, as indicated by an administrative officer:

They are very careful when they get into any business cooperation … They come with their own ideas about the cooperation and that’s it, something that you either take or leave… because they already had their discussions back home… you have no choice but to submit to their way of doing business. [Ghana I-34; June 24, 2014].

With this type of threat, many local partners relented. Another threat tactic was a tendency to prevent locals from mastering the skills required for their job. Interviewees at many JVs argued that locals were frequently fired because they quickly understood technical processes or were pressured to resign on their own through
mistreatment. Consistent with this strategy, Chinese partners threatened anyone who attempted to create a trade union to defend employee interests, and potential union leaders were quickly fired before the idea spreads across the whole organization. Local Chadian managers specifically stated that Chinese partners had retaliation measures, such as collaborating with other local Chinese businesses, to threaten local interests when, for example, the local government partner unilaterally imposed decisions. This context appeared to be a source of constant threat for locals who tried to excel by taking learning initiative. We encountered many cases where local employees who asked too many questions or displayed a high level of curiosity were fired, which caused recurring conflicts between the Chinese and African partners. Several African interviewees stated that they adapted by drastically reducing the frequency with which they asked questions. The threat was constant; therefore, it affected locals' learning motivation because being curious risked negative consequences, including being fired. Chinese partners seemed to use various threats to control locals depending on the context. For instance, at many work sites, Africans stated that their personal responsibility was engaged when they risked venturing out of their assigned zone to learn new skills, even if they did so during break time. While studies (Lee & Beamish, 1995; Lyles & Salk, 1996) have shown that learning involves curiosity and an adventurous demeanor, Chinese partners did not encourage risk-taking, even if locals justified it by their desire to simply watch and learn. In many situations where a local employee suffered an accident, the Chinese partner refused to pay for medical treatment because there was either no individual hiring contract or no effective collective labor agreement. In many cases, local employees were not covered by incidental insurance.

The Chinese do not subscribe to the Congolese National Social Security Fund. So, when you have a physical injury, the Chinese feign light empathy and then discard you. It's over for you...so, if you're junk, you stay with the scrap. [Congo I-11; August 22, 2014].

Consequently, employees acknowledged that the threat of not being insured by the local social security has tempered their learning initiatives. At the partner level, the Chinese mobilized radical means, such as threatening to leave the partnership and creating serious concern because they owned most of the investment. Local partners stated that during some business meetings, the Chinese directors behaved like diplomatic representatives by threatening to contact government officials. The Chinese would often ensure that they had options, even in the worst case scenarios. According to Yan and Gray (1994), the availability of alternatives is crucial to exploit bargaining power, as that partner can threaten to leave the negotiation in favor of an alternative. In many cases, the bargaining power dynamic favored the Chinese partners because they were financially stronger and local partners relied on their assistance and generosity. A director who participated in negotiations for several partnership agreements with Chinese investors stated:
We cannot win against the Chinese because they give us conditions that are so favorable that we are very eager to sign. So, sometimes we do not even go into the details of the agreement to require knowledge transfer. Which bank can give you a loan at 1% interest in the world except Chinese? When the Chinese give you a loan to pay for your own shares, how can you impose knowledge transfer conditions? [Benin I-45; July 13, 2014].

These types of threatening contexts placed local partners at a disadvantage in negotiations. This is particularly the case for JVs that operated in the oil sector and JVs created primarily to supply China’s demand. For instance, the current oil price drop is a source of additional bargaining power for Chinese partners because they may have better alternatives to meet their oil demand from other foreign partners. Thus, local partners, such as those in Chad and Niger, stated that they increasingly acquiesced to Chinese demands.

2.4.5 Sharing strategy
At the crossroads of these four strategies, Chinese partners tended to use a sharing strategy that is also described as a chameleon or camouflage strategy mostly within the operational knowledge zone. This strategy was often used to temper a poor working atmosphere generated after one or more of the four strategies resulted into the African partners’ protest. To rectify the situation, the Chinese partner exhibited a more collaborative attitude by selectively teaching new skills, mostly operational ones. The strategy involved a hide-and-seek dynamic between the Chinese and African partners. The Chinese partner typically decided to share more operational knowledge learned through hands-on work because locals often worked at lower organizational levels performing more manual routine tasks, while the Chinese focused on more complex and knowledge-intensive tasks. The Chinese partner, therefore, shared only the knowledge that did not pose a threat to their power privileges and to their competitive advantage.

The Chinese sift the information they give you: it is really for a certain end. So, when they say come and plug in this here, the information needed to plug in here is all that they will give you, not even about to how to unplug it, even if you ask. [Ghana I-52; June 17, 2014].

Moreover, in training contexts, Chinese trainers answered questions only after they had consulted their Chinese supervisors. Therefore, the Chinese partner transferred only the knowledge necessary at the lowest level for the JV to function based on local employees’ specific tasks and positions. African partners described the training, regardless of location, as too basic, theoretical, and focused on generalities that did not help them to understand complete technologies. Chinese partners did not allow locals to master the various facets of the knowledge, and Africans were not able to permanently adjust and exploit that knowledge (see Carlos Bou-Llusar & Segarra-Ciprés, 2006; Peteraf, 1993). This sharing strategy used tactical elements of a chameleon strategy because the behaviors were customized according to the type of employee and context. This made it
harder for Africans to predict their Chinese partners’ attitudes and to prepare an appropriate reaction that would help them to learn. Based on whether the knowledge was strategic or operational, the Chinese partner determined what to share by mobilizing their official and unofficial power. For African partners, the sharing strategy, even though related to mainly operational knowledge, appeared to minimally represent their learning and knowledge transfer interests. Africans also explained that the overall Chinese practices indicated Chinese partners’ unwillingness to transfer knowledge to their local partners.

2.5 Toward a better understanding of power sources and knowledge transfer in Africa-China JVs
Chinese partners applied strategies based on the type of knowledge at stake and the type of power at their disposal. Power originated from diverse sources, including share ownership, the control of key positions, key resources, the use of culture and language singularities, advantages in localization and soft power, experience, and lobbying. We introduce theoretical propositions to explain this phenomenon (Yin, 1989). From a theoretical perspective, power used in a collaborative or a negotiation context has official and unofficial sources. Our data analysis suggests that Chinese partners developed and mobilized a large arsenal of power sources to prevent knowledge transfer to their African counterparts.

2.5.1 Official power sources
Official power can be defined as the explicit authority that one party exercises over another in a negotiation context to achieve a goal. It is exercised according to the laws, rules, or agreements to which both parties adhere. Official power is acknowledged by each party such that the empowered party systematically controls and approves the decision-making processes. IJV partners agree to confer to each party the extent and nature of exercisable power through the contract agreements and based on factors such as share ownership and controlling key positions in the JV. Official power is sometimes described as formal power because it is considered a formal legitimate authority to suppress resistance and the party’s potential to officially influence another party (Mulder, de Jong, Koppelaar, & Verhage, 1986; Peiro & Melia, 2003).

2.5.1.1 Power from shares
Inkpen and Tsang (2005) found a clear link between ownership and hierarchical power. Thus, bargaining power also depends on the control a partner has over the JV’s capital, which has been used as an indicator to measure the level of control (Blodgett, 1991; Fagre & Wells, 1982). Control can be analyzed from many perspectives, including the extent, scope, or mechanism. We found that in the majority of the JVs, the Chinese partners were the dominant partner. For 26 out of the 29 JVs, the Chinese partner possessed the majority of shares, which conferred on them the highest voting rights and dominant decision-making power. In many
cases, the Chinese partner held veto power with over 60% of the shares. However, in some cases a JV partner holding a minority share can still employ tactics to control the JV (Hamel, 1991; Schaan, 1988). Despite this limitation, the theoretical findings in power studies support the notion that majority share ownership confers power on the majority shareholder.

**Proposition 1:**

*Power from majority share ownership is mobilized to implement a blocking strategy.*

2.5.1.2 Power from the control of key positions

According to Yan and Gray (1994), privileges in appointing the IJV’s board of directors and top managers are important control mechanisms in strategic decision making to manage internal processes and the JV in general. Moreover, top management positions are associated with substantial power (Yan & Gray, 1994). In our cases, the Chinese top managers often held seats on the board of directors, the highest decision body determining knowledge transfer including defining job descriptions, position influence, official interaction, and access zones for local employees.

Even as a director, I cannot decide anything. The Chinese CEO holds important meetings without the knowledge of our local deputy CEO. With the Chinese, it is total opacity. [Niger I-8; August 11, 2014].

They bring us a supervisor who doesn’t speak English, so you can’t really approach him, you only observe. There was a Chinese management officer, and we were told to never ask him questions or communicate with him directly. [Nigeria I-22; July 23, 2014].

Thus, Chinese partners use job descriptions, among others, to formally structure the individual and unit interactions within the JVs to exercise control. Where African managers would typically have authority, they still required approval from their Chinese counterpart, though this was not the case for the Chinese counterpart. Finally, in most cases, locals in top management positions served as deputies to the Chinese.

**Proposition 2:**

*Power from controlling key positions in the JV is mobilized to implement an isolation strategy.*

2.5.2 Unofficial power sources

Unofficial power is often tacit, not acknowledged, and referred to as informal power. Such power is often based upon individuals’ awareness, competencies, background, and experience and supported by personal power sources not necessarily associated with the formal structure or position (Goldberg & Campbell, 1997; Peiro &
Melia, 2003). From this perspective, unofficial power can flow in all directions, whereas official power is fundamentally based upon structural power sources related to a hierarchical position. Accordingly, formal power is predominantly unidirectional, whereas informal power remains reciprocal. In several cases, our data shows that the Chinese partner dominated the decision-making process by using various mechanisms recognized by a local partner representative:

The Chinese are doing what they want in this company; they are difficult to control. Before, they did not accept even the State representative within the company. Information was almost unavailable. I am the director, but I miss their respect. There was no consideration even as director ... they control everything. [Niger I-8; August 11, 2014].

Major sources of unofficial power included controlling strategic resources and exploiting cultural and linguistic differences, geographical localization, soft power, experience, and lobbying opportunities.

2.5.2.1 Power from resource control

Protecting control over JV’s key resources has several advantages. Controlling resources provides context-based bargaining power (Yan & Gray, 1994), especially if the resources are critical (Pfeffer & Salancick, 1978). Each partner’s bargaining power is shaped by the level of contribution to the JV (Harrigan, 1986); that a partner needs to learn from a JV defines that partner’s bargaining power relative to the other party (Hamel, 1991; Inkpen & Beamish, 1997; Yan, 1998). This premise is consistent with Inkpen and Tsang’s (2005) perspective, where dependence in a JV can be a source of power for the firm controlling the key resources. In most of our cases, the Chinese partners held strategic resources, including key technologies. They also tended to monopolize most of the technical knowledge necessary to fix fundamental problems, placing them in an advantageous position for control.

The distribution of power is not balanced at all. They have the largest share percentage, and the technique belongs to them as well. We are just participants, we only contribute through the land, certain custom conditions that exempt some taxes ... but they control all the technological resources of the company. [Chad I-30; August 14, 2014].

Locals did not learn the grassroots of the knowledge because they were absent during the initial work, sometimes because of the turnkey plant formulas in Chinese partnerships. Thus, the Chinese partner continued to control key resources, including technical know-how, which provided them with a significant power advantage. Following this argument, we suggest:

Proposition 3:

Power from controlling key JV resources is mobilized to implement a threat strategy.
2.5.2.2 Power from culture and language

To facilitate learning between partners, the local culture must be accommodated to avoid hampering the transfer process by cultural conflicts (Inkpen & Tsang, 2005), particularly when the cultural gap between partners is significant. Learning and absorbing tacit knowledge is more complex when partners are from different cultural backgrounds and contexts (Lei, Slocum, & Pitts, 1997). Our data suggests that Chinese partners often used the Mandarin language to hide information. In most of the JVs, key documents were available only in Mandarin. Additionally, Chinese employees rarely used English, and most of local employees did not understand Mandarin. Thus, communication was more difficult.

In the meeting, when we talk with Chinese officials, they tend to periodically consult each other in Mandarin in our presence. We are there, we understand nothing. When we, locals, consult each other, they fully understand. It is really unbalanced; they have the advantage in the communication side. The main language of exchange, according to the contract, is French, but they continue sending us documents in Chinese or in an unprofessionally translated English, a Chinese English! [Niger I-8; August 11, 2014].

Because of their position of authority, the Chinese tended to ignore and even to maintain the barriers preventing locals from effectively communicating with Chinese coworkers. The Chinese often refused to use English or French, despite the fact that these were often the JVs’ official language.

Proposition 4:

Power from a cultural and linguistic singularity in the JV is mobilized to implement all strategies.

2.5.2.3 Power from localization and soft power

In some cases, key board meetings were inexplicably held in China at the parent company’s headquarters. This provided a localization advantage because the context and place of negotiations affect both parties’ behavior (see Ertug, Cuypers, Noorderhaven, & Bensaou, 2013). For instance, several African senior managers confirmed that strategically important meetings were transferred to China. The Chinese partners often offered complementary return flight tickets to the African members of the board of directors or contract negotiators to travel to China coupled with generous travel packages and special VIP treatment in China. This was often reserved for Africans with significant decision-making power. Other African technicians and engineers who traveled to China for training did not receive such treatment. Many high-level African managers and decision makers commented that they were uncomfortable with categorically refusing their Chinese partners’ demands after receiving such kindness. Soft power refers to getting others to “want what you want” (Nye, 1990). Thus, the Chinese partner exercised soft power with diplomacy and bargaining tactics during most of the JV decisions made in China because they tailored the negotiation context to their advantage. A top African manager explained:
They employ all necessary means to obtain favors from us. My relationship with the Chinese is really strange and unusual compared to others. They have an ‘aggressive’ approach. In China ... when you go to training, you are given extra money although this generous treatment was not included in the initial package. Sometimes, people are even allowed to go to China with their wives. [Ivory Coast I-59; June 5, 2014].

Proposition 5:

_Power from localization and soft power is mobilized to implement a manipulation strategy._

2.5.2.4 Power from experience

Experience is a key asset in effective knowledge management strategies (Nam, 2011). The Chinese partner had extensive experience establishing JVs compared to their African counterparts. In most of our cases, the Chinese partner had been involved in at least one JV project, while most African partners were experiencing their first JV. A Chadian employee, who previously served in a Sino-Sudanese JV and was working for a Sino-Chadian JV, mentioned that the Chinese behaved differently in Chad compared to his experience in Sudan. He commented that the Sudanese learned from the Chinese and that local partners eventually assumed control of the JV. This may partly explain why the Chinese changed their approach in their later partnership in Chad. The Chinese partners’ extensive negotiating experience provided them with an advantage to obtain their desired outcome during management and board meetings. One Congolese senior official and one Chadian engineer and ministerial director stated that, during negotiations, the Chinese partners relied on their specialist experts to optimize decisions.

In discussions, it is our politicians who negotiate the contracts, we technicians are not involved, and this is the misfortune of what is happening in Africa, particularly in Central Africa. When the Chinese come to us, they are at least a dozen; in each area they bring at least one specialist. Here, they face two or three locals. One person cannot master drilling, refining, environment, and finance at the same time. [Chad I-30; August 14, 2014].

The balance of power is in favor of the Chinese, that’s normal: they have money, they have power, and they have more knowledge, more experience and negotiate better. We face experts. They studied negotiation strategies; we did not. We miss the expertise to make the best out of our partnership with them. [Congo I-14; August 22, 2014].

Proposition 6:

_Power from extensive experience is mobilized to implement all strategies._

2.5.2.5 Power from lobbying

Lobbying has a significant place in knowledge management (Kanol, 2015; Taminiau & Wilts, 2006). The Chinese enjoyed privileged channels of communication with local authorities to make requests related to the
attitudes of some African workers and managers, and could thus lobby locals to satisfy their demands. Several African directors and engineers stated that the Chinese partner lobbied them from Chinese company headquarters by contacting their supervisors and government officers. As a result, some locals claimed to have received calls from their ministers and even the presidential office requesting that they behave in a way that did not best serve the interest of locals in terms of learning and knowledge transfer. The power hierarchy in some African governments was often disorganized and blurred such that it benefited the Chinese partner, who then exploited and dominated official communication with local power holders through strategic and often diplomatic channels. A Beninese and a Congolese described the situation:

The Foreign Ministry and the Presidency start negotiations without our sectorial ministries … when we confront the Chinese, they say no, it is not what the Mandarin-written initial agreement said … if you question, he bypasses you, runs to his embassy to turn it into diplomatic conflict that ends up in our Presidency. [Benin I-39; July 17, 2014].

Chinese have a strong lobbying system here. As soon as we set certain rules, they blackmail our authorities saying that we are looking for money, that we are slowing down the work progress … it becomes a pretext to bring in more Chinese by arguing that what an African does in four days, a Chinese does it in two days. [Congo I-42; August 24, 2014].

*Proposition 7:*

*Power from lobbying ability is mobilized to implement all strategies.*

These power sources are key facilitators of the five typologies of Chinese partners’ knowledge management strategies. Each power source contributed to shaping the strategy adopted according to the type of knowledge and learning context. Overall, the sharing strategy at the crossroads of the four other strategies appears to be a strategy where all sources of power were combined simultaneously. Table 11 presents the characteristics of each category with the corresponding dominant power source.
Table 11: Pairing power, sources, behavior, and strategies

<table>
<thead>
<tr>
<th>Type</th>
<th>Sources</th>
<th>Context</th>
<th>Behavior</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Official</td>
<td>Majority shares</td>
<td>- Decision of board</td>
<td>- Giving more power to Chinese-held positions</td>
<td>Blocking Sharing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Training program</td>
<td>- Changing training content</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Inter-organizational communication channels</td>
<td>- Obstructing interactions of locals with parent company</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Holding key positions</td>
<td>- Managerial and operational decisions</td>
<td>- Sharing passcodes and passwords with Chinese managers only</td>
<td>Isolating Sharing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Access zones</td>
<td>- Leadership positions all occupied by the Chinese</td>
<td></td>
</tr>
<tr>
<td>Unofficial</td>
<td>Resource control</td>
<td>- Technology transfer</td>
<td>- Threat of leaving the JV</td>
<td>Threatening</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Financial decisions</td>
<td>- Controlling and favoring Chinese suppliers for the JV</td>
<td>Sharing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Supply and outsourcing networks</td>
<td>- Holding meetings in China</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Localization and soft</td>
<td>- Board of directors meeting</td>
<td>- Hiding details in initial stages of the agreement</td>
<td>Manipulating</td>
</tr>
<tr>
<td></td>
<td>power</td>
<td>- JV establishment</td>
<td>- Not speaking English and local languages</td>
<td>Sharing</td>
</tr>
<tr>
<td></td>
<td>Culture and language</td>
<td>- Face-to-face communication</td>
<td>- Biased translations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Uncodified knowledge</td>
<td>- All</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experience</td>
<td>All</td>
<td>- Turnkey plants</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Sifting knowledge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lobbying</td>
<td>All</td>
<td>- Informally contacting local officials/influencers</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Interfering in local political appointments</td>
<td></td>
</tr>
</tbody>
</table>

From the findings and the theoretical propositions, we suggest a conceptual model to better understand learning and knowledge transfer with respect to power sources and the nature of the knowledge. Figure 8 illustrates that based on the type of knowledge at stake and the sources of power available to the knowledge holder, the partner will determine which strategy to adopt to control the learning and knowledge transfer mechanism and achieve the desired outcome. Conversely, a partner may choose a strategy and determine the sources of power to mobilize. In the model, one source of power does not exclusively serve one particular strategy, but represents the dominant mobilized source of power compared to other sources.
2.6 Conclusion

This paper explored the struggle for knowledge transfer and control within JVs between Chinese and African participants. This study shows that Chinese partners used their superior power advantage in various contexts to apply four specific strategies, while often using the fifth strategy – sharing – as a moderator to control reactive opposition to the four primary strategies. The findings represent a significant contribution in highlighting how the types of power within a JV affect learning. Previous research minimally addresses power without investigating its major sources. These results contribute to the literature related to knowledge-based view by providing new insights to better understand the significance of power, particularly unofficial power, in the strategic management of knowledge assets. In fact, this analysis shows that power is extremely important, and partners often exploit unofficial and unexpected types of power to achieve their knowledge control goals. This study also found that the Chinese partners mobilized unofficial more than official power to implement strategies to manage knowledge in the JVs. We also propose a conceptual model to explain the dynamics between learning, power sources, and knowledge holders’ strategic choices, particularly within Africa-China JVs. This research presents an original perspective on international business studies related to learning by adding insights into the particularities of Africa-China JVs and by proposing a pioneering approach to knowledge control by examining multiple power sources.

This study is thus limited by its geographical scope, where the findings and recommendations may be more relevant in the Africa-China alliance context. Moreover, we do not pretend to generalize our findings to all
Africa-China alliances nor to all the 29 cases investigated. Indeed, in this paper, we simply focused on the cases where African partners indicated clearly that they didn’t achieve their initial learning and knowledge transfer targets and we therefore investigated how that happened. Another limit of this study is that we adopted a purely African perspective to understand those unsuccessful cases of knowledge transfer. However, we are not stating that all African partners did not learn at all from the Chinese. Indeed, in some few cases, Chinese partners have been more collaborative, and Africans more entrepreneurial with regards to learning. This enabled a few African partners to gain significant knowledge from the Chinese. The last shortcoming of this research is that, because we exclusively adopted an African perspective, our interviewees were all Africans.

Further research to explore and compare how these findings may explain knowledge transfer failure in other settings will be of interest, and so for JVs involving Chinese partners in other regional or national contexts. In that regard, further studies may increase our proposed model’s potential replication elsewhere. The results from this study may help practitioners, particularly African partners in JVs, understand why they may fail to gain significant knowledge from their Chinese partners and the potential opportunities to reverse the trend by, first gaining more power relative to their partners. Indeed, this field deserves greater attention because China has now become Africa’s leading business partner. Although this study improves our understanding of the role of unofficial power in knowledge management practices, future research should explore whether Chinese employees’ attitudes are voluntary, cultural, or deliberate and strategic. This will help determine whether Chinese partners’ strategies are consciously intended to prevent locals’ learning or whether it reflects poor training among Chinese employees about teaching and collaborating with their African counterparts. Therefore, a subsequent question that also needs more investigation is: Why do Chinese partners deliberately or not, try to reduce knowledge sharing while such an attitude may hurt the JV’s performance? There are also opportunities for future studies to explore if some African partners, despite the Chinese knowledge control strategies, managed to learn and how. Future studies can also explore how African partners can encourage their Chinese partners to use the sharing strategy more often, which appears to be the most suitable approach to a modest level of learning mainly operational knowledge. The main challenge is determining how African partners can reduce the power gap with respect to their Chinese counterparts. This is critical as African partners, particularly governments, expect their alliances with Chinese partners to support Africa’s industrialization through knowledge transfer.
2.7 References


Abstract
This study is conducted on 29 Africa-China alliances from twelve African countries and explores learning management by African partners and the transfer of knowledge from their Chinese counterparts. Based on six social capital knowledge transfer dimensions from an alliance network approach, we analyze dimension applicability and relevance for Africa-China alliances. Using multiple case study method with semi-structured interviews, we found that African partners actively take advantage of multiple facilitating conditions to support learning. Africans often used informal even clandestine mechanisms to gain knowledge. Because of informal interaction dynamics, our analysis proposes, within the specific alliance context, a new theoretical framework based on the cognitive, relational, and structural dimensions of social capital. Africa-China alliances appeared to use or even mix the facilitating conditions from other network types to gain knowledge. This research provides insights to knowledge-seeking strategic alliances particularly in Africa-China context. Additionally, the paper juxtaposes social capital and organizational theory with empirical perspectives to better explain learning through the exploitation of organizational informalities.

Keywords: Learning; social capital; informal; strategic alliance; knowledge transfer; Africa; China
Chapitre 3 : L’apprentissage dans les alliances sino-africaines : perspective des informalités et du capital social

Résumé

Mots-clés : Apprentissage ; capital social ; informel ; alliance stratégique ; transfert de connaissances ; Afrique ; Chine
3.1 Introduction

African countries are gradually engaging in cooperation with their southern counterparts including China. Representing a new form of cooperation for some, and a reconfiguration of the international economic order for others, assessments of this emerging phenomenon between southern nations differ. During recent years, Africa-China connections have experienced rapid development, particularly through cooperation agreements that often materialize into new JVs and other alliances between Chinese and African partners.

Harrigan (1986) stated that partners enter into such alliances to learn, develop new expertise, and leverage potential synergies. The goals of each partner, particularly those from southern countries, include experience sharing in the form of inter-organizational and intra-organizational learning. JVs, for instance, are used for the primary purpose of mutual learning (Nam, 2011) and “the process of learning along with the nature of its outcome takes precedence over the choice of a structural mode by which to exploit the learning opportunity” (Inkpen, 1995, p. 125). Accordingly, an alliance such as a JV is often a conduit for obtaining tacit knowledge. Moreover, JVs facilitate the internalization of knowledge or skills unavailable to organizations or not readily accessible from a market transaction (Hamel, 1991; Kogut, 1988). To achieve partners’ objectives, a dynamic learning approach is required (Inkpen & Beamish, 1997).

Limited research addressed learning and knowledge transfer in the context of Africa-China alliances. The current knowledge concerning learning in Africa-China alliances fails to determine whether learning occurs or how African partners learn through such alliances. The absence of literature in this emerging field is particularly interesting, especially in view of the fact that China has become Africa’s leading economic partner, with investments increasingly taking place through JVs with local African companies. Intra- and inter-organizational learning through arrangements such as JVs remains complex (Miller, 1996) given the diversity of organizations involved. This paper examines the strategies Africans employ to learn and transfer knowledge from their Chinese partners through established alliances in Africa. This study avoids a focus on the benefits of organizational learning or knowledge transfer because of existing prevalent studies on the subject of outcomes. Dodgson (1993) stated that analyses of organizational learning have focused on outcomes rather than the complexities of the process. Instead, we address the processes by which learning and knowledge transfer occur in alliances materialized through inter-organizational collaboration between African and Chinese partners. We adopt the social capital perspective of Inkpen and Tsang (2005) and consider JVs such as technological partnerships as forms of collaborative alliances. Our analysis focuses on the conditions and individual and organizational characteristics/behaviors that facilitate inter-organizational knowledge flow between African and Chinese partners. We particularly examine African learning from the Chinese in a fluctuating collaboration context or a competitive-collaborative relationship (see Hamel, 1991).
This study is unique because it includes numerous cases in multiple African countries, and the existing literature lacks focus on this specific topic. We first review the literature of inter-organizational learning/knowledge transfer and social capital from an African perspective and elaborates on the Africa-China alliance context. We then present the research methodology. The results indicates that only few African partners have learned significantly from the Chinese, mostly through informal interactions and clandestine mechanisms. We furthermore discuss theoretically these results based on each of the six social capital dimensions. Finally, we develop a theoretical framework to better explain learning through the exploitation of a context of organizational informalities, followed by an empirical discussion. We also highlighted the major implications of the research.

3.2 Managing IJVs: particularities and contextual settings

An IJV is an independent alliance created and managed jointly by at least two legally separate organizations with one having its headquarters outside the host country. In recent years, IJVs have grown in popularity to become a major means of internationalization (Lupton & Beamish, 2014). There are several benefits in establishing an IJV. Some of them include the opportunity to enter markets in countries where other forms of entry are disadvantageous or prohibited by local law. IJVs can also help reduce business risks inherent to investing abroad. By pooling resources from different partners, IJVs help to boost synergies (Harrigan, 1986) and complementarities in a way that is more likely to be beneficial to both partners than if each partner had operated alone. Creating an IJV with a local partner is often essential for the survival of a new business particularly in emerging countries that are often unknown environments for the foreign partner. Thus, the network of contacts, the social capital, and the know-how brought by each partner is important to operate efficiently. However, despite the growing enthusiasm for such entities, many IJVs lead to disappointing results and failures. Indeed, some IJVs face a nightmare by putting partners in a metaphorical position of being in the same boat but not going to the same destination or, even worst, sharing the same bed with different dreams (Walsh, Wang, & Xin, 1999). This often leads to a difficult journey of collaboration. Indeed, the fact that many partners get involved in an IJV translates into each partner expecting particular and sometimes contradictory benefits in return. The reality is that, often, the parent companies differ in their objectives in establishing an IJV. Therefore, partners’ objectives are often conflicting, pushing each of them to favor their own interests rather than the IJV’s. In addition, the objectives are unstable over time because they generally depend on hardly predictable factors such as the external environment, the changing strategy and priorities of the parent company and the composition of the IJV managing team. This divergence can result into, not only conflicts, but also performance issues and even the IJV dissolution. Because cooperation dominates in a relationship only
when the individual objectives of partners are compatible (Beamish & Lupton, 2009), harmonizing partners’ main objectives, before even the start of the alliance, becomes essential.

Managing IJVs involves constant interactions between different national cultures and management systems. The existence of cultural distances (Hofstede, 1991) between partners increases the risk of ambiguity, complexity, and resistance and could result into differences in objectives and coordinating approaches in operating methods and strategy implementation. These incompatibilities can also lead to differences in perceptions and can generate a lower level of collaboration and a higher likelihood of opportunistic behaviors within the IJV. Some sources of failure of IJVs reside in the conflicts and tensions that emerge when merging cultures that are significantly different. For instance, Africa and China have significant cultural differences. Therefore, creating an Africa-China JV where cultural differences are not handled properly can result into a higher rate of conflicts and tensions between the two partners or amongst the multicultural management team or at the lower organizational levels such as between the Chinese and African employees. Accordingly, it is essential to capitalize on each partner’s strengths and limits. It is through collaboration based on valuing cultural differences and mutual support that a more synergistic environment can emerge. Cultural synergy is fundamental to managing the effects of cultural diversity and to efficiently solve problems inherent to multicultural contexts because cultural synergy focuses more on managing diversity consequences rather than on eliminating that diversity (Hofstede, 1991; Yan & Gray, 1994).

The reality of managers’ multi-dependence to the IJV and to the parent companies is a particular feature in managing IJVs. Often, this translates into difficulties in the top management functions because of the conflicting and ambiguous role played by managers. Indeed, managers of IJVs have at least two identities: one as representatives of the interests of the overall IJV and another as the defenders of their own parent company’s interests. The IJV managers thus have a complicated task, because they face two hierarchies of aspirations while being requested to accommodate the interests of other IJV partners as well. This ambiguity relates to the notion that IJV managers do not always have enough information on the specific expectations of each parent company, the different groups of employees and the aspirations of various host country stakeholders. IJV management challenges can also be related to exogenous factors such as the hostility of the host country environment. Often, IJVs face both the pitfalls of a new socio-cultural setting that is characterized by, for instance, partners’ different conceptions of labor and business laws as well as the uncertainties of a new economic environment in which opportunism (Hamel, 1991), informalities and informal power (Yan & Gray, 1994) can play a more important role than written law and formal procedures.
IJVs are complex entities that escape the ordinary management methods. Indeed, an IJV is an alliance of reason which often takes the form of a relationship between conflict and cooperation. Thus, partner selection and developing collaborative relations are the cornerstone of managing IJVs. The convergence of each partner’s goals, the complementarity of skills and the compatibility of organizational cultures are crucial in selecting IJV partners (Beamish & Lupton, 2009; Lupton & Beamish, 2014). Moreover, since the relationship between IJV partners is built over time, the strength of the relationship depends on how the two partners manage to trust each other, to understand, to estimate, and to resolve their differences. On one hand, the various traditional management tools, such as a contract, the distribution of official power, control, and the disposable margin to benefit from opportunism to exercise informal power are fundamentally important to benefit from a partnership. However, on another hand, behavioral elements such as trust, collaboration, compromise, communication, coordination, and commitment are also essential to establishing and maintaining mutually beneficial relationships between partners. Therefore, to reach a successful partnership, it is crucial to ensure a stable, sustainable, and balanced collaborative framework within the IJV as well as between partners. This needs to be supported by reconciling all partners’ interests, by behaving in a collaborative manner, by exploiting skills complementarity and by developing a better cultural synergy (Yan and Gray, 1994).

3.3 Theoretical framework: learning and social capital

The study of the relationship between organizational learning and social capital requires identifying the role of social capital in the transfer of knowledge. One method for learning and transferring knowledge is by collaborating with various partners in strategic alliances. According to Gulati (1995), strategic alliances as one form of network refer to the voluntary coming together of firms to exchange, share, or co-create products, technologies, or services. The firms are partners with learning objectives and knowledge-sharing expectations. Argote and Ingram (2000) define knowledge transfer as the process of affecting the experience of another network member, and Inkpen and Tsang (2005) see the manifestation of knowledge transfer as changes in knowledge. One perspective of knowledge transfer in strategic alliances is the acquisition of knowledge by firms from an alliance partner by accessing the skills and competencies of the partner (Baum, Calabrese, & Silverman, 2000; Kogut, 1988) resulting in potential managerial or technical gains, or even increasing the co-creation of knowledge. Inkpen and Tsang (2005) noted that the knowledge of primary interest is tacit, difficult to replicate, and not easily purchased. The authors also exposed conditions that facilitate knowledge transfer in networks highlighting the role of social capital. They proposed social capital from the perspective of networks of individual relationships that function as a valuable resource/capital for (1) the individual or (2) the organization that possesses social capital. This is because individual social capital partly drives the
development of organizational social capital. With respect to strategic alliances, organizational social capital takes priority over individual social capital (Inkpen & Tsang, 2005). Kim (1993) suggested a link between individual and organizational learning by stating that organizations ultimately learn via individual members. According to Nahapiet and Ghoshal (1998), for both the individual and the organization, social capital is a valuable source of information, and “who you know” affects “what you know.” Cross, Thomas, and Light (2009) also stated that “who you know” affects “what you decide.” Thus, social capital that organizations and individuals possess contributes to inter-organizational learning and knowledge transfer. Many researchers argued that social networks are significant in knowledge transfer, and that related research is inadequate (Argote & Ingram, 2000; Li, Chang, Li, & Li Ya, 2014). Inkpen and Tsang (2005) conceived that all networks represent social relationships, and social capital dimensions are applicable in the study of learning and knowledge transfer in strategic alliances.

This research adopts the perspectives of Inkpen and Tsang (2005, p. 151), who define social capital as “the aggregate of resources embedded within, available through, and derived from the network of relationships possessed by an individual or organization.” Therefore, we view social capital as a means for individuals and organizations to transfer knowledge and to learn from partners – individuals or organizations. Following Nahapiet and Ghoshal’s (1998) structural, cognitive, and relational dimensions of social capital, Inkpen and Tsang (2005) presented a sound analysis of social capital’s role in knowledge transfer in three different types of network. The major conclusion is that certain conditions facilitate knowledge transfer and differ across the three networks (intra-corporate, strategic alliance, and industrial district). In the case of strategic alliances, Inkpen and Tsang (2005) indicated six important conditions corresponding to three social capital dimensions for successful knowledge transfer, which are summarized in Table 12.

<table>
<thead>
<tr>
<th>Social capital dimensions</th>
<th>For strategic alliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td></td>
</tr>
<tr>
<td>Shared goals =&gt;</td>
<td>— Goal clarity</td>
</tr>
<tr>
<td>Shared culture =&gt;</td>
<td>— Cultural diversity</td>
</tr>
<tr>
<td>Relational</td>
<td></td>
</tr>
<tr>
<td>Trust =&gt;</td>
<td>— Shadow of the future</td>
</tr>
<tr>
<td>Structural</td>
<td></td>
</tr>
<tr>
<td>Network ties =&gt;</td>
<td>— Strong ties through repeated exchanges</td>
</tr>
<tr>
<td>Network configuration =&gt;</td>
<td>— Multiple knowledge connections between partners</td>
</tr>
<tr>
<td>Network stability =&gt;</td>
<td>— Non-competitive approach to knowledge transfer</td>
</tr>
</tbody>
</table>

Our analysis of the results is based on the previously described configuration of social capital with respect to strategic alliances. We empirically discuss all the facilitating conditions and explore how the conditions...
contributed to successful learning and knowledge transfer for African partners. We also propose a framework to better explain the learning dynamic in Africa-China alliance settings.

3.4 Research method

This research adopts a multiple case study approach, which, according to Yin (2011), focuses empirically on a contemporary phenomenon within its real context while spanning several investigative sites. The multiple case study method facilitates a thorough understanding of a specific phenomenon in a particular situation and does not aim to generalize theory findings, although Campbell (1975) stated that this methodological approach is a preliminary step towards generalization. The case study remains the dominant qualitative research method in international business (Welch, Plekkari, Plakoyiannaki, & Paavilainen-Mäntymäki, 2011), and the exploratory nature of this study implies the case study method to be an optimal approach (Yin, 2009). Moreover, according to Denzin and Lincoln (1994), the more specific and unique the study object, the more the epistemological rationality of the case study method becomes relevant. Therefore, the case study is characterized by the limited number of situations in the analysis, the depth of analysis, and a focus on the inductive approach (Gauthier, 2008). Additionally, given the exploratory nature of this research, the multiple case study method offers the possibility of methodological adjustments inherent to the research process. Stoecker (1991) stated that the characteristics of case studies also shape the choice of theoretical and methodological framework, an idea supported by Gauthier (2008, p. 219), who stated “the best researchers adopt an iterative approach allowing them to refine their research instruments or even add sub-questions to the original questionnaire.”

Another advantage of the multiple case study method is that a holistic approach based on a collection of various information sources (sheets, speeches, and official documents) enables a thorough review of the phenomenon complexities (Denzin & Lincoln, 1994). This flexibility proved insightful during our research. Alliances, such as JVs in Africa, have not been the object of major scientific studies (Beamish & Lupton, 2009). However, in recent years, alliance arrangements have become more prevalent on the African continent particularly with southern partners such as the Chinese. Therefore, the novelty of the scope of this research justifies an exploratory case study approach of the learning and knowledge transfer phenomenon within Africa-China alliances. Hence, the unique aspect of this research is to highlight, through a learning perspective and a knowledge-based view, the methods, often unofficial and clandestine, employed by Africans to obtain knowledge when collaborating with the Chinese. Table 13 describes the characteristics of the alliances under study.
Table 13: Characteristics of the 29 alliances

<table>
<thead>
<tr>
<th>Age: Years of existence – YE</th>
<th>YE &lt; 5</th>
<th>5 &lt; YE &lt; 10</th>
<th>YE &gt; 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees involved – EI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL &lt; 100</td>
<td>8</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>100 &lt; EI &lt; 500</td>
<td>7</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>EI &gt; 500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Localization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Africa</td>
<td>15</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Central Africa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East Africa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control/ownership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese-dominated</td>
<td>26</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>African-dominated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees ratio</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese-dominated</td>
<td>10</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>African-dominated</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The research is conducted on 29 Africa-China strategic alliances located in twelve African countries – Benin, Burundi, Cameroon, Chad, the Democratic Republic of Congo, Ghana, the Ivory Coast, Nigeria, Niger, the Republic of Congo, Rwanda, and Togo. The alliances studied are formed only by African and Chinese partners. All alliances have been in existence for at least four years, which is more than the three years considered necessary for organizational learning to occur (Ingham, 1994; Lyles & Salk, 1996). The alliances include arrangements in the following sectors: Ten in telecom/media, three in aviation services, four in mining/refining, one in water sanitation, two in manufacturing, three in power and energy (thermal, biomass, and renewables), three in construction, and three in textiles. The fieldwork was conducted between 2013 and 2014 in China and Africa. During a six-month period, the interviewing researcher traveled to all twelve African countries to perform face-to-face, semi-structured interviews, which, for processes that evolve in naturalistic settings (Patton 1990), are considered appropriate for data collection. The researcher also visited China and collected key Chinese investor-related information concerning alliances of interest before visiting Africa for the interviews. Based on rigorous selection criteria, we contacted participants in the field through several channels, including LinkedIn profiles through a snowball effect and via the researchers’ personal network because the researchers had participated in similar projects in China. In some cases, during the fieldwork, JV employees introduced the interviewing researcher to individuals who fit the participant selection criteria. This research focused on the African perspective; therefore, we conducted interviews exclusively (1) with Africans working in the alliances (which are either 100% private or partially state-owned), (2) with Africans working for the African parent companies, or (3) with Africans working in local government ministries and agencies such as local government officials participating in the negotiation, establishment, and management of the alliance in Africa. Many of the alliances involved several African government partners. Thus, in all twelve African countries, the interviewing researcher visited people directly in charge of the alliance at the ministries and agencies who had signed or monitored the alliance agreement. Relevant country ministries included ministries of infrastructure and transport; economy and commerce; foreign affairs; industry and commerce; mining and energy; petroleum; planning, and other significant government coordinating agencies. In some cases,
consultants and major shareholders were interviewed. Interviews were also conducted with a multilateral financing organization in charge of Chinese investments in Africa. The interviewing researcher met with at least two individuals from each alliance. Participants included engineers, operators, technicians, managers, managing directors, ministers or their deputies, CEOs, translators/interpreters, and members of the board of directors. Some participants occupied multiple positions simultaneously because they worked for both the government and the company. We contacted 86 individuals for interviews; 11 of whom refused to participate in the research. The Chinese partners were often reticent during fieldwork to allow local participants to be interviewed. Such opposition did not surprise us because collecting data in Africa is extremely challenging, particularly when the project requires several local trips in an African environment that is not research-collaborative (Rogerson & Rogerson, 2010; Lages, Pfajfar, & Shoham, 2015).

We interviewed the 75 remaining people, all Africans, and obtained contributions from all twelve countries. Many of the individuals and companies requested strict confidentiality. Fourteen interviewees did not authorize the tape-recording of their interviews, but allowed the note-taking of valuable information during the interview. In total, we tape-recorded and transcribed 61 interviews. Interviews lasted 40 to 100 minutes. Participants possessed between five and nineteen years of work experience. Participants had been working for at least three years within an alliance environment with Chinese employees who acted either as their colleagues or as supervisors. Moreover, official documents such as the terms of the alliance, the agreements signed by both Chinese and African partners, corporate brochures and annual reports, newspaper reports, and other documented specific collaborative arrangements have been obtained and used as relevant sources of information to provide a more rigorous analysis. Our research has used these various data sources for triangulations particularly when certain interviewees provided problematic, questionable, or incomplete information. To ensure data reliability, we asked interviewees to confirm our transcripts’ accuracy (Lincoln & Guba, 1985). We used a qualitative approach to analyze interview transcripts through reduction (coding), reorganization, and comparison of content (Miles & Huberman, 1994). A precise coding scheme improved the collected data sensitivity based on content analysis procedures (Lincoln & Guba, 1985; Taylor & Bogdan, 1984). We then used thematic categorization and content analysis based on the six discussion dimensions of our questionnaire: (1) acquisition of new knowledge; (2) joint creation of knowledge; (3) motivation, skills, absorption capacity, and specificity of knowledge; (4) structure, transfer of knowledge, and power relations; (5) organizational and individual communication, and (6) determinants of successful learning. We were conscious of possible bias in our own cultural beliefs in the analysis, which prompted an analysis of the transcripts from an objective perspective. Indeed, this study involved several researchers from different international backgrounds (British, African, Canadian, and Chinese), which assisted in the control of cultural and interpretative biases in the data analysis.
3.5 Results and analysis

Of the 29 cases analyzed, we found that Africans achieved some of their initial learning objectives in certain cases with some difficulty, or at least extended substantial effort in achieving these objectives. In this analysis, we focus only on successful situations at the organizational and individual levels of the alliances. The results suggest that many African partners have managed to obtain knowledge and learn despite a described lack of openness by Chinese partners (Alavi & Leidner, 2001). Individually taken, the Chinese neither voluntarily collaborated nor willingly shared or taught in the beginning. African partners, both at the organizational and individual levels, used various strategies and tactics, often informal, to surmount the legal and artificial barriers set by the Chinese. The strategies were adopted with consideration of local people’s traits and attitudes consistent with organizational and individual behavioral patterns.

Establishing learning objectives when entering into an alliance facilitates mutual understanding and agreement on the methods to achieve the initial goals of the partners (Das & Teng, 1998). In the context of the current study, through the establishment of alliances, African partners confirmed that they were following learning objectives, and the Chinese were conscious of the agreement. In the cases involved in this study, we accessed initial agreement documents signed by both the locals and the Chinese whereby African partners stated their commonly agreed learning goals when entering into the alliances. Therefore, African partners clearly indicated their goal of obtaining knowledge from their Chinese partners. In many cases, the researchers had access to highly confidential company and government documents concerning the alliances, including official reports from the ministry acting as a local partner, videos and, in some cases, the interviewing researcher had the opportunity to attend official meetings. Common targets had been set since the initial negotiation stage. To support those learning objectives, some African partners created accompanying measures such as Chinese language curricula in schools to allow local employees to learn Chinese:

I even requested the creation of Cameroonian services that will allow us to learn Chinese because if you are not committed to copy others, you cannot advance and, to copy, you must learn the language because it drives the method, philosophy, thought, and manners. Many do not understand the strategic idea behind learning the Chinese language. That's why we fought to have a Confucius Institute in Cameroon to learn Chinese. Chinese language is now taught in our faculties. [Government officer, Cameroon I-17; August 25, 2014].

Table 14 indicates the nature and content of extracted statements in official agreement documents that state learning and knowledge transfer as one of the local partner’s top priorities.
Table 14: Key points of learning and knowledge transfer statements

<table>
<thead>
<tr>
<th>Summary of agreements regarding learning and knowledge transfer goals</th>
<th>Established learning targets:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Replace Chinese staff at a set deadline, in a fixed number of years</td>
</tr>
<tr>
<td></td>
<td>- Chinese to local staff position, hand over fixed ratio progress</td>
</tr>
<tr>
<td></td>
<td>- Percentage of the decrease of the Chinese/locals ratio</td>
</tr>
<tr>
<td></td>
<td>- Be able to do the task that the Chinese undertake during/after the JV</td>
</tr>
<tr>
<td></td>
<td>- “Africanization”(^1) of the JV</td>
</tr>
<tr>
<td></td>
<td>- Replicate the same project or plant after the alliance</td>
</tr>
<tr>
<td></td>
<td>- Be able to repair equipment and conduct maintenance independently</td>
</tr>
<tr>
<td></td>
<td>- Commitment of both partners to achieve goals</td>
</tr>
<tr>
<td></td>
<td>- Described processes/activities for learning and knowledge transfer</td>
</tr>
</tbody>
</table>

3.5.1 Cognitive dimensions

Here, we analyze the study results against the cognitive dimension identified in our theoretical framework. This dimension is associated with goal clarity and cultural diversity as facilitating conditions for strategic alliances.

3.5.1.1 Goal clarity

The first cognitive dimension – shared goals – was presented by Inkpen and Tsang (2005) as a facilitating condition and was satisfied in our cases, at least from the African perspective. Inkpen and Tsang argued that when network members have shared goals, parties develop similar perceptions concerning interaction, thus promoting mutual understanding and the exchange of ideas and resources. Conversely, the authors stated that when partners have divergent goals within a strategic alliance, conflict may arise, thus limiting the flow of knowledge exchange between the parties. Learning and knowledge transfer in the context of Africa-China alliances represent the core of mutual agreements and is officially documented:

The two governments are committed to encouraging the partners from both countries to ensure cooperation towards better technology transfer and higher professional qualifications of local employees. [The Republic of Congo, official cooperation document].

During the next seven years, both parties agree to share knowledge and to allow local employees to assume the posts for which they have gradually qualified. [Chad, official cooperation document].

\(^1\) Local partner explains that the concept refers to the idea of Africans gradually replacing all Chinese positions in the alliance.
In the contract, the need for knowledge transfer and a mechanism that states from the beginning, every year, the requirement to recruit Nigeriens for initial training, is mentioned. Regarding local staff, there is even a course and a special budget dedicated to the training of our compatriots. [Government officer, Niger I-31; August 12, 2014].

3.5.1.2 Cultural diversity
We consider the second cognitive dimension – shared culture – satisfied in our cases because of the cultural diversity differences between the two partners, particularly with respect to human resources’ cultural background. Inkpen and Tsang (2005) considered the overall effect of properly managed cultural diversity to be beneficial to knowledge transfer consistent with Phan and Peridis’s (2000) proposition. The authors state that differences between partners enhance the learning process. Our data gives significant empirical evidence to support the notion that learning and knowledge transfer in Africa-China alliances are embedded in rich cultural diversity, and a substantial cultural gap exists between Chinese and African partners.

3.5.2 Relational dimension: Shadow of the future
Here, we discuss the relational dimension associated with shadow of the future as facilitating conditions for strategic alliances. Thus, with respect to – trust – we realized that, empirically, the parties' mutual trust was not obvious in all cases implying the need for clarification of the shadow of the future in this context, to distinguish trust at the organizational or partner level and trust at the individual level.

At the partner level, we consider that trust refers to the level of commitment and transparency in both partners. Based on our data, we interpret that commitment and transparency exist in both the African and Chinese partners because, when asked, most of the African partners recognized the organizational commitment and openness of their Chinese counterparts. This was supported by the African interpretation that all initial learning agreements were openly agreed and signed by both parties. Trust contributes to inter-organizational knowledge transfer and co-creation (Dodgson; 1993; Doz, 1996; Ertug, Cuypers, Noorderhaven, & Bensaou, 2013) because it encourages the willingness to share knowledge which, according to Zimmermann and Ravishankar (2014), has to be clearly distinguished from the ability to transfer knowledge. Many African partners prioritized the establishment of trust at the initial stages of the alliance to develop a favorable learning context. One director and representative of a local partner stated:

We favor measures that help establish a relationship of trust and loyalty with the Chinese to allow our cooperation to work well. [Benin I-48; July 16, 2014].
This observation in the African relational strategy is consistent with the view of Inkpen and Tsang (2005), who stated that when the level of trust is high, firms are more likely to invest resources in learning because of the willingness of their partners to refrain from instituting specific controls over knowledge spillovers.

However, at the individual level, local employees within the alliances demonstrated a low level of trust towards their Chinese counterparts and often accused them of failing to exhibit behavioral transparency, particularly during team and technical tasks:

No, I do not trust them. Even for my reports, I always ask several people before accepting what a Chinese tells me. Since China, I know they have been very confined, keeping everything in secret, they don’t explain everything … they don’t give you all the data. They have no real personal solidarity … they are not bad, but they have a culture of secrecy. [Ivory Coast I-56; June 9, 2014].

Personally, I never trusted the Chinese. And, if you conduct a poll in this company, I fear that 100% of Chadians will say that they do not trust them … there is always suspicion. [Chad I-47; August 13, 2014].

Overall, some Africans learned skills directly applicable to their field, but they also learned skills not applicable to their area of expertise because of spillovers. This gain of new knowledge in different areas may be explained by the higher level of trust that some local employees, who originally did not have mutual trust in their Chinese counterparts, gradually achieved in their relationships.

Inkpen and Tsang (2005, p. 158) mention that “because of the development of mutual trust, partners will be more willing to move forward” and organizations will decrease efforts to protect knowledge and skills. The authors were referring to mutual trust between organizational partners in their conceptual framework; therefore, in the initial stages of the alliance, we consider for our analysis that organizational (partner) trust exists, which is not the case for inter-individual (employee) trust.

3.5.3 Structural dimensions

This section discusses the study results against the structural dimension identified earlier. It is associated with strong ties and multiple knowledge connections between partners, and noncompetitive approach to knowledge transfer as facilitating conditions for learning in strategic alliances.

3.5.3.1 Strong ties between partners

There is a common belief that poor relationships block knowledge sharing in strategic alliances. Inkpen and Dinur (1998), followed by Kale, Singh, and Perlmutter (2000), argued that for knowledge transfer and learning
to occur in alliances, strong ties between partners are necessary. Gulati (1995) suggested that prior partner relationships provide substantial support. Larson (1992) maintained that strong ties contribute to trust reciprocity, whereas Inkpen (1995, p. 125) insisted that the “strategic relationship between the parent and its JV is a key aspect of receptivity” which refers to a learning organization’s ability to absorb new knowledge from its JV partner (see Hamel, 1991). We therefore realize that African partners developed strategies to build new and stronger ties with their Chinese counterparts. One African employee noted that locals sometimes marginalized the Chinese who were unwilling to build better relationships:

There was one guy who was not doing his job correctly, when locals asked him questions, he was bitter. After Nigerian colleagues started complaining, our boss decided to send him back to China. [Nigeria I-25; July 24, 2014].

In anticipation of a positive outcome, Africans sought available opportunities to team with the Chinese to establish and develop strong ties. According to Badaracco (1991, p. 98), “for one organization to secure embedded knowledge from another, its personnel must have direct, intimate, and extensive exposure to the social relationships of the other organization.” Some locals comment on becoming familiar with the Chinese particularly during teamwork interactions:

There are times when we experiment, we work together, each of us giving ideas, we try mine, it doesn’t work, then his, it doesn’t work either. Suddenly, we combine our techniques until we succeed. I know them well. There is one with whom I sympathize. Even last week, he came, we ate. He said he had arrived in the Ivory Coast recently. We engaged in in-depth conversation about why he is here. When I need them, I go to them. I socialize. [Ivory Coast I-56; June 9, 2014].

When you speak Mandarin, the Chinese look at you differently ... they value the fact that you speak Chinese. Even at my job interview, the fact that I speak Chinese and studied at China’s University of Posts and Telecommunications has given me an advantage. They didn’t ask me many questions … everything happened very quickly. [The Democratic Republic of Congo I-40; August 28, 2014].

I have a Chinese colleague who generally tells me the truth. He keeps me informed of everything. Often he calls me in advance to tell me there will be this and that, be careful! [The Republic of Congo I-24; August 21, 2014].

3.5.3.2 Multiple knowledge connections between partners
For the second structural dimension – network configuration – Inkpen and Tsang (2005) stated that multiple knowledge connections between partners ease knowledge transfer in the context of strategic alliances. Literature has often identified four types of alliance structural ties that can lead to knowledge sharing (Inkpen & Tsang, 2005; Von Krogh, Roos, & Slocum, 1994): technology linkages, alliance-parent interaction, personnel
transfers, and strategic integration. The four processes share a conceptual framework that creates opportunities for individuals to connect and share experiences. We realized that official knowledge connections between Africans and Chinese were neither diversified nor multiple but were rather limited. In our case studies, the Chinese often controlled the processes related to technology linkages, alliance-parent interactions, personnel transfers, and strategic integration. Consistent with Yan and Gray’s (1994) view of bargaining power, the Africans frequently mentioned that the Chinese monitored and managed structural ties vis-à-vis local employees who had no power to undertake any significant structural change:

The Chinese control this company. I don’t know the details of the contract agreement but the capital investment, and putting up the structure itself is dominated by the Chinese. [Ghana I-52; June 17, 2014].

Practically, we locals control nothing, despite our 40% share in the agreement. [Chad I-30; August 14, 2014].

When asked, they often say it takes their boss’s authorization to teach us, that is to say their supervisor gives the green light. And once, they refused. Everything you do will be in vain unless you contact the headquarters, of course, if you can! [Niger I-32; August 12, 2014].

The uncontrolled alliance structural ties left locals vulnerable to the decisions of the Chinese because the latter possessed majority ownership of the alliance. The Africans appeared to be struggling to develop greater knowledge connections with their Chinese counterparts. This problem generated informal and even clandestine connections inside and outside the alliance. Africans were often using the intra-corporate structural dimension of personnel transfer between network members to increase their learning and knowledge transfer opportunities rather than remaining passive. Some Africans adopted the strategy of attracting Chinese partner employees to work for the African parent company because the Chinese controlled the alliance; a form of opportunistic, informal, and dissimulated inter-partner personnel turnover. Inkpen and Tsang (2005) stated for intra-corporate contexts only, that when individuals leave a network they take with them knowledge crucial for organizational success. Some African alliance partners mentioned that they have poached Africans that used to work for the Chinese parent company as they seek to strengthen their learning competitive advantage:

We even poached a Chinese employee partner to strengthen our knowledge transfer. We asked him to join us because we wanted an insider to support us in our learning, someone familiar with Chinese ways of doing business and who can help us counter their cheating systems with accuracy and forward thinking. Now, when we approach them, we even involve consultants to avoid unpleasant surprises. [Ivory Coast I-59; June 5, 2014].
3.5.3.3 A noncompetitive approach to knowledge transfer

A noncompetitive approach to knowledge transfer is central for knowledge transfer in strategic alliances with respect to the third structural dimension – network stability. An empirical reality in Africa-China alliances was that partners were not engaged in a learning race. One of the official reasons behind the establishment of the alliances, as exposed in the mutually signed agreements, was knowledge transfer from the Chinese to the African partners. Although the Chinese also learned from the alliance experience, it was not their primary goal. Thus, no fundamental competitive approach to knowledge transfer was evident in the case studies. This initial existing condition may have helped Africans gain knowledge from the Chinese. It may also partly explain why the studied alliances remained stable because, according to Inkpen and Tsang (2005), a noncompetitive attitude toward learning supports greater learning through greater stability. Therefore, we consider that the noncompetitive attitude maintained the momentum of dependency and bargaining power. Overall, we consider that this structural facilitating condition was satisfied in the case studies.

3.5.4 Discussion: Learning, network role, and informalities

Nonaka (1994) argued that while individuals develop new knowledge, organizations articulate and amplify that knowledge. For the author, this synergistic expansion of knowledge represents joint learning by individuals and organizations. This perspective connects with Huber’s (1991) taxonomy of grafting, a process by which organizations, through their employees or their organizational units, internalize new knowledge previously unavailable. According to authors such as Brown and Hendry (1998) and Paniccia (1998), network ties result from interpersonal relationships originating from informal social interactions during group activities. This perspective considers that an organization’s social capital is the combination of social capital owned by its individuals. Inkpen and Tsang (2005) acknowledged that, for inter-organizational knowledge transfer to take place in a network, either or both levels of social capital must be present and that, for strategic alliances, the nature of organizational ties significantly affects interpersonal ties. Establishing individual social capital strengthens the organizational knowledge flow. Inkpen (1995, p. 54) argued “with the venture formation, a firm gains exposure to its JV partner and its knowledge base. Information viewed as potentially useful to the parent may be acquired by individuals or sub-units … the newly acquired information must then be distributed and interpreted by parent managers for the parent to maximize its benefit from the learning experience.” In Africa-China strategic alliances, African partners did not follow exactly the expected facilitating conditions, but rather navigated between the facilitating conditions of the types of network, particularly between the intra-corporate and strategic alliance. Africans extended great effort in creating informal facilitating conditions of the intra-corporate network while they were still operating in an alliance. For instance, many Africans mentioned that Chinese partners favored centralized decision-making processes within the alliance and Tsai (2002) found that centralization creates obstacles for knowledge sharing in intra-corporate networks. Following Grant’s (1996)
institutional view of knowledge integration, Inkpen and Tsang (2005) stated that it is advantageous for the headquarters of an intra-corporate network to decentralize authority to members of the network who then, independently, exploit the knowledge they possess. For these authors, decentralization enables members to autonomously establish lateral ties while timely sharing knowledge without first seeking headquarters’ approval. African partners tended to informally behave in a way that reduced official centralization to avoid the Chinese response to requests for information such as: “I’m not allowed to teach you this specific equipment;” “My Chinese boss has to provide authorization;” “We have to confirm with our headquarters in China.” In the majority of alliances, the Chinese dominated or had more shares and often more decision power in business operations. Therefore, to overcome learning obstacles, locals created micro, internal, and external informal contexts, often unofficially and unilaterally, whereby they circumvented the alliance’s centralized system that blocked individual effective use of organizational social capital. For instance, employees who developed strong ties with the Chinese were able to visit their Chinese colleague’s home where they informally conducted joint trials on personal equipment, or they practiced at the office when the Chinese directors and decision makers were absent. Employees informally navigated the boundaries of the restricted organizational capital to benefit from Chinese unofficial openness:

I invite them to eat and chat. With my average skills in Mandarin, I try to access more corporate data … I try to sympathize so that they will assist me with enthusiasm in the company. By the grace of God, it works. There is at least one guy, when I need explanations, he is my first contact. I even visit his house where he has experimental equipment. [Ivory Coast I-56; June 9, 2014].

I remain as much as possible in the office but also outside, at home, on internet searching and reading. Even on weekends we are here, working with the Chinese, they sometimes don’t even take lunch breaks. In fact, it's during weekends that we solve unexpected technical problems. [Ivory Coast I-59; June 5, 2014].

We noticed particularities in locals’ individual behavior. They are materialized in a difference between the Francophone and Anglophone local employees within our sample. Many respondents mentioned that the Chinese describe the Anglophone employees as more direct, concise, and open. This is supported by some comments made by the Chinese during some informal interactions with the interviewing researcher whereby the Chinese voiced dissatisfaction with the Francophone partners’ lengthy procedures and prolonged speeches. We realized from our empirical data that Anglophone partners favored more informal settings and exhibited superior learning tendencies; however, we cannot confirm if this is a consequence of the Anglophone workers’ tendency to be more direct, concise, and open. One African manager described the Chinese attitude:
They do not like formalism. They say we, Francophones, are too litigious and more complicated than Anglophones and that we are "mafan!"\(^2\) [Benin I-48; July 16, 2014].

With respect to the use of social capital at the organizational learning level, Inkpen and Tsang (2005, p. 152) argued “the nature of organizational social capital sets the tone for individual social capital”. Therefore, individual members in an organization with substantial social capital will exploit that capital for superior learning and knowledge transfer. Moreover, the organization as a knowledge amplifier and processor (Nonaka, 1994) will benefit by spreading and sharing the obtained knowledge through the entire alliance network. From another perspective, Camagni’s (1995) “local network” refers to the notion that an organization that is spatially close to other companies benefits because networking and inter-organizational and interpersonal interactions become easier and regular. This advantage allows the development of formal and informal channels for knowledge transfer between organizations. From an empirical standpoint, local partners in countries like Nigeria explained that documents required for managing complex processes were often unavailable within the alliance. However, the local partners indicated that the fact that the JV’s was physically located within the local parent company helped them circumvent the barrier of uncodified knowledge. Therefore, local partners were able to develop new skills and to transfer significant knowledge between the parent organization and the JV through more frequent informal interactions of employees. This location and informality advantage was valuable. The study of Maskell and Malmberg (1999) confirmed that spatial proximity is crucial for transferring tacit knowledge. Here, Africans mixed this spatial advantage to the various informality opportunities to transfer knowledge. Consistent with the notion of organizational proximity and networking, informal interactions through meetings and gatherings is a means to connect with peers or other individuals with similar interests. In such circumstances, interactions are embedded in a context of informality and exchange structures and their boundaries are not officially defined. According to Inkpen and Tsang (2005), knowledge is shared through formal or informal exchanges that are facilitated by established rapport and friendships on an individual basis. Empirically, we realized that Africans used such informality in its various forms through diverse communication channels, many of them informal, to learn from the Chinese. A comparison of this African behavior to Monteiro, Arvidsson, and Birkinshaw’s (2008) notion of communication reciprocity implies that the African strategy has theoretical support in an alliance context. According to the authors, the recipients’ motivation and absorptive capacity, and their perceptions concerning the capabilities of the units from which they seek knowledge, is what drives the process of knowledge transfer in international organizations. Thus, subsidiary units will provide privileges to the units with which they have some communication reciprocity and from which they can obtain knowledge. From the unit’s internal perspective, employees working within those receiving units (African

\(^2\) A Chinese word that means troublesome.
partners in this case) may then behave accordingly and provide privileges to colleagues from source units (Chinese partners) although Monteiro et al. (2008) highlighted that differences in learning capabilities between the two partners may jeopardize knowledge transfer. Finally, this dynamic is transferable to the alliance context where African partners often had lower capabilities compared to the Chinese. To compensate for this weakness, several African partners invested, often unilaterally or clandestinely, in the development of sufficient absorptive capabilities to allow superior knowledge transfer.

3.6 Proposing a framework to understand learning in Africa-China alliances

Based on our analysis, we propose a framework to better explain the informality and social capital strategy of Africans to gain knowledge from the Chinese. The theoretical framework is based on the three predefined social capital dimensions while establishing a new configuration to the interactions between individual determinants and collaboration informalities. The relational and structural capital appear to be more informally developed. Figure 9 presents the new framework to better understand learning in Africa-China alliances.

![Diagram showing the framework for understanding learning in Africa-China alliances](image-url)

Figure 9: Learning, social capital, and informalities

Figure by Ado Abdoukadre
3.6.1 Cognitive capital
Taking advantage of informalities to learn and to transfer knowledge requires an appropriate mindset, adequate information and personal qualities. From a social capital perspective and based on our data, we categorized the characteristics and behaviors most common to African employees. We considered the cognitive dimension of social capital to identify the individual determinants and the associated organizational informalities. Locals described several characteristics and behaviors as contributing to their learning from the Chinese. Subsequently, we identified the key determinants associated to the cognitive capital.

3.6.1.1 Experience and knowledge
Africans that learned were experienced learners, those who mastered and used effective learning methods. In most of the cases, the company hired them regardless of their various African nationalities. The main criteria was that they were smart enough to understand Chinese technologies and complex processes faster. They also tended to make intensive use of interpreters and translation apps, surfing live on internet to get complementary information about processes. Additionally, they regularly used technical dictionaries to deepen their jargon and knowledge for a better understanding and a better communication. They tended to refuse to obey their Chinese supervisors when an order is not legally justified. They were also significantly knowledgeable in Chinese sociology and business culture which gave them the advantage of informally sharing culture and goal for a better learning. In fact, many Africans stated that they are informed of China’s development history and aware of the idea that the Chinese are developing their country based on questionable methods of learning and knowledge transfer especially from their western partners. So, some locals indicated that they were using every tool and strategy at their disposal to gain knowledge through informal culture and goal sharing. Often some locals wrote each learning experience in a notebook or test-book that was then shared with others Africans so that the knowledge becomes easy accessible and codified.

3.6.1.2 Motivation/attitude
Some Africans were so motivated that they took their Chinese colleagues off the workplace for informal experimentations, here again, creating a better informal environment to share culture and goals. Therefore, they were determined in creating contextual informalities that supported their learning. They were dedicated toward their job and learning and had a significant ability to develop a Sino-local technical jargon such as “Chingala” which is a combination of Chinese and Lingala languages. Since many of them have lived in China, they were often able to master the Chinese English which they described as an English that has significant Chinese accent in terms of pronunciation and punctuation.
Those good learners were also those eager to master new technologies and familiarize with relevant web apps whether on their computers or more often on their mobile devices. They were often resourcefulness in terms of
learning new skills and they were constantly willing to embrace new learning adventures that sometimes challenged their basic knowledge. Therefore they stated that being fearless and confident helped them learn more. The do-it-yourself attitude also played a significant role in allowing Africans to learn through taking their own initiatives by performing unusual tasks without asking the help of their Chinese colleagues. They often described such unilateral actions as a leadership and versatile attitude necessary to cope with the Chinese learning barriers. These Africans were often changing specialization to master new fields or different expertise and acted in way that allowed them to learn new skills and to become specialized rather than generalists. Many of them stated that in order to learn, they had to adopt the Chinese attitude in performing tasks meaning that they often needed to unlearn in order to master new skills. They sacrificed their privileges by spending extra time and even money on learning. Indeed, some employees stated that they voluntarily came to office on weekends to practice in a friendlier context with some of their Chinese colleagues that accepted to teach them. Some even invested their own money to buy equipment that supported their learning such as personal tablets, software, and internet data plans. Therefore, they were able to access more live information and conduct personal research and technical experiences at home or in the company.

3.6.1.3 Ability
A key characteristic of Africans who attested learning from the Chinese is that they were highly open-minded. Often, they had Chinese educational, cultural, or professional background that made them understand the Chinese mentality. Therefore, Africans were able to drag along the Chinese employees toward informal culture and goal sharing. Indeed, many Africans studied in China and mastered the Chinese culture. This allowed them to deal with the Chinese in a more collaborative manner. Some of the Africans have even worked with Chinese, in China for some, before joining the JV. Their previous experience served as an asset to better work with the Chinese and to learn. Also, these good learners, in their majority, graduated from Chinese schools which gave them the advantage of knowing the Chinese way of working. Also, many of those Africans had a research-oriented graduate degree that prompted them to more technical curiosity and discovery interests. A very common behavior of such Africans was the “Karambani” and no “Guirman kay” attitudes, allowing them to learn through risk-taking, humble, and proactive attitudes. We found that several Africans, despite the fact that they had engineering degrees, were acting as laborers just to learn even the very basic knowledge that may make them understand more complex Chinese technologies. They were constantly endeavoring to discover Chinese success secrets. They were described by their African supervisors as good watchers and excellent doers because they significantly gained knowledge by simply watching and doing. From the cognitive

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3 Word originated from Hausa language: refers to snooping behavior driven by an exaggerated curiosity and leading to a high risk-taking attitude.
4 Word originated from Hausa language: refers to arrogant behavior.
standpoint, this shows many Africans’ clear learning consciousness and their ability to imitate and perform several tasks and gestures. They often displayed secretive attitudes consisting of pretending not to know while their real intention was to get detailed explanation of a process or technique from their Chinese colleagues. Many stated that they were playing the Chinese game in the sense that they remained patient and clever learners.

3.6.2 Relational informal capital

This type of capital is fundamentally based upon the communication skills that employees use to generate informal communication, informal networking and informal inter-personal trust. Therefore, communication skills are of crucial importance for developing relational informal capital. African employees developed social networks with their peers from control missions, from the Chinese parent company, and even from the competitors to support their learning. Therefore, they constantly extended their relational capital to create better learning opportunities. Many indicated that they sympathized and networked with the Chinese employees in order to develop close relationship that decreases the learning obstacles. Thus, some Africans stated helping their Chinese counterparts to get promotions by giving positive comments to their Chinese supervisors. It has helped Africans in building a stronger relational informal capital and in developing trust and a more collaborative context. Also, many Africans mentioned being diplomatic has helped them to master new skills because such an attitude influenced the Chinese in becoming less authoritative and in forging a higher informal trust.

To clarify, local partners, particularly human resources officers, informed us that the characteristics, traits, and attitudes of African employees were desirable in local candidates during recruitment. Our results from the interviews concerning employees’ individual characteristics were coherent with local partners’ recruitment criteria. However, behavioral factors were described by individual employees as aspects of customized learning that often escaped the awareness of local partners or their human resources officers. Indeed, every attitude was based upon employee’s individual social capital, particularly from a relational capital and cognitive standpoint, all supported by diverse contextual informalities. Inkpen and Tsang (2005) stated that individual social capital originating from an individual’s network of relationships differs from organizational social capital derived from an organization’s network of relationships. We found that individual social capital was informally used by employees as a valuable resource for learning, and the Africans have been using their individual social capital to learn from the Chinese. Several Africans engaged in establishing strong social connections with the Chinese using what some locals called “in organization diplomacy.” This strategy involved sympathizing with the Chinese to establish informal but close friendship and a mutually beneficial relationship for learning. For example, such an informal approach rendered the Chinese co-worker more open. The Chinese co-worker then accepted the relationship partner into his social network and taught the local new
skills while being responsive to his/her questions. Moreover, to increase the opportunity to learn, locals even acted as an informal conduit for Chinese employee promotions by providing positive feedback to their African senior managers, who then transmitted the compliment to the JV’s whole executive board. Therefore, leveraging informal social networks served as a learning method for Africans inside and outside the company:

If there is a problem … when you see the Chinese boss directly, it surely will not be solved. But, if you use a Chinese friend as intermediary, there, you get answers. I use this strategy. That’s why I have Chinese friends. By the way, tomorrow, I’m going out with another Chinese to tour Kinshasa and eat braised fish out of this purely professional framework. It is an informality that helps me. [The Democratic Republic of Congo I-2; August 29, 2014].

Some Africans informally used strong social network ties to obtain information and new knowledge inaccessible to them otherwise, although Inkpen (1995, p. 124) referred to the concept of imperfect imitability and suggested that “having information is not the same as understanding it.” Africans gradually gained access to machines and equipment in other departments by informally arranging extra learning time with their Chinese friends to explore hi-tech equipment and conduct joint trials, often during weekends.

3.6.3 Structural informal capital
Local partners have established, often without the knowledge of their Chinese partner, special, virtual, or ad hoc structures for managing the knowledge transfer process. Many interviewees didn’t want to give further details on this comment but clearly recognized the fact that in some areas they had hidden mechanism for gaining knowledge. It is based upon locals’ communication skills and some have been trained to keep those informal learning channels and ties operational. Therefore, there was frequent unofficial training of technical staff on individual as well as collective basis. To increase Africans’ motivation, local partners set informal reward programs to encourage employees’ performance against learning objectives. African partners were also unilaterally revising priorities on learning needs, on how to informally gain knowledge, and where to get it. Also, to improve the interactions between the JV and local parent company, some partners have arranged that the JV be located inside the local parent company geographic area and often inside the same building. This has contributed in creating informal structures, channels, and ties between the parent company and the JV. This informality was particularly important for locals’ learning and knowledge transfer. In fact, some African partners stated that they have clandestinely adopted an employee rotation strategy which was not officially approved by the Chinese. They were also favoring multi-sectorial teams of experts with transdisciplinary competence when it comes to projects from the negotiation stage till the implementation stage. Partners, particularly in Central and West Africa indicated that they have networked with region’s local JV partners to learn from each other’s experiences vis-à-vis the Chinese. Therefore, they toured other regional Africa-China
alliances to inquire and to exchange experiences. Some local employees used unofficial channels or justification to access learning resources from other units/departments. For instance, some employees confessed that they often skipped hierarchical structures to gain new knowledge. Some mentioned that, at times, they circumvent their Chinese boss and go directly to the person possessing the information/knowledge using the justification that they already have permission for the enquiry by virtue of the research project assignment:

It is easy to cover myself with a pretext. We all know in this company, at the end, the result is all that is needed, we do not care how you arrive at it. [Ivory Coast l-56; June 9, 2014].

Gils and Zwart’s (2004) empirical study on alliances showed that only a few partners are committed to sharing strategic knowledge, and many do not cooperate for fear of transferring their expertise. This finding is consistent with African partners’ perceptions that the Chinese were not committed to sharing knowledge. The African partners sensed that the Chinese often obstructed the potential of knowledge flow by blocking the formal organizational social capital development between partners and disturbing the interplay between individual and organizational levels. Despite this lack of Chinese organizational willingness to share knowledge, several African partners, through sustained knowledge-seeking behavior, found informal ways and tactics to gain knowledge by adopting learning strategies, sometime clandestinely, based on their specific informality advantages. Often, African partners who succeeded in transferring knowledge through their alliances were those who leveraged unusual resources such as their employees’ individual social capital. African partners relied on individual rather than organizational social capital to transfer knowledge, which is consistent with Inkpen and Tsang’s (2005) view of social capital. The authors consider relationship networks a valuable resource/capital for individuals and organizations. The quest to develop individual social capital for superior learning and knowledge transfer has encouraged many Africans to sympathize with Chinese counterparts, who then became more willing to share knowledge. The approach was one of a diplomatic attitude while being opportunistically and relatively submissive, a strategy that, according to the Africans, tended to transform the Chinese into more collaborative colleagues:

I use the polite way to learn from them, to deal with them. The polite way guides me in understanding if the Chinese are willing to teach me or not, and then, I can take action accordingly to move forward. [Chad l-35; August 14, 2014].

3.6.4 Exploiting more informality opportunities
In addition to the various initial informalities, other opportunities supported the optimization of African’s learning struggles. We identified some organizational opportunities used by Africans to exploit more informalities within
and outside the organization. Some behavioral patterns appeared redundant in the alliances and enabled knowledge gain from the Chinese partners. Subsequently, local partners were aggressively developing informal environments and took actions to influence the inter-personal and inter-organizational learning and knowledge transfer dynamics.

3.6.4.1 Informal power settings
African partners mobilized every resource to increase their power advantage. In fact, some put government officials such as ministers in leadership roles within the JV. Therefore, several African government officials, including ministers sometimes, were involved simultaneously in the JV’s executive board and the local government. This has conferred higher power to the African partners. One of the ministers interviewed mentioned that the fact that he is a government official has decreased the Chinese authoritative manners within the JV and has thus led to better collaboration between the Chinese and the Africans. Local partners indicated also that, when they had the opportunity, they unofficially conferred to Africans more power in mixing teams and controlling missions. Moreover, they were always ready to back up locals who were willing to spy, copy, or even steal knowledge or technologies in case they were caught up by the Chinese. Additionally, some local partners and employees confessed that they overall preached low ethical standards and less religious faith for a better African learning. To reduce the power gap, local partners favored working with same-level Chinese colleagues because they felt that they could confront them more easily if they didn’t collaborate. Another informal power setting is to geographically isolate the JV. In fact, one military officer mentioned that because the JV is the desert, the Chinese often felt threatened when locals complained about poor learning. Therefore, the Chinese easily gave in to local staff’s demands and to pressure from African military keepers who also indicated that they intervened in favor of their local country mates during learning and inter-personal disputes between Africans and the Chinese.

3.6.4.2 Enhancing unofficial communication channels
To insure that locals were participating in all technical steps through a permanent communication, some African partners rejected turnkey plants because they suspected missing some important knowledge segments when the Chinese solely perform the installation phase. Africans also established mandatory training for alliance’s official language for both local and Chinese individuals even though some African employees indicated that they informally subscribed to online English and Chinese language trainings. Therefore, some locals have even invested personally, both time and money, to learn English and Chinese to better communicate with their colleagues. Additionally, African partners reinforced English as the organizational “must use” language. For a more codified knowledge, African partners ensured that there were abundance of quality documents and details in oral and written communication during interactions. Thus, they were able to
require better explanations from Chinese when confronted to learning challenges. To make sure that the Chinese and Africans stayed at the work place for learning by watching, local partners requested their employees to come and leave on-time thus installing an entrance/exit management systems for all employees. Also, the Africans pressured the Chinese to bring more serious and real experts from China to train locals. This demand has created more informal networking between the Africans and many of the Chinese experts. Indeed, some locals indicated that they still kept in touch with the Chinese experts who had gone back to China. In many JVs, local partners adopted a twin-position approach whereby they put two engineers (one African and one Chinese) for each key post. Also, African partners, particularly those with majority share ownership, primarily placed locals in key technical and managerial posts so that they could control the strategic spheres for facilitating knowledge transfer.

### 3.6.4.3 Developing clandestine capacity and ability

To develop their capacity and ability, some local partners hired people from the Chinese parent company even though this was formally forbidden in the initial JV agreement. This clandestine hiring method was described by locals as necessary for learning because it allowed them to have individuals that will keep informal ties with their former Chinese colleagues. Consequently, they were able to take advantage of the structural and relational informal capital of the poached employees to ease knowledge transfer. Additionally, local partners intensely recruited skilled Africans from across the globe to develop their learning ability. Also, there were informal sessions for training the trainees on teaching the locals how to learn better. Accordingly, some African partners developed customized but unofficial training programs for motivated local employees to learn the Chinese language in local schools. These local partners did not hesitate to discard undisciplined learners and uncooperative “teachers”.

### 3.6.4.4 Benefitting from special circumstances and opportunism

As discussed in earlier sections, several factors are involved in successful learning and knowledge transfer. These factors include capacity, ability, balance of power, knowledge specificities, structure, communication, and motivation. Our data indicated that, using different contextual approaches and resources, many African partners succeeded in adjusting their behaviors to learn from the Chinese. At the organizational level, Africans have improved their ability and power advantage. They also created virtual and often informal structures and channels for communication and networking. Africans also adapted and aligned the knowledge specificities to their local context while increasing local employees’ motivation. However, all these actions were accompanied by other supporting conditions that contributed to achieve learning and knowledge transfer objectives. Some of those conditions were organization-related and some were environment-related and were often opportunistic and circumstantial. For instance, the Chinese employees were not interested in missions outside the country’s
capital because they did not find the living conditions optimal for their stay there. Therefore, they preferred teaching local staff to operate machines and fix related problems in locations that were far from the capital. Also, during periods of joint-creation of knowledge through trial and error tests, locals attested learning more because there were more technical work-related interactions with the Chinese than during routine activities. Additionally, the Chinese tended to transfer significant knowledge in situations where they expected to benefit more widely from the success of the JV through for example attracting more Chinese businesses in the JV’s area. For instance, one of the JVs in Nigeria operates in establishing local Chinese-led free zones. Thus, the Chinese partner has mobilized more expertise and has transferred more knowledge to make the free zone establishment entirely successful so that Chinese investors get attracted. Additionally, the Chinese showed higher flexibility in the JV’s management structure and they agreed to assign local employees to positions with significant responsibility and power. Also, the fact that many African partners requested that the maintenance be done by African employees has allowed locals to learn and to master key equipment and technologies.

3.7 Conclusion
The results of this research contribute to the academic and public debates regarding Chinese engagement with Africa. Theoretically, we discovered that, with regard to the distinction of the facilitating conditions of knowledge transfer in strategic alliances, Africans have used strategies based on the mobilization of network advantages in an alliance context. Therefore, the idea that the three network types involve different dynamics between organizational and individual social capital is realistic. Indeed, the related facilitating conditions and arguments are helpful for firms seeking to exploit network knowledge opportunities. But the case of Africa-China strategic alliances proved to be particular and singularly insightful. For instance, successful African alliance partners exploited, often informally, the combining of the facilitating conditions of other types of networks, which sometimes did not even belong to the same corresponding dimension supporting their learning experience across alliances. This potentiality, strategic for successful knowledge transfer, has not received significant attention in previous analyses and contextualization. Consequently, our study proposes a new configuration that highlights the significant role of informalities in the strategies and tactics employed to gain knowledge. Therefore, we emphasize the need for further research to revisit the theoretical applications of existing conceptual frameworks on interactions between social capital and knowledge transfer to include a new informality dimension. Moreover, our analysis showed that in an alliance network, a mix of other network facilitating conditions not necessarily at the same level is often used to gain knowledge. The practical implications of this research reflect the shifts in the methods used to transfer knowledge from the Chinese. African partners who aim to successfully transfer knowledge should consider the facilitating conditions specific to their type of network but should also grasp opportunities to transplant other networks’
facilitating conditions into their learning resources and strategies. This method will channel resources towards a more conditions-inclusive learning strategy. This strategy systematically capitalizes on the social capital dimensions relevant for circumventing knowledge transfer barriers constructed by their alliance partner. More importantly, informalities played a significant role in Africans’ knowledge gain because they allowed employees and partners to get around the official barriers set by the Chinese partners. Africans can refine on how to wisely sharpen those informality opportunities for better learning and higher knowledge transfer.

In this study, we included only a limited number of successful cases; however, we focused on learning in the context of Africa-China alliances particularly from a perspective of knowledge transfer and informal social capital. We depicted that African partners explored new knowledge-seeking attitudes, often informal, while expending significant efforts to learn from the Chinese. Further research should explore, from an African perspective, the strategies used by Chinese partners to prevent the transfer of key knowledge to African partners.
3.8 References


4. Chapter 4: Toward Effective Knowledge Transfer in Africa-China Partnerships

Abstract
This paper explores the reasons for African’s poor achievements in learning and knowledge gain from their partnerships with the Chinese. Based on the qualitative and interview-based data, we identified the weaknesses that prevented the partners from gaining significant knowledge from the Chinese. Our analysis conducted on 29 Africa-China partnerships in 12 African countries suggests that, while Africans often blamed their Chinese partners for their unwillingness to transfer knowledge, Africans did not learn significantly because they ignored their own weaknesses. We suggest that, in addition to the Chinese recurrent unwillingness to share knowledge in several partnerships, there are clear weaknesses and failures on the part of the African governments and partner companies with respect to policies, capacity, attitudes, and ability. Therefore, we propose a juxtaposition of strategic and institutional perspectives with practical recommendations to enable effective knowledge gain. With respect to the smiling curve, we suggest that African partners target a higher added value knowledge type, namely, strategic and sophisticated knowledge, by selecting the most suitable Chinese partner for the achievement of Africans’ learning goals. Additionally, we propose the development of an intra-African interconnected network for knowledge transfer and experience sharing at the pan-African level. We develop a knowledge transfer policy framework to support effective knowledge transfer based on radical and incremental readjustments at the pan-African, national, and organizational levels.

Keywords: Knowledge transfer; learn; smiling curve; institution; Africa; China; partnership; alliance; joint venture; strategy; pan-African
Chapitre 4 : Vers un meilleur transfert de connaissances dans les partenariats Chine-Afrique

Résumé

Cet article explore les raisons des mauvais résultats des partenaires africains en matière d’apprentissage et de gain de connaissances dans leurs alliances avec leurs homologues chinois. À partir d’un ensemble de données principalement qualitatives, nous avons identifié les faiblesses majeures qui ont empêché les partenaires africains à acquérir des connaissances importantes auprès des Chinois. Pendant que les Africains blâment régulièrement leurs partenaires chinois pour leur réticence à transférer des connaissances, notre analyse menée sur 29 partenariats Afrique-Chine dans 12 pays africains suggère qu’en réalité, les Africains n’ont pas acquis de connaissances parce que, a priori, ils ont ignoré leurs propres faiblesses. Alors, nous argumentons que, en dépit de la réticence récurrente des Chinois à partager des connaissances, il y a des faiblesses et des défaillances claires au niveau des gouvernements africains et des entreprises partenaires locales en lien avec les politiques, les capacités, les attitudes et les habiletés africaines. Par conséquent, nous proposons une juxtaposition de perspectives stratégique et institutionnelle, avec des recommandations pratiques pour permettre un meilleur gain de connaissances. En ce qui concerne la curbe-sourire, nous suggérons que les partenaires africains ciblent davantage les connaissances qui génèrent une valeur ajoutée plus élevée, à savoir, des connaissances stratégiques et sophistiquées, notamment en sélectionnant les partenaires chinois les plus aptes à leur faire atteindre leurs objectifs d’apprentissage. Aussi, nous proposons le développement d’un réseau intra-africain interconnecté pour le transfert de connaissances et le partage d’expériences au niveau panafricain. Nous proposons aussi un cadre de politique de transfert efficace de connaissances sur la base de réajustements incrémentaux et radicaux aux niveaux organisationnels, nationaux et panafricain.

Mots-clés : Transfert de connaissances ; apprendre ; curbe-sourire ; institution ; Afrique ; Chine ; partenariat ; alliance ; coentreprise ; stratégie ; panafricain
4.1 Introduction

“African countries need to adopt a more strategic approach to trade negotiations at the bilateral and multilateral levels to ensure that the outcomes are mutually supportive of their national development goals” (UNCTAD-UNIDO, 2014, p. 9). This statement is directly linked to Africa’s engagement with its major partners, such as China. Africa’s ties with China have increased significantly during the last two decades. In 1995, Africa’s trade with China accounted for only $6 billion. In 2014, that number rose to over $200 billion and is expected to surpass $300 billion by the end of 2015 (US International Trade Commission, 2014). China is now leading foreign investments in Africa. There are currently more than 2,500 Chinese companies doing business in Africa often by entering into partnerships with local partners. Such partnerships are opportunities for Africans to develop infrastructural capacities and to gain knowledge from the Chinese. Studies on the state of Africans’ learning through partnerships with emerging countries such as China are rare. Limited research explores the subject of African learning through JVs to any significant scale. Several studies address knowledge management within wholly-owned African private companies but few reference Africa-foreign partnerships. Moreover, the findings are often commentaries on the management of Africans’ meagre existing knowledge rather than mechanisms for learning additional skills and gaining new technologies from foreign partners (Ahmed, 2007; Ahmed, Ghoneim, & Kim, 2008). In both cases, the literature indicates inefficiency in African knowledge management and poor learning and knowledge transfer. African countries are marginalized with limited access to major technologies and learning because they have not exploited major international collaborations (Mbhalati, 2014). Gaining tacit knowledge is even more challenging because this type of knowledge is difficult to replicate and has been neglected in Africa (Wolfe, 2009). Reasons for the failures in knowledge transfer include Africa’s lack of knowledge management curriculum in schools, poorly equipped employees, and a lack of effective learning methods (Ondari-Okemwa & Minishi-Majanja, 2007). The literature also noted that African businesses’ under-development of a knowledge base is because of recurrent incongruent choices in foreign partners and a failure to adapt working methods to those of their partners. Additionally, Africans have not demonstrated the necessary proactive attitude required to search for foreign expertise. All these factors led to inadequate knowledge transfer to Africa. This paper examines African weaknesses both at the government and partner level and the failure in gaining significant knowledge from Chinese partners. After identifying the African weaknesses, the paper proposes a normative but practical approach towards effective knowledge transfer by juxtaposing strategic and institutional perspectives and outlining key conditions for adequate policy and strategy formulation.
4.2 Africa-China emerging partnerships

International collaboration models are increasingly diversified between advanced and emerging countries. However, collaborations between emerging countries have increasing significance. An analysis of North-South economic collaborations based on dependence theory suggests that the North-South collaboration framework is based on a relationship of dependency rather than interdependence; emerging countries are at a disadvantage with respect to negotiating from a strategic and industrial standpoint. Ajakaiye and Kaplinsky (2009) suggest that Africa must exploit the opportunities from the emergence of Southern economic powers such as China. This represents a new perspective on South-South partnerships and dynamic development of economic cooperation for emerging nation partners. China, as the leading investor in Africa, has injected significant funds into Africa's growing sectors such as infrastructure development and capacity building. Investments are often in the form of joint partnerships and inter-firm alliances. China’s total investment in the African infrastructure sector accounted for 28% in 2012, more than all other countries including advanced economies. Figure 10, based on ICA (2013) data, presents the facts as highlighted in the Africa Development Bank’s (AfDB, 2014) African Development Report on regional integration for inclusive growth.

Figure 10: China’s investment in infrastructure development in Africa

A fundamental principle of partnerships and alliances between advanced and emerging economies is that of complementarity between the partners. Countries or firms interested in establishing an alliance are often motivated by the synergies and mutual learning that both partners can generate. Therefore, research that explains the motivations of international collaborations through, among others, the theory of complementarity
is significant for the understanding of inter-partner dynamics. Yin and Vaschetto (2011) consider that the theory of complementarity refers to reciprocity and interdependence in international business relationships. For example, partners from two countries may decide to partner in national markets instead of competing with each other in Africa. Bräutigam and Xiaoyang (2011) analyzed the major bilateral and multilateral agreements and stated that South-South partnerships are experiencing significant development. The emerging context of collaboration between Southern partners, such as the Chinese and Africans, is characterized by business relations that are based upon greater interdependence and complementarity towards mutually beneficial outcomes.

In the context of international business, complementarity explains the primary motivation of cooperative agreements and the establishment of international partnerships. International partnerships, such as JVs, are a means to capturing partners' complementarities. According to Lupton and Beamish (2014), two major factors for successful international alliances are the compatibility of partners’ objectives and the will to cooperate. With increasing rapprochement between Africa and China, cooperation seems to respect more the principle of complementarity and cooperation, which may explain the emergence of more Africa-China partnerships during recent years. But can Africa count on China to exploit those complementarities and boost its industrial development? The answer depends on how Africa and China engage in their partnerships. Marysse and Geenen (2009) indicated that it is unlikely that Chinese engagement will significantly benefit Africa’s development and knowledge gain in the long term if it continues in its current form. The authors noted that Chinese products, such as textiles, are often in direct competition with locally produced goods and that African businesses, unless they cooperate in a thoughtful manner with competitive Chinese companies, will not survive. Hence, rather than creating a win-win situation and transferring knowledge, Chinese enterprises will displace local businesses while employing imported labor (Broadman, 2007). For the defenders of the Africa-China lose-win theory, current engagement cannot meet Africa’s knowledge transfer needs to the extent necessary for its development (Yin & Vaschetto, 2011). In contrast, Chinese partners continue to argue for the win-win theory and state that their commitment to economic cooperation with Africa is mutually beneficial for technology transfer to Africa. Additionally, Bräutigam and Xiaoyang (2011) indicated that, for African partners, this is the ultimate moment to seize this new Africa-China cooperation opportunity. Therefore, there is potential to support knowledge transfer to Africa by developing strategic skills and to create more jobs for Africans.

Several studies published on the Africa-China relationship have focused exclusively on trade and Chinese investment in Africa’s infrastructure and manufacturing (Foster, Butterfield, Chen, & Pushak, 2009; Kaplinsky & Morris, 2008; Sandrey & Fundira, 2008; Schiere, 2010). Most studies did not examine Africa-China inter-firm partnerships. Some researchers believe that the Africa-China studies have focused on political analysis such as China’s influence on Africa (Bräutigam, 2010; Paulo & Reisen, 2010; Wang & Bio-Tchane, 2008) rather than on trade, commercial partnerships, and inter-organizational collaborations. However, collaborations such
as JVs are increasingly popular because of their role in gaining knowledge and conquering foreign markets in a dynamic context of global opportunity and competition (Ozorhon, Arditi, Dikmen, & Birgonul, 2010). Beamish (1985) argued that knowledge transfer and learning in JVs depend on the previous experience of the partners involved. Therefore, JVs will operate singularly in different environments, and knowledge transfer occurs according to the dynamics within the environments in which those entities operate. Harrigan (1984) supported the argument and stated that the macro and the micro environments have significant impact on the configuration and effective functioning of the JV and learning processes.

When Africans enter into partnerships with the Chinese, it is often with the objective of gaining knowledge (Ado & Su, 2015). However, to gain knowledge, partners, particularly the Chinese who hold the knowledge at stake, must collaborate and be willing to share their knowledge and expertise. But, the Chinese have often behaved in opportunistic and uncooperative ways with respect to knowledge transfer. In some cases, the Chinese exploited conditions to prevent Africans from learning (Ado & Su, 2015). For instance, the Chinese established clear behavioral differentiation whereby they customized their knowledge management practices to suit Francophone versus Anglophone settings. Moreover, in French-speaking countries, the Chinese imposed English as the official language despite the irony that several Chinese supervisors refused to speak neither English nor French even when it was the JV’s official language. Consequently, in a learning context, language barriers created a dialogue of the deaf and the Chinese opportunistically acted in uncooperative manners. Additionally, the Chinese customized their tactics based on the knowledge specificities and whether or not it was a first learning experience for the African locals (Ado & Su, 2015). This Chinese behavioral and strategic customization disturbed the learning context, and there is sufficient evidence that a friendly context plays an important role with respect to learning and is often a factor in improving trust and collaborative communication between partners (Chrysostome & Su, 2002; Harrigan, 1986). The Chinese regularly acted in a contradictory way. Additionally, African partners described the Chinese top managers as knowledgeable concerning lobbying and influencing local governmental decision-making spheres. For instance, an African high-positioned government officer identified that, in most of the contracts he signed, formulations such as “The African party must…The Chinese party can” were common in the agreements, and that once the document arrived in his office, he had no power to change, renegotiate, or delay an agreement. Such contracts left several breaches in favor of the Chinese because, often, they were the initiators and leaders of the negotiations during the JV’s establishment. African engineers often emphasized that the Chinese are mentally programmed and, once a decision is made, it is difficult to change that decision. Increasing robotic processes and less human interactions in the JVs increased the difficulty for locals to benefit from inter-personal communications whereby they could pose questions directly to their Chinese colleagues. Moreover, the Chinese exploited the lack of local technical standards in Africa and applied their own norms, a practice that many Africans said did not help them to gain knowledge and understanding of key processes. Additionally, the refusal by many skilled Africans
to assume lower level positions and the humility to perform labor tasks although they are highly qualified engineers prohibited learning and knowledge transfer for local partners. The Africans have accused the Chinese of artificially erecting obstacles within the high added value segments where strategic knowledge is at stake, such as in product conception, innovation, R&D activities, and high-end marketing. The Chinese strategy varied depending on the sector and knowledge segment and type (Ado & Su, 2015). Moreover, the Chinese who did not want to communicate in English deliberately used an accent that was difficult for Africans to understand. Chinese opportunistic attitudes have prevented Africans from gaining significant knowledge. In studies on Africa-China partnerships, the controversy is whether Chinese are extending the necessary effort and sacrifice to transfer knowledge to Africans. However, it is rare to find a paper in which this central question is posed from an African perspective to determine the efforts and sacrifices Africans have made to learn from the Chinese. The Chinese knowledge control strategies were obvious (Ado & Su, 2015), but the second question deserves attention because the reason Africans have not gained significant knowledge lies in the weaknesses of the receiving partners or the Africans themselves, their governments, and policy loopholes exploited by foreign partners. For instance, the literature shows sufficient evidence that when the receiving partner (the learner) does not possess significant learning skills and absorptive capacity (Cohen & Levinthal, 1990), knowledge transfer may not occur as desired. Therefore, missing answers to this fundamental question expose the crucial knowledge gap and may explain why many Africans failed to gain knowledge from the Chinese. This paper provides an objective and comprehensive analysis of the phenomenon. Therefore, the research questions of the current paper are: What are the African weaknesses that have prevented them from gaining significant knowledge through their partnerships with the Chinese? How can the knowledge transfer dynamic be improved? Thus, by collecting response elements to these fundamental questions, this paper contributes to a better understanding of the areas of improvement for significant knowledge transfer to Africa.

4.3 Research approach

This study adopts a multiple case study approach. The research includes 29 Africa-China partnerships located in 12 western, central, and eastern African countries – Benin, Burundi, Cameroon, Chad, the Democratic Republic of Congo, Ghana, the Ivory Coast, Niger, Nigeria, the Republic of Congo, Rwanda, and Togo. The partnerships included only African and Chinese partners in the telecom/media, aviation services, mining/refining, water sanitation, manufacturing, power and energy (thermal, biomass, and renewables), construction, and textiles sectors. The fieldwork was conducted in 2013 and 2014 in China and Africa. During a six-month period, the researchers traveled to all 12 African countries to perform face-to-face, semi-structured interviews. We visited China and collected Chinese investor-related information concerning the partnerships before visiting Africa for the interviews and remaining fieldwork. Based on rigorous selection criteria, we
contacted participants in the field through several channels including LinkedIn profiles, through a snowball effect, and through our personal network because we had previously participated in similar projects in China. We interviewed only Africans because this study adopts exclusively an African perspective. Interviews were with (1) Africans working in or for the partnerships (that were either 100% private or partially state-owned), (2) Africans working for the African parent companies, and (3) Africans working in host country government ministries and agencies, such as local government officials participating in the negotiation, establishment, and management of the partnerships. Many of the partnerships involved several African government partners. Thus, in all 12 African countries, we visited individuals directly managing the partnerships at the ministries and agencies that signed or monitored the agreement. Relevant country ministries included ministries of infrastructure and transport; economy and commerce; foreign affairs; industry and commerce; mining and energy; petroleum; planning, and other significant government coordinating agencies. We obtained valuable information from government officials, other public servants, and key private sector representatives involved in the Africa-China partnerships. Additionally, we obtained data from official reports and national policy documents. In some cases, we interviewed consultants and major shareholders. We also conducted interviews with a major multi-lateral financing organization in charge of Chinese investments in Africa. Participants included ministers or their deputies, CEOs, members of the board of directors, managing directors, engineers, operators, technicians, managers, and translators/interpreters. Some participants occupied multiple positions simultaneously because they worked for both the government and the company. Therefore, in some cases, participants were appointed to their position by their government but sometimes independently by the parent companies or the JV. We contacted 86 individuals for interviews; 11 refused to participate. The data collection in Africa was extremely challenging because the project required several local trips in the African environment, which is not research-collaborative (Rogerson & Rogerson, 2010; Lages, Pfajfar, & Shoham, 2015). Table 15 describes the profiles of all the interviewees.
Table 15: Interviewees’ profiles

<table>
<thead>
<tr>
<th>Respondents’ titles</th>
<th>Number</th>
<th>Appointment status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government ministers</td>
<td>2</td>
<td>Government</td>
</tr>
<tr>
<td>Deputy government ministers</td>
<td>3</td>
<td>Government/private</td>
</tr>
<tr>
<td>Government counselors</td>
<td>2</td>
<td>Private</td>
</tr>
<tr>
<td>Ministerial directors</td>
<td>3</td>
<td>Government/private</td>
</tr>
<tr>
<td>CEOs</td>
<td>3</td>
<td>Private</td>
</tr>
<tr>
<td>Managing directors</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Senior managers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Department heads</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Human resources officers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Engineers</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Technicians/operators</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Administrative officers</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>HR delegates</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Translators/interpreters</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Consultants</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Shareholder representatives</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>--</strong></td>
</tr>
</tbody>
</table>

Overall, we interviewed 75 consenting people and obtained contributions from all 12 African countries. Fourteen interviewees did not authorize a recording of their interview but did allow note taking. In total, we tape-recorded and transcribed 61 interviews. Interviews lasted from 40 to 100 minutes. Participants possessed between five and 19 years of work experience. Moreover, we used official documents, such as the terms of the partnerships signed by the Chinese and African partners, corporate brochures and annual reports, newspaper reports, and other documented, specific collaborative arrangements as relevant sources of information to provide a more rigorous analysis. We also consulted statements related to organizational and public policies, which allowed us to sharpen our analysis. We used these various data sources also for triangulations when certain interviewees provided problematic, questionable, or incomplete information. To ensure data reliability, we asked interviewees to confirm our transcripts’ accuracy, and we used content analysis to analyze the data (Lincoln & Guba, 1985). In this research, the most relevant segments of the interview transcripts were answers that focused on respondents’ collaborative experience with the Chinese, where we discussed the conditions that refrained African partners from gaining knowledge, and which the respondents considered critical for knowledge transfer. Segments in which interviewees explained the significant factors that allowed them to internalize their Chinese partner’s best practices, skills, and methods were also of interest in this research. Finally, we were conscious of possible bias in our own cultural beliefs in interpreting the data, which prompted an objective analysis of the transcripts. Indeed, this study involved several researchers from different international backgrounds (Canadian, African, and Chinese), which helped to control cultural and interpretative bias in the data analysis.
4.4 Toward a corporate strategic perspective of knowledge transfer

Through our analysis, we discovered that the Chinese used various strategies to manage the knowledge that they possessed and the knowledge transfer processes. Although the strategies appeared to work for the Chinese, this was not necessarily because of the Chinese actions. The Africans also contributed to the expansion and strengthening of knowledge barriers because of inner weaknesses in many of the Africans. We identified major organizational and institutional factors from the data analysis that supported Chinese knowledge retention strategies. Based on the identification of those factors that relate mainly to the African overall context, governments, institutions, policies, and partner organizations, we recommend strategic and institutional approaches toward better knowledge transfer for Africans.

Our data indicate that, from the outset, African partners, both public and private, often did not identify their learning and knowledge transfer priorities, and the partnership agreements did not specify key details. The local negotiators appeared to lack commitment. This was evident when, for example, an African negotiator unwittingly informed us before an interview that a contract draft was too lengthy to read while, in the following hours, he was supposed to have an important meeting with the Chinese on the JV’s strategic planning. There was also a redundant complaint of some local partner delegates that Africans from control missions were undisciplined and absent during night shifts and around holidays. Africans often lacked expertise in the relevant JV sector and suffered from insufficient technological absorptive capacity and experience in learning and knowledge transfer mechanisms. An African national director comments:

As long as we do not develop our capacity too, particularly in the research and development, it will be hard to get industrialized and do things in Africa by Africans. Local content and training are crucially important, and they are missing. [Nigeria I-27; July 31, 2014].

Also, Africans often did not have the ability to recognize and capitalize on new knowledge to facilitate its assimilation and application (see Cohen & Levinthal, 1990). Moreover, the African partners often did not choose competent people at the negotiation and implementation stages of the JV.

From a labor perspective, many African managers complained that their local employees refused to be assessed by African engineers after training. This would occur when the Chinese appointed a qualified African engineer to train and assess his local colleagues’ learning performance. However, local employees often questioned the legitimacy of such an appointee and, thus, refused to be assessed by a local that they described as unqualified for the position arguing that, in some cases, sociologists were hired as engineers because of an opaque recruitment process undermined by political appointments of incompetent people to strategic learning positions. Local employees were also portrayed by their African supervisors as having inadequate academic backgrounds and lacking crucial learning skills and the right tools, such as computers, to explore, for example, online company documents. Several African managers described local employees as
lazy, undisciplined, and lacking the humility and will to learn. The African managers commented that they had cases where a local regularly arrives at work late or drunk, thus missing learning opportunities. Moreover, some locals confessed that they sometimes lost focus during work because of personal financial and family burdens, such as how to provide food during the days before they receive their paycheck. Ironically, in many JVs, human resource managers told us that several local laborers had a habit of not coming to work the day following their paycheck.

There are always bad apples … when wages are paid, some workers do not come because they just had their salary and they have to drink a little bit. When they finished the feast, they return to work. But, among the Chinese, it does not work because they run behind time to meet deadlines, so it penalizes a little. [Congo I-12; August 25, 2014].

Also, African employees’ unawareness of the equities is advantageous for the Chinese because the locals consider the JV to be solely owned by the Chinese, thus conceding more unofficial bargaining power to the Chinese while increasing fear associated with asking “stupid questions” and “being ridiculed.” This causes locals to adhere to the information that they receive from their Chinese co-workers. Finally, local employees seemed to be naïve with respect to Chinese knowledge control strategies, and they were not always aware of the advantage and strategic utility of any future gained knowledge for themselves, the local partner, or overall African development.

Therefore, for Africans to correct the situation and gain knowledge, certain conditions are required. Nationally and institutionally, governments and policy makers should increase the availability of skilled Africans by creating more schools with a technical curriculum. This will provide training to locals who are then adequately prepared with the necessary learning skills and abilities for work with Africa-China partnerships. For countries that have a high number of skilled expatriates (e.g., Nigeria), governments should sharpen and improve national and local strategies to attract highly qualified expatriates. Governments should encourage African integration so that labor can easily move across national borders in Africa. This would allow other African nationals to complement other countries’ frequent shortages in qualified labor. These actions could cause Africans to take priority over Chinese imported labor in all African countries. Moreover, African states should set favorable laws, such as mandatory ratios of local employees to Chinese employees in Africa-China partnerships. This legislation should be accompanied by state laws that impose professional qualifications for Chinese professionals working in Africa. African strategies should emphasize national incentives that will encourage Africans to learn the Chinese language and, conversely, require Chinese employees to learn and master English. Africans who understood Chinese had more learning opportunities. A manager explained:

I have more opportunities than others because I am a manager. There are things that necessarily go through my office. So, at least, I can know that you did this or that. It’s true that
most files are in Chinese, still I usually get an idea of what it is because I fairly understand the language. And when working with our local partner, the Congolese government, I have the documents in French. [Congo I-24; August 21, 2014].

It is also crucial that Africa set an ambitious R&D agenda for its knowledge needs and invest appropriately to develop local absorptive capacities. African countries must define African technical standards and request full compliance with those local standards from the Chinese. This will enable Africans to transplant knowledge that is compatible with local specificities and gain useful and easily adaptable knowledge for further exploitation. Organizationally, and based on the overall data analysis, African partners should specify detailed contract terms on learning and knowledge gain objectives. Targets must be determined and measured during normal time frames and consistent with the establishment of clearer JV hand-over programs from Chinese to Africans. This approach was central to cases where Africans gained significant knowledge from the Chinese as described in these comments:

The company itself has a program that, over a period of time, the leadership of the company should be gradually given to Ghanaians. So, we are trying to push that agreement forward. The Chinese are gradually training our local people. [Ghana I-52; June 17, 2014]. We don’t have the same business culture at all. So, when we sign a contract, we scrutinize clauses well, we search the details because Chinese are very meticulous and look for the slightest flaw to enjoy. [Benin I-48; July 16, 2014].

Regarding the main issue of poor communication among Chinese and African employees, Africans should negotiate a convenient number of translators and draft learning manuals and procedural documents in the partnership’s official language. JVs should improve their Chinese language training for Africans and sensitize locals on the importance of knowledge gain for Africa’s overall development and the significance of subsequent opportunities for future use of gained knowledge. African partners should seek expert consultants on partnership formation when engaging with the Chinese to determine ways to capitalize on knowledge transfer. Such an approach could benefit Africans by negotiating, for example, the lifting of the Chinese restrictions on locals’ access to some JV’s facilities. Africans have the opportunity to capitalize on spin-offs by gaining broader knowledge rather than core skills only. Even though Africans are targeting a specific type of knowledge, this should not prevent them from gaining expertise in other areas even if it is unrelated to the partnership. Most importantly, Africans should exploit all opportunities to improve their bargaining power with respect to their partners by adopting some of the strategies used by the Chinese, for example, lobbying and holding better positions within the company:

Initially, each high position had a deputy local person. There has been knowledge transfer because for most technical positions occupied by Chinese expatriates, Beninese have been trained and have now taken over. It is only in the field of electronic engineering that we still have Chinese assistance. [Benin I-48; July 16, 2014].
In the few cases where Africans did gain significant knowledge, some key positions within the JV were held by local officials unusually appointed by State government to work concomitantly for the JV and the state. A Beninese and a Congolese recognized that their status as government representative and senior manager in the JV had given them power and generated collaboration from the Chinese.

Out of the 1,200 employees, I am the only government official. Personally, I am in a situation of "privileged" in the sense that I represent our State. So, Chinese people respect me more ... I was at the ministry before landing here. Under work, we share meals together several times ... we have very appeased relations with them. They do collaborate ...... here, I have to admit that they transferred knowledge because, for almost all positions previously held by Chinese expatriates, they have trained Beninese who have now taken over. [Benin I-48; July 16, 2014].

As a supervisor, I can go anywhere within the company, to look, to control what the Chinese does, how he did it. So, I get to know everything and learn how to do it, and to also have an idea on how to fix technical problems and even how to design processes. [DR Congo I-28; August 28, 2014].

Our data also indicate that African partners who established JVs with Chinese by acquiring an already existing Chinese company operating in China and relocating it to Africa gained more strategic knowledge than greenfield JVs in Africa. Therefore, Africans should consider the opportunities to explore and even favor the relocation of partnerships from the acquisition and repatriation of plants, machines, and key Chinese employees from China to Africa. Additionally, from a strategic and global competitiveness perspective, the smiling curve analysis offers interesting insights. Africans have the opportunity to select partners from whom they can gain strategic and sophisticated knowledge to upgrade their know-how to higher value-adding segments of the global value chain. Some partners have already underlined the importance of such an approach.

At the state level, our diplomacy is really to attract good partners, make sure there are no problems and live in harmony with the Chinese while learning from our own experiences: Where we come from, with whom we have partnered, in what areas, what we gained, where we want to go and with which partner, to avoid always being the loser. [Congo I-51; August 25, 2014].

For Africans to further this winning approach, our smiling curve analysis suggests that Africans must support their companies in gaining strategic knowledge consistent with the global value chain principle. The key recommendation from such an analysis is that, to benefit from Africa-China rapprochement, African companies must gain knowledge and expertise through strategic partnerships with Chinese companies that are on the high added value segment of the smiling curve. A strategy to move from low to high added value activities will enable Africa to build winning companies and a competitive economy while ensuring sustainable African industrialization.
Strategic knowledge is often described as knowledge that allows the holder to generate higher added value to its business activities. It is the type of knowledge required to conceive new products and generate prosperous patents based on heavy R&D activities. Product development, patents, and high-end marketing are among the activities with the greatest value-added potential. This type of knowledge is sophisticated, systemic, complex, uncodified, and significantly affects the learner’s operations once obtained (Wong, Ho, & Lee, 2008). Strategic knowledge is unique because the resource is rare outside the organization, and its possession confers a strategic advantage to the owner as a source of greater added value (Roper & Arvanitis, 2012). Strategic knowledge is difficult to obtain and, once its significant components are acquired, the new holder can permanently adjust and exploit the knowledge without radical changes. However, operational knowledge is often basic and used for non-key activities and routine tasks such as simple assembly line and conveyor production. Operational knowledge is often not a major source of added value despite its advantage in improving the gainer’s technical ability and specific skills. In the context of Africa-China partnerships and based on our smiling curve analysis, we recommend that Africans channel their efforts toward gaining strategic knowledge from the Chinese. This will allow African partners to position their activities at the higher end of the smiling curve. Figure 11 describes conceptually and practically how to proceed. Consider that enterprises from both China and Africa could potentially establish a partnership. The smiling curve’s basic principle is to always perform activities that create more added value for the business. From an African perspective of gaining knowledge, African partners must target Chinese partners that operate within the higher value segments.

![Figure 11: Partner and knowledge choice: Smiling curve analysis](image)

Figure by Adou Abdulkadre
African Enterprise (AE) 3, located on the lower added value activity segment, should seek alliance partners such as the Chinese Enterprise (CE) 1 or 2 to gain strategic knowledge required for higher added value activities. However, this choice should also consider the knowledge gap between the two partners. To ease the knowledge transfer process, Africans must be able to absorb their Chinese partner’s targeted knowledge. African capacities must thus be compatible with the desired knowledge. For instance, if an African partner wants to learn a new technology, that partner must possess the basic prerequisites to operate that technology, such as up-to-date software and a basic understanding of the individual technology components.

Additionally, AE1 or AE2 are already positioned at the higher end of the added value segments. Although such enterprises are rare in Africa, AE1 or AE2 can enter into an alliance with the already well-positioned Chinese Enterprises CE1 or CE2 to sophisticate their strategic knowledge. Thus, African enterprises can consolidate and strengthen their competitive advantage with high added value activities. An African enterprise that is positioned at a high added value activity segment does not have to refrain from partnering with Chinese enterprises that are at a lower added value segment (e.g., AE2 with CE3). However, this type of partnership should be based on the identification of significant potential areas of complementarities and incremental upgrading opportunities for the African partner. The same logic applies to an African enterprise positioned at a lower added value segment than its targeted Chinese partner. For example, AE3 can partner with a Chinese enterprise that is between CE1 and CE3. Therefore, that African partner can still engage in a partnership with a more experienced Chinese partner but with the objective of incremental and radical upgrading of the African partner’s knowledge base. All these various combinations of partner choice can occur at the upstream and the downstream end of the global value chain as long as one of the central considerations is upgrading strategic knowledge-related activities and achieving a position in a higher added value segment. Finally, the objective of the African partners must ultimately include improvement in competitiveness based on organizational and environmental advantages. For instance, African partners that operate in the energy sector that are located in African countries with generous sunshine, such as in the Sahel region, should favor Chinese partners from whom they can gain strategic and competitive knowledge in sophisticated solar and renewable energy technologies.

To improve learning and knowledge transfer in Africa, local partners, both private and public, must identify and prioritize technical and managerial knowledge needs and negotiate strategic partnerships on the basis of Africans’ industrial aspirations while prioritizing training that emphasizes greater value-added knowledge development. An African partner describes this strategy:
We ensure that the dependency is reduced. We send our people abroad for training to learn how to design, manufacture and install equipment. As soon as they come back, we give them the means by putting in place the structures because training is necessary but not sufficient. We do not send our students necessarily to China, but Europe and the United States as well. [DR Congo I-20; August 29, 2014].

Africans need to create specialized training centers based on the advantages and strategic choices of each African country or region to coordinate knowledge transfer processes and take advantage of those partnerships. Additionally, institutional support and established coordination structures are required to manage learning, knowledge transfer, and the sharing of experience at national, regional, and pan-African levels.

4.5 Toward a pan-African institutional perspective of knowledge transfer

A recurrent weakness in partnership hosting countries is a lack of technical curricula and schools that prepare local employees for learning. When Africans were sent to China for studying and training, African government agencies did not effectively negotiate the scholarships. Therefore, some competitive curriculum and majors were not open to African students in China causing a constant shortage of qualified local labor for the partnerships. A government officer noted a crucial Congolese weakness:

We have very few vocational schools in Congo. Technical curricula are rare here, so there are very few technicians in this country. The engineering majors hardly exist in Congo. Even the private schools we have here are rather those with majors in management, marketing, finance, or accounting. My country’s policy is less orientated toward technology-related skill development. I got my degree in engineering, abroad, inevitably. [Congo I-14; August 22, 2014].

Additionally, when the government acted as the local partner, the agreements were not well negotiated because of multi-sectoral team default and a lack of African representatives (technicians, engineers, and officials) with a command of Chinese negotiation tactics and business culture. Also, political instability led to the replacement of local officials and managers involved in the early stages of the partnership negotiation, thus reducing the effective and constant support of local authorities to the local partner.

The reality is that our ministers do not remain long in their positions. It’s rare that a minister stays for three, four, five years due to constant government rearrangements. So, what happens is that, often the minister does not conclude the deal before he gets replaced. This benefits the Chinese. The political instability does not allow the initial negotiator, who happens to master the details, to finish the negotiation. [Chad I-30; August 14, 2014].

We discovered that in some cases, such as the China-Niger JV, Africans remain in vulnerable positions because projects were predominantly financed by the Chinese who also happened to finance local partner’s equity. A lack of state laws and control of local to Chinese ratios resulted in fewer Africans in the JVs.
Government weaknesses are also related to low levels of support from public authorities to locals and projects of African attempts to cope with Chinese dominant power and opportunistic behaviors such as unjustifiably firing potential local trade union leaders. Employees are not protected by local laws concerning trade union involvement. Although the Chinese regularly use opportunities to block locals’ trade union initiatives, the behavior of the Chinese contradicts the core principles of JV operation in China. In China, Article 7 of JV law indicates that “Staff and workers of joint ventures shall establish their trade union organizations, conduct trade union activities and safeguard their lawful rights and interests according to the law. JVs shall provide necessary conditions for the activities of the trade unions.” In many African countries, this law either does not exist or is not implemented, placing locals in uncompromising positions. Africans have appointed non-experienced negotiators from ministries. Other weaknesses include the tendency of African politicians with governmental power to locate JVs in their native provinces rather than in strategic regions where knowledge and spin-off potential are significant. There is misalignment of national strategies and policies with learning priorities. Host countries’ lack of logistical and infrastructural agendas made learning less attractive because of the unlikelihood of the future applicability of gained knowledge and the locals’ unawareness of the value and usefulness of any acquired knowledge.

Africa-China rapprochement and the aspiration of Africans to obtain knowledge from their Chinese partners are realities. Cooperation between Africa and China is reaching new heights as China has become Africa’s largest trading partner. Trade volume between the two allies has now surpassed $200 billion. However, to better negotiate its cooperation with China, Africa has opportunities to reflect on its partner’s history and learn from the Chinese experience of the 1980s. Following the opening up of 1979 led by former president Deng Xiaoping, China established a negotiation platform for its cooperation policy for Sino-Western partnerships. IJVs played a significant role in knowledge transfer to Chinese before and after China joined the WTO in 2001. For instance, in 1990, the predominant part of FDI in China was through JVs and, in 2000, JVs accounted for approximately 50% of all Chinese inward FDI (Bishop, 2007). China’s JV policy and overall government support to local firms played a significant role in assisting local companies in gaining knowledge from their foreign partners. To achieve this, China’s technological capabilities were a competitive advantage. China and its companies managed to learn and transfer technology from several of their Western alliance partners including Japan, the US, and Western European countries. Since the early 1980s, the Chinese have constantly established their own conditions when negotiating partnerships with foreign governments and companies, particularly those from advanced countries. Chinese strategy has remained clear and consistent: investment in China requires significant capital investment and the acceptance of joint-partnerships that allow the transfer of expertise, knowledge, experience, and technologies to Chinese local partners. During its opening up policy, China favored JVs as a means of knowledge transfer. Several provisions in China’s JV laws
and implementing regulations gave Chinese government and its companies the power to impose technology transfers during JV establishment (Bishop, 2007). For instance, Article 5 of the Law on Chinese–foreign Joint Ventures states that “The technology and the equipment that serve as the investment of the foreign partner in a joint venture must be advanced technology and equipment that actually suit our country's needs.” This law, coupled with government’s institutional tools and support, allowed China through its state-owned companies that partnered with foreign firms, to build a thriving economy based on industrial development. The subsequent knowledge gain enabled many Chinese companies to become outstandingly competitive in various sectors at the national and international levels.

China’s background of negotiation with Western partners with expertise in specific fields of interest shows Chinese determination to address the nation’s development needs and priorities. China has constantly insisted on the core principle of learning and transferring knowledge from its foreign counterparts. In 1979, China initiated a strategy of offering incentives to foreign companies that favored JVs while ensuring that the Chinese partners enjoyed a favorable balance of power mainly by retaining majority equity shares. This bolstered Chinese negotiations and increased the gains from foreign partners. Clearly, entering into JVs is not sufficient to achieve learning and knowledge transfer. An institutional mechanism must be supportive of the local partners. Since the Fifth National People’s Congress of July 1, 1979, the Chinese government has adopted a fundamental law for Chinese-foreign JVs. The Regulations for the Implementation of the Law on Sino-foreign Equity Joint Ventures (2001) requires that Sino-foreign JVs integrate the purpose of promoting China’s economic development and technological upgrading. There is even a provision that requires approving authorities to consider the expected level of technical and managerial training and to ask partners to document JV technological contribution and impact on China’s development. Concomitantly, China has constantly favored its state-owned enterprises (SOEs) as partners for foreigners rather than its private enterprises. Chinese SOEs enjoy official and unofficial support from provincial and central governments that, in terms of official and unofficial power, positions them to gain knowledge and benefit from partners’ expertise through the JV.

African countries have many shortcomings concerning knowledge development policies and strategies. Improvements and redesign of laws and technical tools are necessary. Africa must systematically strategize to support Africans in gaining knowledge through partnerships with foreign firms. Therefore, China’s partnership policy and strategy, both at the governmental and organizational levels, are models from which Africa should learn. China’s strategy embodies the type of institutional and regulatory support that African companies require from their governments and regional institutions to gain knowledge from their alliances with the Chinese. Bansal (2011) indicated that Africa still needs a pan-African coherent policy for cooperating with China. The
problem of policy harmonization facing Africa must be addressed to create an effective and sustainable learning experience for Africans to ensure that partners are gaining the most valuable knowledge for African company and industry competitiveness. The 2013 UN Economic Report on Africa outlined that Africa’s future depends fundamentally on continental leadership in designing and implementing policies that promote African industrialization. Consistent with the role and objectives of the NEPAD, and to develop the necessary continental leadership to gain more knowledge from its partnerships with China, Africa must create the conditions that define effective pan-African policies. NEPAD’s purposes include promoting investments in agriculture, encouraging human resources development, and economic diversification in manufacturing and mining industries. Therefore, NEPAD’s goals could be fully aligned with national and pan-African knowledge transfer policies. This requires a profound commitment towards the re-thinking of African countries’ cooperation policies with allies such as China. To achieve those objectives through cooperation with emerging countries such as China, NEPAD can encourage and support Africans in gaining strategic knowledge and transferring technologies and experience from their Chinese counterparts. As NEPAD becomes increasingly influential with significant impact and voice across the continent and beyond, the pan-African organization in conjunction with African governments, regional organizations, and the private sector must lead the development of institutional mechanisms that will enable African companies to enjoy bargaining power with the Chinese. For instance, a Congolese partner stated that a law on foreign capital ownership in strategic partnerships can give local partners a significant advantage in terms of negotiating technology transfer.

Ideally, we should have negotiated for higher capital ownership. Then, the power could have been somewhat balanced… currently, the fact that Chinese hold the majority of the capital is a handicap for us. [Congo I-9; August 25, 2014].

This would help African companies gain strategic knowledge necessary to assume higher added value activities and global competitiveness. Such a law would boost the continent’s growth based on Africa’s potential, comparative advantage, and internal resources supported by regional and national specificities. Africa must address cooperation and knowledge transfer with one voice. Speaking univocally will ensure that Africa’s cooperation with China is consistent and coordinated at the continental level and, thus, improve bargaining power with China. For instance, a single voice at the negotiation table was successful in the adoption of the African Consensus for the new 2015 agenda of the UN’s Sustainable Development Goals. Leadership by the AU and regional economic communities is essential in dealing with China and ensuring that Africa’s cooperation and negotiating knowledge transfer position with the Chinese reflects Africa’s development priorities as a whole. However, for Africa to speak with one voice, some challenges must be addressed. Integration efforts and compromises from each African country coupled with sacrifices from regional blocks and organizations on the African continent are required. Pan-African and regional institutions
such as the AU, NEPAD, ECOWAS, COMESA, SADC, ECCAS, SACU, IGAD and advocating organizations such as the UN’s OSAA could play fundamental and consolidating roles by supporting Africa in developing a unified approach towards a more integrated Africa. This would create a common development vision with a harmonized cooperation agenda for the continent for knowledge and technology transfer when negotiating with China and non-African partners.

Cheru and Obi (2011) emphasized that in the absence of effective African concerted leadership, the relationship with emerging Southern powers such as China could be disadvantageous for Africa in coming years. Accordingly, Africa requires a strategic negotiation approach with emerging countries. The knowledge needs for Africa’s industrialization have to be the pivot points for Africa’s negotiating framework with China. A statement from a Congolese deputy minister noted:

The president turned to China because Westerners no longer have the means to accompany us. Our country is therefore obliged to turn to the highest bidding partner which is China. We need the Chinese, however, they know our weaknesses, and that’s our weakness. The political line of Congo, set by the government, is under the direction of the president. That political line pushes Congo to target industrialization by 2025 and the necessary parameters were defined according to that vision... We turned to the Chinese because they are partners able to execute our projects, and lend us the money. [Congo I-51; August 25, 2014].

The African economy must first be driven by its own industries where goods and services are produced by African companies within the African continent and with higher added value. African companies must learn to develop their own products and manufacturing processes and upgrade their position on the global value chain by gaining sophisticated knowledge from Chinese partnering companies. With the increase in China’s engagement in Africa, the continent has a strategic potential ally which, if reasonably and thoughtfully handled, can provide African companies with significant knowledge and increase local and global competitiveness. To ensure a win-win situation, China may receive preferential but competitive access to African natural resources while, in return, Africa should benefit from knowledge and technology transfer for the development of made-in-Africa products by African companies within the higher added value segments of the global value chain. African countries must request that China’s government and its state-owned and private companies encourage knowledge transfer and share experience with Africans. Otherwise, the Chinese will not willingly share knowledge. Consequently, because key resources that China needs are retained by African countries, Africa can rethink its policies and renegotiate knowledge transfer arrangements with Chinese government and business. Africa has enormous resources that confer significant bargaining power and provide invaluable opportunity for Africa to negotiate with China for strategic knowledge. If Africa does not exploit its current resource-based bargaining power, it will be difficult in the future to secure knowledge transfer in its
partnerships with the Chinese. Appropriate structures for intra-African knowledge sharing networks can avoid such missed opportunities.

Africa-China partnerships vary in forms and number across African countries. China’s leading economic trading partner in Africa is South Africa (UNCTAD-UNIDO, 2014). Several partnerships between the two countries exist at the macro and micro business levels. Therefore, during recent years, several Chinese companies have entered into JVs in Africa’s major economies such as South Africa. China-South Africa JVs are increasing and exploit mutual synergies to benefit business complementarity opportunities in South Africa. Harrigan (1986) found that partners, particularly those from developing countries, enter alliances to learn, develop new expertise, and leverage potential synergies. South African partners are increasingly engaging with their Chinese counterparts to develop and exploit mutually beneficial markets and complementarities and gain valuable knowledge. The last decade has seen increasing China-South Africa JVs in South Africa. There is significant opportunity for partners from other African countries to learn from the experience of South Africans vis-à-vis the Chinese. However, for other Africans to capitalize on the South African experience in engagement with Chinese companies, a pan-African approach to inter-partner knowledge transfer and intra-African knowledge sharing network is crucial. Figure 12 conceptually materializes this idea by proposing a map for an intra-African integrated network of knowledge transfer and experience sharing.

Figure 12: Interconnected African knowledge-sharing map
Conceptualized by Ado Abdoulikadre
Our proposition of an interconnected African knowledge sharing map is based on the premise that when a South African company has established a successful JV with the Chinese and gained significant knowledge from that partnership, there is an opportunity to collaborate and share that knowledge with other African potential partners. There is simplicity in the idea of other Africans entering into JVs with a South African partner that has already learned from the Chinese than entering into a JV directly with the Chinese. Practically, as Figure 12 shows, we recommend that the South African firm that gained knowledge through a JV with the Chinese be the catalyst for a new JV with, for instance, a Congolese firm that is looking for that same type of knowledge. Thus, instead of the Congolese firm looking for a new Chinese partner in China, the South African partner could be a compatible partner to the Congolese because both African parties are familiar with local realities and share similar African business culture, environments, and needs. This formulas reduces the potential issues related to institutional and cultural distances among others. Therefore, a South African-Congolese new JV should be favorable to a brand new Sino-Congolese JV. This same process can be replicated with any other experienced African partner when entering into a JV with another interested African country’s partner. Our example proposes only five cases of this scenario, but the combinations can be expanded to a pan-African scale to favor a genuine intra-African knowledge transfer and experience sharing chain. This can make African partners avoid entering into ineffective JVs if the Chinese partner is opportunistic and does not share the African partner’s knowledge transfer objectives or philosophy.

To ease the knowledge flow across national borders in Africa, a new mechanism can be developed as indicated on the figure 12 by the arrows between JVs to link the JVs in a genuine intra-African network of experience and knowledge sharing. For this recommendation to be implemented, we require engagement and political determination from the African public and private partners/actors, private sector professional organizations, national governments and agencies, policy makers, and, above all, strong leadership from regional and pan-African institutions such as NEPAD and the AU. This will support internal capability and regional, national, and local institutional networks for superior knowledge transfer.

We present an analysis framework for a strategic approach to knowledge transfer and development in Africa. Figure 13 describes the systemic process by proposing an integrating analysis framework.
The framework considers the strategic and institutional perspectives towards effective knowledge gain for Africans. Therefore, we first consider Africans’ weaknesses at the government, policy, and organizational levels. We also consider Chinese opportunistic behaviors that prevent Africans from gaining knowledge through partnerships. Then, capitalizing from these factors and experiences, African actors must take strategic actions to support their knowledge quest by developing new and convenient tools for effective partnership negotiation and exploitation. These actions and tools should be developed based on targeting specific knowledge segments on the global value chain. Actions and tools should integrate and support the development of a pan-African networking map that allows African partners to share knowledge and experience across national borders within the continent. This systemic approach leads to knowledge development policies and strategies at the pan-African and regional levels (level 1) and at the national and organizational levels (level 2). This process, if properly implemented in conjunction with African states, regional and pan-African organizations, and private and public major actors, will boost Africa’s ability to gain and share strategic knowledge and to enhance Africa’s competitiveness, industrialization, development, and position on the global value chain.

4.6 Conclusion
This paper identified Africans’ inner weaknesses in transferring knowledge from the Chinese, which are evident at the strategic and institutional levels. We proposed recommendations to address the weaknesses
and improve conditions for knowledge transfer to Africans. We proposed a juxtaposition of strategic and institutional perspectives to overcome the challenges. From a global value chain perspective, we recommended that Africans target value-adding knowledge types particularly by choosing Chinese partners positioned at the higher end of the value chain. Additionally, we suggested that an intra-African interconnected knowledge sharing network be created. An integrated knowledge transfer analysis framework is also proposed for effective knowledge gain and development policies and strategies at the macro and micro levels. Changes are required concomitantly at the organizational, national, and pan-African levels. The pan-African networking proposition requires support by African leaders from private and public spheres and demands a political courage and pan-African institutional engagement for effective inter-African knowledge sharing.

Avenues of research include exploring ways to align Africans’ knowledge transfer and learning strategies with the overall dynamics of African development and knowledge-seeking priorities. Additionally, further research is needed on the proposed mechanisms for knowledge transfer and experience sharing between African partners to leverage Africa’s industrialization. Researchers should explore opportunities for the identification of priority skills based on the specific strengths of each African country or region. This will help in gaining the appropriate knowledge for the targeted and appropriate global value chain segments. Overall, answers to these questions will support the development of Africa’s knowledge base and the establishment of better ways to strategically position African economic activities within the most valuable segments of the global value chain. However, because this study is conducted only in 12 African countries, the generalizability of our recommendations is limited. Future research must compare other African countries and partnerships with our results and propositions to improve the understanding of the subject.
4.7 References


5. General conclusion

This study makes several contributions to the advancement of knowledge from empirical, theoretical, and managerial perspectives and with a view toward African public policy decision-making for the industrialization and development of the continent. This research provides insight to the management of learning processes and knowledge transfer mechanisms. Additionally, this research clarifies the current level of African learning from Chinese alliances and the conditions and factors that explain the successes or failures in acquiring knowledge. The results of the study provide insights to both researchers and practitioners into learning and knowledge transfer, particularly in the Africa-China context. Based on a review of the current scientific literature on this subject and to the best of our knowledge, there is no study of this magnitude in the Africa-China context so far. Thus, this study also brings a major empirical contribution. The findings are of significant importance for the understanding of Africa-China rapprochement. The results bring an in-depth contribution to the Africa-China win-win, win-lose debate, particularly from a knowledge transfer perspective.

5.1 Theoretical implications

The results of this research provide theoretical contributions to China-Africa literature and the learning and knowledge transfer phenomenon. The study focused on the specific context of IJVs and China-Africa JVs. The findings add significant and organized knowledge with respect to China-Africa business rapprochement. Although the primary objective of this exploratory case study was not to generalize the findings, theoretical comparisons are made concerning the existing literature on organizational learning and knowledge transfer in IJVs. The results contrast with previously established theories and with the findings of other studies although, to our knowledge, such studies are rare and almost non-existent in a Sino-African setting. We suggested various models on the design and theorization of the learning and knowledge transfer phenomenon in the context of South-South JVs. Theoretically, the case of China-Africa strategic alliances proved to be insightful. Our study proposed a new conceptual model that highlights the increasing role of power and informality in strategies and tactics employed by partners to monopolize or gain knowledge. Thus, we extend the current literature by arguing new theoretical dimensions that play an important role in knowledge transfer within partnerships such as JVs. This study also provides theoretical insights to strategic and institutional dimensions of knowledge transfer from organizational and policy (micro and macro) perspectives.

5.2 Managerial and policy implications

This study provides clarification for Africans to better understand and manage the interpersonal, inter-organizational, and international mechanisms of learning and knowledge transfer. The results identify ways to
manage individual, organizational, national, and cross-border contextual variants to promote knowledge acquisition by Africans. Consequently, the findings of this research can illuminate African partners to make informed alliance decisions when entering into JVs with Chinese or other partners. The results presented in this study can also inspire partners, including those from other emerging countries, to better manage (develop, share, or monopolize) knowledge with their alliance partners. The findings may help practitioners, particularly African JV partners, to understand why they failed to gain significant knowledge from their Chinese partners and identify potential opportunities to reverse the trend by first gaining more power with respect to their partners. Building upon the findings, Africans can exploit more informal opportunities for learning and greater knowledge transfer. The practical implications of this research reflect upon effective ways for Africans to gain knowledge. Therefore, the identified ways can inspire other African partners who aim to successfully transfer knowledge from their alliances with Chinese partners. By exploiting these research findings, African practitioners can therefore improve their inter-organizational learning and knowledge transfer. These findings also address the lack of an analysis framework for learning and knowledge transfer strategies and support policy decision making both public and private with respect to knowledge transfer. Moreover, this study can help Africans to effectively engage in JVs and support their quest for strategic knowledge from Chinese partners. Because this research identified Africans’ challenges in learning and transferring knowledge from the Chinese, the results are an opportunity for Africans to reflect upon their inner weaknesses and to take appropriate measures. We juxtaposed strategic and institutional perspectives to make practical recommendations that address African challenges. Based on a smiling curve approach, we recommended to both public and private alliance decision makers an approach whereby Africans target value-adding knowledge by selecting Chinese partners positioned at the higher end of the curve. We also recommended the establishment of an intra-African interconnected knowledge sharing network to allow pan-African knowledge and experience exchange. Finally, a new integrated knowledge transfer analysis framework will support Africans in defining their knowledge development policies and strategies at the macro and micro levels.

5.3 Study significance

The answers to the questions of this thesis concluded that the research findings on China in Africa are frequently oriented toward win-lose findings although many lack substantive methodological rigor. To balance this bias, researchers on China in Africa should contrast micro-level studies with the gains of local Africans from cooperation with macro-level studies. Moreover, researchers should focus on institutional and theoretically demanding perspectives that look at the similarities and patterns within the China-Africa context while they further investigate the mutual trust and alliances between China and Africa. To overcome the major methodological and theoretical weaknesses of existing studies on China in Africa, researchers must consider
additional directions in future research including more empirically based studies, and culturally aware researchers that prioritize the cultural, social, and historical dimensions of Africa-China cooperation. Additionally, longitudinal approaches to discover whether Africa’s cooperation with China is different from its cooperation with traditional partners are required. Following these shortcomings, we conducted an empirical study on China in Africa by exploring a sample of Sino-African JVs operating in Africa. The study brought new insights concerning African gains from their cooperation and alliances with the Chinese from a knowledge-based view perspective. Our results indicated that Africans did not gain significant knowledge from their Chinese partners as expected. The findings also improved our understanding of the role of power, particularly unofficial power in knowledge management practices. The results indicated that the Chinese used radical strategies including blocking, isolation, manipulation, the use of threats, and limited sharing to monopolize their knowledge assets. However, African partners were not always submissive and passive to Chinese knowledge control strategies. Our research investigated furthermore and revealed some African tactics to achieve learning despite Chinese resistance to sharing knowledge. Following a social capital and informality perspective, the study highlights the ways that African alliance partners can mobilize their particular advantages to gain knowledge from the Chinese. Indeed, few Africans have managed to gain significant knowledge from the Chinese by adopting informal mechanisms and clandestine procedures within and outside the alliances. The results of the study emphasize the need to revisit the theoretical applications of existing conceptual frameworks on interactions between social capital and knowledge transfer to include more informal dimensions. However, to better understand the Africans’ knowledge transfer successes and failures, an investigation of Africans’ own learning and knowledge transfer advantages and weaknesses was necessary along with proposed changes at the micro and macro levels to allow African partners to gain more power in relationships. Therefore, our study also explored African fundamental weaknesses. The results depict several weaknesses and challenges for African partners ranging from inadequate or inexistent national knowledge development policies to an organizational lack of absorptive capacities and learning skills. The study presented practical directions for improving Africans knowledge quest. Recommendations included the adoption of a multi-perspective approach that considers the strategic and institutional aspects of knowledge transfer. The analysis recommends that Africans target knowledge that upgrades them to higher added-value activities. A pan-African network of knowledge and experience sharing can also support Africa’s quest for strategic knowledge. We developed a practical framework for policy matters at the pan-African, regional, national, and organizational levels for effective knowledge transfer. This requires the coordination and synchronization of the work of regional and pan-African organizations with national specificities, policies, and knowledge needs.
5.4 Study limitations

This study is limited by its geographical scope and generalizability. Therefore, the findings may be more relevant to the Africa-China alliance context, and recommendations may be more significant for African partners and countries. This study adopted exclusively an African perspective of Africa-China partnerships and interviewees where all Africans. Although the study's geographical scope is Africa-China, the findings are relevant to the 29 JVs of our studied sample and their 12 respective countries, though the findings vary slightly across those JVs and countries. Therefore, we cannot generalize the research findings of this study to the all African continent particularly regarding the Chinese knowledge control strategies and the Africans’ use of informal learning mechanisms. This research is not exhaustive in the various aspects of China-Africa relations, and significant opportunities for further studies still remain. Future studies in other settings may increase the potential for our proposed models’ replication elsewhere.

5.5 Research avenues

Additional studies should now examine how to align Africans’ knowledge management policies and strategies with the dynamics of Africa’s development and knowledge-seeking priorities. Researchers should focus on developing and implementing new mechanisms for knowledge transfer and experience sharing among African partners to leverage Africa’s industrialization. Moreover, research opportunities exist on the prioritization of skills based on national or regionally specific strengths and weaknesses. Future studies on the Africa-China setting should explore the role of informalities and the extent to which they have ethically helped African partners gain knowledge by circumventing organizational and environmental formal structures. Additionally, future research should explore from the Chinese perspective, whether Chinese partners’ non-collaborative attitudes were voluntary and cultural, and if they reflected poor training among the Chinese for knowledge transfer and collaboration with African counterparts; or, if their attitudes were deliberate and consciously intended to prevent locals from learning. Finally, these research avenues are significant for both partners in understanding, strengthening, improving, or questioning Africa-China relations from an African standpoint and a knowledge-based view. Therefore, this field deserves even greater attention in the current context where China is Africa’s leading business partner, and Africans are developing higher expectations for knowledge gain from their Chinese allies to boost Africa’s competitiveness, industrialization, and overall development.