1. / EXECUTIVE SUMMARY

It is estimated that some 27 million people live in contemporary forms of human bondage, notably in the Indian Ocean World (IOW), a vast region running from Eastern Africa, to the Middle East, South and Southeast Asia to China. International agencies such as Anti-Slavery International (ASI), the International Labour Organisation (ILO) and the United Nations Children's Fund (UNICEF) have for long agitated for the suppression of modern forms of bondage, but governments both in the region and in the West have to date failed to formulate effective policies.

This underscores the significance of the proposed research project which brings together a interdisciplinary Franco-Quebecois team of specialists on forms of human servitude in the IOW (historians Antonio Mendes and Johanna Ransmeier; economic historians Gwyn Campbell and Alessandro Stanziani; geographer Jon Unruh), political scientist Isabelle Guérin; anthropologist David Picherit); and a geoscientist expert in Dynamic Bayesian Networks (Margaret Kalácska). This team aims, for the first time, to carry out a comparative structure of coerced labour in three core regions of the IOW: China, South Asia, and East Africa. These regions are of major significance. China and India constitute major emerging economic powers and have historically played highly important roles in the IOW economy. By contrast, East Africa is home to some of the world’s poorest countries. Moreover, whereas democratic influences run deep in India, they are suppressed in China, and have only nominal influence in East Africa. As human rights form the foundation of democracy, the perpetuation of human bondage on a large scale in the IOW poses major threats to political and economic stability both within the region and world-wide.

This project will explore the relationship between historical and contemporary forms of servitude and human trafficking in the IOW within the context of socio-economic, institutional and specific environment interaction. Through researching key archives (colonial, national, local, judicial); structured interviews; the construction of a data base on migration and environmental factors and their impact; and the utilization of Dynamic Bayesian Networks which will permit us to establish in a robust manner relationships between the different variables (migrations, environmental events etc) from 1800 to the present day across the entire macro-region, we will be able to undertake comparative analyses that will not only bring the historical and contemporary dimensions of IOW bondage to the forefront of the research agenda, but through the strategic dissemination of research results, also increase public understanding of the causes and nature of IOW bondage, and help decision-makers formulate appropriate policies.

2. CONTEXT, POSITIONING AND OBJECTIVES OF THE PROPOSAL

Human bondage still exists despite international prohibitions of slavery (1948 Universal Declaration of Human Rights; 1956 UN Convention on the Abolition of Slavery). Almost 30 million people are estimated to be trapped in modern forms of slavery that, some experts argue, globalization has accentuated (e.g. Bales, 2009). An affront to human rights, slavery endangers political and economic stability, and health in regions where it is prominent, notably the Indian Ocean World (IOW) — a vast region running from East Africa to China (Bales, 2009, 1999; ASI, 2011, 1995; ILO, 2011).
ASI and the International Labour Organisation (ILO) highlight three main reasons for the concentration of human servitude in the IOW: (i) poverty and illiteracy; (ii) the unwillingness or inability of governments in the region to enforce anti-slavery legislation; and (iii) the hands-off attitude of Western governments who consider bondage in the IOW the concern of authorities within the region. An additional problem is that concerned organizations such as ASI, the ILO and UNICEF, and governments, employ different definitions of slavery and servile labour. For example, while Kevin Bales, President of Free the Slaves (the United States sister organization of ASI) estimates that some 27 million people are trapped in modern forms of bondage (Bales, 2009), UNICEF considers child labour bondage (involving children below the age of 14) alone involves 250 million children - the bulk of whom live in the IOW, notably India (UNICEF, 2001).

Again, concerned organizations and policy makers lack an understanding of the historical roots of IOW servitude. This in large part stems from a general identification of “slavery” with the Atlantic slave trade against which European and North American governments successfully campaigned and which finally ended with formal abolition in Brazil in 1888. Thus in the 2007 bicentenary celebrations of the British Anti-Slave trade Act of 1807, only the Atlantic trade received recognition – a focus reinforced by the UNESCO Slave Route Project (UNESCO, 2011) and European and American educational syllabi (Hodgson, 2010). Yet scholarly research is starting to demonstrate the existence of a large and vibrant IOW slave system that (i) predated, co-existed and in some instances overlapped with the Atlantic system; (ii) continued in modified forms into the 21st century; and (iii) in which concepts of “slave” and “free” derived from the Atlantic slave paradigm are often inapplicable. The IOW slave trade was as much continental as oceanic, so that while the cumulative number of slaves traded across the IOW maritime space over the centuries probably well exceeded the 10-12 million landed in the Americas, the greatest IOW slave traffic was overland, notably within Africa, India and the Far East: India alone had an estimated 8 to 9 million indigenous slaves in 1841 – double the number of black slaves in the United States in 1865 (Balfour, 1885). Moreover, most humans trafficked in the IOW were probably females and children, and non-Africans (Reid, 1983; Condominas, 1998; Clarence-Smith, 1989; Campbell, 2005; 2004); and there existed a far greater variety of forms of bondage than in the Americas-slavery, that often overlapped with other types of servitude, and the characteristics of which were highly time and culture specific (Stanziani, 2010, 2009; Campbell, 2005, 2004).

This forms the justification for this project: a structural analysis of historical and contemporary forms of bondage in three key areas of the IOW – emerging superpowers China and India; and as a contrast East Africa – and the changes they underwent over the longue durée from 1800 to the present day – a period that corresponds with the rise and development of modern capitalism. China and India constitute major emerging economic powers that historically played highly important roles in the IOW economy. By contrast, East Africa is home to some of the world’s poorest countries. Moreover, whereas democratic influences run deep in India, they are suppressed in China, and have only nominal influence in East Africa. As human rights form the foundation of democracy, the perpetuation of human bondage on a large scale in the IOW poses major threats to political and economic stability within the region and world-wide.

Our interdisciplinary Franco-Québec research collaboration involves historians(Antonio Mendes, Johanna Ransmeier), economic historians(Gwyn Campbell, Alessandro Stanziani), a human geographer (Jon Unruh), political economist(Isabelle Guérin), anthropologist(David Picherit) – all specialists in aspects of servile labour in the IOW; and an expert in Dynamic Bayesian Networks (geo-scientist, Margaret Kalácska). Our chief goal is to undertake a comparative analysis of the changing structure of forms of forced labour in the IOW since the emergence of the modern capitalist era, within the context of the interaction between major socio-
economic, institutional and environmental factors. Through researching key archives (colonial, national, communal, judicial and organizational); structured interviews; compiling data bases on human migration and environmental events and their consequences; and the use of Dynamic Bayesian Networks, we aim for the first time to:

- clarify complex and uncertain historical and current relationships over time between economic, political, social and environment factors, and historical and contemporary forms of bondage and human trafficking.
- advance new paradigms for the analysis of IOW history.
- help inform research into human bondage elsewhere in the world.
- bring the historical and contemporary dimensions of IOW bondage to the forefront of the research agenda.
- through the strategic dissemination of research results, increase public understanding of the causes and nature of contemporary IOW bondage, and help decision-makers formulate appropriate policies.

3. **PROGRAMME SCIENTIFIQUE, ORGANISATION DU PROJET / SCIENTIFIC AND TECHNICAL PROGRAMME, PROJECT ORGANISATION**

1.1 Definitions

The issue of definitions is critical. The Québec and French teams, under Campbell and Stanziani respectively, will collaborate from the outset to define the major categories of unfree labour. Of central importance is the meaning of the term “slave.” Conventionally considered the opposite of a “free” person, a “slave” is defined by most Western scholars within the paradigm of the Atlantic slave system wherein mainly young African males were shipped to white-owned plantations in the Americas. They were deprived of civil rights, and their children inherited slave status. Masters possessed absolute power over their slave “chattels,” who they could punish, sell or transfer at will. The slave was a capital asset who, through coercion, bore dividends both in productive labour and through reproduction. Violence characterized all stages of a slave’s life. Uprooted and dehumanized, the slave suffered “social death,” from which he could salvage dignity only through rebellion and forging a distinct slave culture (Patterson, 1982; Eltis, 1997). This racialized heritage still divides American society, and heavily influences the African diaspora worldwide. Such definitions and concepts need to be rethought as analytical tools for the IOW.

**Research questions:**

- Are Western concepts of “slavery” and “freedom” applicable to the IOW?
- Define the difference between “slavery” and other types of unfree labour in historical and contemporary forms of servitude in the IOW.

We will examine how appropriate the concept of an abstract form of liberty (in the form of a community composed of individuals equal before the law and governed by market rules of supply and demand) is to the present-day IOW. In most pre-1800 IOW societies it was inconceivable (Campbell, 2011, 2004). There existed in the IOW a far greater variety of forms of bondage than in the Americas, with slavery often overlapping with other forms of servile relations—the characteristics of which were highly time and culture specific (Stanziani, 2010, 2009; Campbell, 2005, 2004). We will define the term “slave,” and through examining various types of bondage in China, India, and East Africa in their different socio-economic and historical contexts, clarify how a “slave” differed from other forms of “unfree” labour and from “free” workers. By our first team meeting (Montreal, Fall 2011), we will have produced robust working definitions of
the chief categories of bondage and the ways in which they change over time and space. Of central importance here is the debate over shifting boundaries between free and unfree emigration (Engerman, 1999; Cooper, 2000). Campbell, Stanziani, and Mendes will focus on the indentured and engaged labour systems (Wanquet, 1998; Allen, 1999; Steinfeld, 1991); Ransmeier on “trafficking” of Chinese females for sexual purposes; Guérin on debt bondage contracts in South India; and Unruh on tenure-unfree labour contestations in contemporary East Africa; while Picherit will examine Indian workers’ own perceptions of bondage and freedom.

1.2 Research axes
The two teams will then enter the major phase of the project which is orientated around three principal research initiatives conducted within a temporal framework of the longue durée covering the rise and expansion of modern capitalism from 1800 to the present day:

2. Local Bondage in a Global Context: The interaction between local, regional and global forms of dependence.
3. Governments and Bondage in the IOW: The labour and anti-slavery policies adopted in the three areas of the IOW under review.

1.2.1 Human-Environment Interaction
Background: Beyond occasional linking of major IOW political events to natural disasters (Crosby, 2003; Diamond, 1997), the socio-economic impact of environmental forces is little understood. Exposés of contemporary servitude emphasize its geographical concentration in the IOW, but fail to clarify the region’s historical significance in economic and environmental terms – and thus the context required to understand modern bondage. In this highly innovative aspect of the project we introduce “human-environment interaction” as a conceptual framework for understanding past and current social relations in the IOW. This in turn owes much to Fernand Braudel whose work on the Mediterranean region was path-breaking in that it identified a strong relationship between the environment and human society over the longue durée (Braudel, 1996). Like the Mediterranean littoral, the IOW (a macro-region running from East Africa to the Far East) is an environmentally unified area defined by the monsoons, a complex system of winds and currents that governs the waters of the northern Indian Ocean, the Indonesian Sea, and the South and East China Seas. From April to September, the Asian continent heats up and hot air rises, producing a vacuum which sucks in air from the ocean, thereby creating the southwest monsoon. During the alternate “winter” months, the opposite occurs, creating the north-east monsoon.

The monsoon regime shaped the agricultural production in which the vast bulk of the IOW population was, and still is, engaged. It largely dictates precipitation patterns on the Asian continent both littoral to, and in the deep hinterland of the monsoon seas, and thus critically influences production patterns and social relations. For example, the monsoons are primarily responsible for the division in Asia between the wet-rice

The Indian Ocean World Monsoon System
cultivation of the southern Asian belt, and the dry winter crops (e.g. wheat and barley) of the regions to the north; and for fostering long-distance trans-IOW maritime trade (Chaudhuri, 1992, 1985; Abu-Lughod, 1989). Studies indicate that major disturbances to this system could be life-threatening and propel people into human bondage (Breman et al. 2009; Hirata, 1979; Dull, 1972; Guérin 2007; Morton, 2009; Campbell, 2009; Lasker, 1960; Reid, 1983).

Research questions:

- How have “natural” factors impacted on human life in the IOW?
- How has human-environment influenced systems of bondage in the IOW?

Little attempt has been made to relate climatic variables to harvest yields, rates of malnutrition, disease and mortality, social and political unrest, or warfare — all of which impact significantly on demography, labour relations, and migration. In this project, we will investigate the relationship between environment, societal dynamics and institutions of bondage in the IOW. First, we will build a data base of the incidence of the above factors in the IOW from 1800 to the present day, noting their date and location, their gravity, and as precise an indication of the environmental impact on human bondage. Campbell already has a considerable database for the period 1800-1910, to which he will add; and he and Unruh will expand this for the post-1910 era for which there exists much more readily available, accurate and detailed statistical data (e.g. USGS, 2011; MMS, 2010; NOAA, 2011).

Second, we will evaluate the impact of human-environment interaction in the formation and maintenance of regimes of forced labour, as well as in modifying those structures, in different regions and over time. For example, Campbell will analyse his existing data on nineteenth-century natural and human disasters, and the slave trade in the Western IOW, in order to evaluate their significance as factors leading to enslavement. Again, for contemporary East Africa and India, Unruh and Picherit respectively will examine the role of human-environment interaction in conflicts over natural resources, and claims to them — such as rights in customary law over land, water, labour and cattle — in creating forms of human bondage.

In addition, we will test two conventional hypotheses about the debt-servitude relationship in the IOW, and its changing nature over time: (i) that in traditional indigenous debt bondage systems, individual indebtedness in most cases increased — because of high interest exactions, and lodging, feeding and clothing costs — to the point that it became permanent, even hereditary (Schottenhammer, 2004; Watson, 1980; Klein, 1993; Patnaik, 1985; Reid, 1983); and (ii) that European colonial regimes
facilitated a growth in indebtedness through imposing monetary taxes, promoting commercialisation, and enforcing credit contracts (Reid, 1983; Klein, 2005). To examine these hypotheses, we will analyse the India-Mascarene (Mauritius-Réunion) (Stanziani) and Mozambique-Madagascar debt-servitude nexus (including, for East Africa, the structure and impact of pawnship) (Mendes, Campbell, Unruh). Ransmeier and Guérin will explore similarities and contrasts in the use of unfree labour in the brick-building sectors of China and India; and analyse why, in contrast to India, there still exist in China traditional forms of bondage despite decades of communism (with its emphasis on worker rights and gender equality), and independence from foreign rule.

Further, Guérin, Picherit and Unruh will examine the degree to which forms of traditional debt bondage inform structures of contemporary servitude. The aim is to establish the relationship between the historical and contemporary debt-enslavement-slavery nexus – within the context of environmental change and hazards. Building on her previous work on the debt-servitude nexus (Guérin, 2009, 2007, 2004), Guérin will investigate the indebtedness-bondage relationship in India, focusing on the labour-intensive brick, sugar, and rice sectors in South-India that were historically characterised by forced labour regimes (Bremen, 2009; Bhukut, 2007), but have recently undergone major transformations due to growing liberalization, environmental constraints, and the campaign to end discrimination against Dalits. Guérin’s work will be complemented by Picherit’s analysis of the changing relationship of debt and forms of unfree labour in the mining industry of Rayalaseema (South India). In his turn, Unruh will focus on the debt-unfree labour relationship in contestations (including armed conflict) over land tenure in eastern Africa, notably Mozambique, Madagascar, Zanzibar and Darfur. His work will thus immediately complement the debt-unfree labour nexus analysis of Campbell and Mendes.

1.2.2 Local Bondage in a Global Context

**Background:** Many specialists of contemporary human bondage consider that since the 1990s globalization has in the IOW weakened labour organizations and government regulation of industry, permitting a resurgence of exploitation by employers that result in slave-like labour practices (Bales, 2009, 1999; ASI, 2011, 1995; ILO, 2011). This project will test these assertions in a number of specific case studies. The identification of types of labour migration, such as indentured labour, with the slave trade and slavery is the subject of major scholarly debate – one, however, set almost exclusively in the context of Atlantic paradigms of slavery. It thus opposes “free” and “unfree” emigration (Kale, 1998; Patterson, 1982). However, recent studies have shown the virtual impossibility of clear-cut distinctions between free and unfree migration. Instead, they suggest a continuum from chattel slavery via serfdom and debt bondage to wage labor (Lucassen, 1997; Emmer, 1986). Our project will further develop this approach.

**Research questions:**

- Analyse the recruitment mechanisms for, and intermediary structures governing, migrant labour.
- To what degree have western capitalist forces commercialised labour in the IOW?
- Did the indentured and engagé labour systems constitute “slavery in disguise”?
- Has recent globalization permitted a resurgence of slave-like labour practices?

We will examine forced migration within the context of the IOW economy, from 1800 to the present day by focusing on specific case studies drawn from China (Ransmeier), India (Stanziani, Guérin, Picherit), and East...
Africa (Campbell, Stanziani, Mendes, Unruh); analysing their structures (sources, markets, routes, transport, mortality rates); and evaluating their economic significance. Of critical importance here was the labour-intensive nature of capitalist enterprise in the IOW. We will analyse to what degree western capitalist forces were able to commercialize labour in the IOW through measuring the size and quality of the free wage labour force, as compared to the workforce tied in traditional systems of bondage, over time, and by sector (plantation, carriage, and transport); and investigate the structure and durability of (indigenous and European) trader and intermediary networks in the slave, indentured labour and engagé labour markets.

Specifically, Stanziani will examine why the impact of Indian migrant labour on Mauritius was so different from that on Réunion. In their turn, Mendes and Campbell will investigate recruitment mechanisms and work regimes of (i) engagé migration from Mozambique and Madagascar to the islands of the Western Indian Ocean, and (ii) corvée and government contract labour under colonial rule in Mozambique and Madagascar, in order to determine the degree of coercion used, and the longer-term social and economic impact of these systems. They and Stanziani will also explore in what ways the colonial labour policies of Portugal, Britain, and France differed in India, East Africa and the islands; and why British policies differed from colony to colony.

To this aim, they will explore colonial and IOW (Madagascar, Mozambique, Mauritius) archives on local forms of justice, local estates (including documents on conflicts over wages, savings, and working conditions) and finance (custom and police records on immigrant savings, claims and complaints). In addition, Stanziani and Mendes will compile a data base (including names, numbers, savings, working conditions) for the India-Mauritius-Mozambique indentured labour nexus in the late eighteenth to early twentieth century. Campbell, for the Western IOW, and Ransmeier for China, will also investigate if, and to what degree, the forces of the international economy created new forms of human servitude, notably the trafficking of females into sexual slavery.

In accordance with our basic paradigm (the longue durée), we will pursue similar themes of enquiry into the relationship between migration and human bondage in the twentieth century and the contemporary era, focusing in particular on the impact on the rural labour force of a decline in agricultural production in post-colonial world. Guérin and Picherit will examine the causes and impact of local, interregional, and long distance worker migration in India; Picherit will conduct a detailed investigation of the nexus between regional politics, labour policies, and debt-bondage in the Andhra Pradesh building and mining sectors; Unruh will explore the impact of recent land acquisitions in eastern Africa on local land-tenure-labour relations; and Ransmeier will analyse Chinese female migration within China and to the wider IOW from the late nineteenth century to the present day.

1.2.3 Governments and Bondage in the IOW

Background: Despite the theory of the sovereignty of the market, it is clear that forces of the international economy were often mediated by political authorities. These had the means (e.g. force; taxation; legislation) and motivation (economic; social; political) to restrict the geographic mobility of subject peoples; transform them into a servile workforce; evict them from land; or propel them to migrate. For example, some researchers have argued that the construction and maintenance of water storage and channeling facilities in dry zones, and of large-scale irrigation works in wet zones demanded major labour inputs, and led to structures of authority that geographically restricted and physically controlled the required workforce; and developed ideological systems that reinforced hierarchy and inter-generational social rigidity, including those associated with caste structures. Hence the role of government in
labour relations and work regimes needs to be examined in the context of changing political regimes: pre-colonial, colonial and postcolonial. For much of the period under review, vast swathes of the IOW lay under the formal or informal rule of European regimes that, in defiance of liberal economic theory, imposed managed economies.

Research questions:

- Explain the variance over time and place of European anti-slavery measures in the IOW.
- To what degree and why did colonial regimes create new forms of bondage in the IOW?
- Can individual IOW countries effectively eradicate bondage without outside support?

Campbell, Stanziani and Mendes will, in the context of both the mounting anti-slavery movement in the West in the nineteenth century, and competing demands for labour by European and indigenous authorities in the in the IOW, examine their impact on IOW structures of labour recruitment, migration, and work regimes. In particular, they will investigate the variance over time and place in European anti-slavery measures: In Africa, the internal slave traffic remained buoyant for some 50 years after the banning of the external slave trade, in Indochina the French first seriously applied anti-slavery measures in 1897, in the Hualawng Valley of eastern Burma the British abolished slavery only in 1926; and in the Middle East—part of Britain’s informal empire after World War I—abolitionist pressure remained muted until after 1945 (Kopytoff, 1977; Miers, 1998; Klein, 2005; 1993; Reid, 1983; Clarence-Smith, 2006). This will take the form of both IOW-wide studies (Campbell and Stanziani) and particular case studies (Madagascar, Mozambique and India). Campbell, for example, building on his previous studies of labour in pre-colonial Madagascar (Campbell, 1988), will research predominantly French colonial and relevant missionary archives in order to study the ways in which the corvée regime imposed by the French colonial authorities from 1095 formed continuities with, or broke from, traditional forms of forced labour. He will compare and contrast the labour demands of the pre-colonial Merina regime with those of the French colonial regime and settlers, to evaluate to what extent they both led to policies that geographically constrained and physically controlled the required workforce. Almeida Mendes will lead a similar enquiry in Mozambique and test the attitudes Portuguese elites adopted towards labour, slavery, and its abolition. Campbell and Stanziani will examine French and British labour and anti-slave policies in the western Indian Ocean, and their impact – taking into account the role and attitudes of the major interested parties (imperial elites, local administrative and military personnel, and estate owners) as of public opinion. Again, Guérin and Ransmeier will analyse the development and efficacy of policies to combat contemporary human bondage and trafficking in India and China respectively; while Unruh and Picherit will investigate the elaboration and impact of similar policies in specific case studies in Andhra Pradesh and eastern Africa.

1.3 Data Synthesis and Interpretation

Of ground-breaking importance is the integration into the synthesis of our research data of Dynamic Bayesian Networks. All data collected by team members on the socio-economic and environmental background to, and structure and evolution of types of, servile labour, will be entered in a McGill data bank and fed by GeoScientist Kalácska through a Bayesian network toolbox to clarify relationships between historical and contemporary forms of bondage over different regions of the IOW. Team members will collectively analyse the findings and feed them into their individual and collaborative case studies.
1.4 Méthodologie

To realize our goal of uncovering the roots and structures of, and transformations in, both historical and contemporary forms of servitude in the IOW, and the linkages between them, we will employ a number of methodologies and apply them to specific case studies in China, India and eastern Africa and the islands.

Historian team members, Ransmeier and Mendes, will utilise a mixture of the Annales approach to history which stresses interdisciplinarity, the importance of considering all levels of society, and the collective nature of mentalities (see e.g. Bloch, 1931; Momigliano, 1966; Finley, 1973) and modern Hermeneutics, which emphasises the necessity of interpreting a text in light of the cultural, historical, and literary contexts in which it was produced by its author and encountered by its interpreter (Heidegger, 1962; Gadamer, 1994; Hirsch, 1976; Schleiermacher, 1998). Economic historians Campbell and Stanziani will employ a combination of economic theory, and historical methods. They will, for example, use a macroeconomic approach to uncover fluctuations in the performance, structure, and behaviour of the IOW economy, and the causes and consequences of those fluctuations. The liberal free market approach derived from Adam Smith (Smith, 1776), and which focuses on supply and demand as the central regulatory forces of the economy, will form the context for this study, although challenges to this model will also be held in mind. These include Marxist economics (Marx, 1867, 1859); development theory (Rostow, 1960; Lewis, 1978, 1970); development of underdevelopment theory (Baran, 1957; Wallerstein, 1980, 1979, 1974; Amin, 1977); and models relating to legal pluralism in colonial and post-colonial contexts, and concepts such as “law in action” (legal and economic entitlements), and flexible neo-institutionalism (see e.g. Stanziani, 2009). Political economist Guérin will combine economic theory and quantitative techniques with qualitative (sociological) techniques—including semi-structured interviews, random sampling, value chain analysis, and village monographs—to elucidate the structure of contemporary bondage in significant sectors of the South Indian economy. Anthropologist Picherit, drawing on the historical materialist theories of social historians such as E.P. Thompson (Thompson, 1964) and the theories of historian Rajnarayan Chandavarkar who disputed conventional assumptions about the universal processes of capitalism, industrialization and modern state formation (Chandavarkar, 1994), as well as social anthropologists such as Jan Breman, Gérard Heuzé or Geert De Neve (Breman, 2004; Heuzé, 1996; Neve 2005), who investigate the transformation of the rural Indian peasants into industrial workers, will focus on the issues of power and coercion in the everyday lives of poor Indian labourers in Andhra Pradesh, India. He will conduct primarily ethnographic fieldwork, studying migratory labour circulating between rural villages and mines. In his turn, Unruh employs the methodologies of human geography (anthropogeography)—which concerns the study of the characteristics and phenomena of the earth’s surface that relate directly to, or are shaped by, human activities (Murphy, 2009). To investigate tenure-debt-labour contestation in selected east African regions, he will research relevant written documentation, including grey and academic literature on recent foreign land acquisitions and archival material; and conduct oral interviews with key informants.

Project members will make extensive use of central colonial and local archives. The former include East India Company and colonial archives in London (notably the India Office Records and Public Records Office), and colonial archives in Aix-en-Provence (for France) and Lisbon (for Mozambique); and the latter, archives in China, India, Mauritius, Réunion, Madagascar, Mozambique, and Zanzibar. The team has already compiled a list of relevant archival inventories and locations. Further, in their individual case studies, team members will exploit hitherto underutilised ones. For example, Stanziani will investigate judicial and estate archives and immigration records on indentured workers’ savings; Ransmeier will
research judicial and local community and association archives; Guérin will analyze debt bondage contracts; and Unruh will digitalise, organise and analyse an “emergent archive”—a loose collection of documents, and maps—in the Zanzibar Indian Ocean Research Institute and National Archives. Throughout, project members, whose linguistic competency covers Chinese, Portuguese, Telegu, and basic Malagasy, in addition to English and French, will aim to access source material in the original languages.

The synthesis of data on the socio-economic and environmental background to servitude, and the structure and evolution of types of servile labour, will play a central role in the team’s analysis of human bondage. All research data collected by team members will be entered in a data bank at McGill where GeoScientist Margaret Kalácska will use the Netica software, and Bayesian network toolbox integrated with Matlab, to construct and analyze, single layer and temporal (dynamic) Bayesian Networks to integrate qualitative and quantitative data. Dynamic Bayesian Networks combine the robustness of probabilistic methods with the expressiveness of graphs to encode relationships between variables and offer a framework for handling uncertainty and complexity within a single model over time (Kalácska et al., 2005; Pearl, 2000). These networks will produce probabilistic scenarios that infer inter-relationships and causality in complex and uncertain contexts (historical and current) between bondspeople and their socio-economic background and environment over time. This will enable us, for example, to clarify relationships between historical and contemporary forms of bondage.

In sum, our project proposes an interdisciplinary empirical analysis into forms of human bondage in the IOW on a scale never before attempted. The interaction between the methodology of historians, economic historians, economists, and social geographers, provides a heuristic rather than positive model within which to question and analyse the main themes of inquiry over the longue durée from 1800 to the present day. Empirical investigation of both archives and oral interviews will test and modify the heuristic model. Through interdisciplinary collaboration, our team will formulate a common set of questions with which to approach both archival research and field interviews, concerning for example definitions and analysis of bondage and forced migration; environmental influences on forced labour regimes; and the efficacy of legal regulations governing bondage. These findings will be subjected to Bayesian Networks to give probabilistic scenarios of historical and current linkages and causality that will further inform and refine our case studies. Team leaders will maintain close collaborative communications in order to maximise an understanding of the context and interpretative ability by project members. All members will with Kalácska collectively interpret the Bayesian Networks findings in order to better inform their individual and collaborative case studies. They will present their findings in individual and collaborative contexts, notably at the annual team meetings and appropriate conferences and workshops; and team leaders will encourage the publication of research findings from within their teams, both single- and co-authored, in peer-reviewed academic journals and as books. It is anticipated that major collaborative collections will result from the project as well as detailed policy documents to be presented to appropriate international organisations and policy makers.

1. Qualité scientifique de l’équipe
Our team is interdisciplinary, bringing together historians, economic historians, geographers and economists who, combined, possess the methodologies, techniques, and linguistic competency required to achieve the project goals. Team members’ specialties combine to cover the three core IOW regions under review: China, India, and eastern Africa. The project has four main components: (a) management and direction; (b) archival and field research; (c) data synthesis and analysis; and (d) interpretation and publication.
2.1 Team members, qualifications and roles: 

Québec Team:

Gwyn Campbell, Canada Research Chair in Indian Ocean World History, Director of McGill’s Indian Ocean World Centre (IOWC), and PI of the MCRI project on making of the IOW economy in the context of human-environment interaction, is an internationally renowned specialist on the economic and labour history (Campbell, 2009, 2005, 2004) of the IOW – where he has had wide experience: Born in Madagascar, he has taught in India, Madagascar and South Africa, and served as consultant to the South African government in negotiations leading to the formation of an Indian Ocean regional association in 1997.

Role: Campbell will direct the Québec team and, with Stanziani, provide overall leadership for the project; ensuring that project goals are met; maintaining regular communication within teams and with each other (2-monthly teleconferences); and overseeing both initial team collaboration to define the major categories of unfree labour, and research in the three core areas of China (led by Campbell and Stanziani), India (Stanziani), and East Africa (Campbell) in which, in individual and collaborative case studies, team members will investigate the three research axes detailed above. Further, he will build on previous studies of labour in pre-colonial Madagascar (e.g. Campbell, 1988) to analyse recruitment mechanisms and work regimes of engagé migration from Madagascar to neighbouring countries (chiefly the Mascarenes); and compare and contrast forced labour regimes in pre-colonial and colonial Madagascar. With Stanziani, he will analyse the structure and performance of the IOW economy from 1800; with Mendes and Stanziani, compare and contrast (i) the development of legal rights, bondage and debt in post-slavery Mauritius and Réunion with the apparent transition from “forced” to “free” labour in Madagascar and Mozambique; and (ii) the colonial labour policies of Portugal, Britain, and France in India, and East Africa; with Unruh augment a data base on the incidence and impact of significant human and natural “events” (e.g. conflicts; volcanism; droughts, floods; disease) in the IOW; and with Ransmeier investigate the relationship between the expansion of the international economy and the emergence of new forms of sexual slavery in the IOW. Additionally, he will evaluate the significance of natural and human disasters in the enslavement process in the 19th century IOW; and with Mendes will provide the historical context for Unruh’s research into the recent to contemporary nexus linking environment, scarce natural resources, human conflict and “unfree” labour in eastern Africa.

Jon Unruh, Associate Professor in McGill’s Department of Geography and IOWC affiliate, specialises on relationships between land tenure, conflict, and environmental change, notably in contemporary Africa (Unruh, 2009, 2007, 2006) – on which issues he is a valued advisor to international bodies.

Role: Unruh will examine the debt-bondage relationship implicit in (i) contestations (including armed conflict) over land tenure in selected eastern African regions (Mozambique, Madagascar, Zanzibar and Darfur); and (ii) recent land acquisitions in eastern Africa—addressing the issue of whether the current surge of foreign investment in land “frees” the east African cultivator, or transforms him/her into forced labour on their former land, or into forced migration; explore how African contestations relate to the wider IOW; collaborate Campbell to collect data on human-environment interaction in the IOW; and with historian colleagues in studying the influence of human-environment interaction over the longue durée on land tenure-debt-labour relations; and with Guérin and Picherit examine the degree to which forms of traditional debt bondage inform structures of contemporary servitude. Additionally, in collaboration with Guérin, Picherit and Ransmeier, he will evaluate the development and efficacy of policies to combat contemporary human bondage in East Africa, India and China.

Johanna Ransmeier, Assistant Professor in McGill’s Department of History,
specialises in the history of human bondage and trafficking in China (Ransmeier, 2011, 2007) on which issues she has lobbied at the Office of the High Commissioner for Human Rights (OHCHR) in Geneva.

**Role:** Ransmeier’s research, complementing that of Guérin on rural to urban migration flows, will focus on the relationship between debt and trafficking of Chinese females for sexual purposes domestically and to the wider IOW. She will supplement her existing database on bondage and trafficking since 1850, notably through researching labour contracts and promissory notes located in Chinese judicial and police archives; records of *huiguan* (Chinese native-place organizations) chapters; and “missing person” reports from “sending communities” for bonded labour. Also, with Campbell, she will investigate the relationship between the expansion of the international economy and the emergence of new forms of sexual slavery in the IOW; and with Guérin, Picherit and Unruh, evaluate the development and efficacy of policies to combat contemporary human bondage in the IOW.

**Margaret Kalácska,** Assistant Professor in McGill’s Department of Geography, is a GeoScientist expert in ecological and forensic applications of remote sensing, HPC hyperspectral data analysis, machine learning (pattern recognition, Bayesian Networks, classification), spatial modelling and tropical ecology (Kalácska 2009, 2008, 2005).

**Role:** Kalácska will provide cutting edge data synthesis and analysis: Team members will feed into a data bank at McGill their qualitative and quantitative research data which Kalácska will integrate through Dynamic Bayesian Networks in order to infer relationships between variables and thus clarify complex and uncertain historical and current linkages or causality between servile labour and its socio-economic and environmental background.

**French Team:**

**Alessandro Stanziani,** Directeur d'études at the École des hautes études en sciences sociales (EHESS) and Centre national de la recherche scientifique, and Professeur affilié at the École normale supérieure de Cachan, is an international expert on the history of forced labour regimes (Stanziani, 2010, 2009, 2008a, 2008b), and leader of a major project on comparative forms of bondage in Russia-Central Asia (17th to 19th centuries) and the IOW (18th to early 20th century).

**Role:** Stanziani will head the French team and, with Campbell, oversee initial team collaboration, to define the major categories of unfree labour, and the major research thrusts of the project (see Campbell, above). In collaboration with Campbell, he will analyse the structure and performance of the IOW economy from 1800. He will examine why bondage increased in much of the IOW when migration grew and transport costs fell; if bondage had more to do with complex interrelationships between concepts of labour status, “contractual” relationships, and notions of obligation than to labour and population scarcity *per se*; relationships between labour mobility and regulation in the industrialising West and IOW “periphery”; contested frontiers between free and unfree Indian migrant labour; and the different impact of Indian migrant impact in colonial Mauritius and Réunion. Also, with Campbell and Mendes, he will compare and contrast the development of legal rights, bondage and debt in post-slavery Mauritius and Réunion with the apparent transition from “forced” to “free” labour in Madagascar and Mozambique; and colonial labour policies of Portugal, Britain, and France in the IOW.

**Isabelle Guérin,** Research Fellow with the Development and Societies unit of the Université de Paris I, Sorbonne, and the Institute of Research for Development; and affiliate of the French Institute of Pondicherry where she heads the “Labour, finance and social dynamics” research programme, is a specialist on the social fabric of labour and credit markets, notably on the relationship between contracts, debt bondage and indebtedness in South India (Guérin, 2009, 2007, 2004).

**Role:** Guérin will, like Ransmeier, analyse rural-urban migration. Building
on previous debt-servitude studies (above), she will analyze debt bondage contracts in the South Indian construction and agro-business sectors, traditionally characterised by forced labour regimes (Bremen, 2009; Bhukut, 2007), that have recently been transformed by liberalization, environmental constraints, and Dalit upliftment campaigns. Working on the hypothesis that debt bondage should be analysed within a broad socioeconomic context, she will examine the degree to which the above factors have undermined, modified, or reinforced forms of forced labour; changing labour management techniques; and domestic household budgets of selected workers in order to estimate the degree of their indebtedness to employers. Also, with Picherit and Unruh, she will examine how forms of traditional debt bondage inform structures of contemporary servitude; and with Unruh, Picherit and Ransmeier, policies to combat contemporary human bondage in the IOW.

**Antonio Mendes**, Maître de Conférences, at the Université de Nantes, and specialist on the history of the Portuguese slave trade (Mendes, 2010, 2009, 2008), is a member of the Centre de recherches en histoire internationale et atlantique and Centre international de recherches sur les esclavages; research affiliate of the EHESS, Centro de Historia de Além-Mar in Lisbon, and Emory University; and co-organizer of a monthly seminar series entitled “Les Traites: XVe-XXe siècles.”

**Role:** Mendes will investigate recruitment mechanisms and work regimes of engagé migration from Mozambique to neighbouring countries (chiefly the Mascarenes); and corvée and contract labour in colonial Mozambique; and with and with Campbell and Stanziani compare and contrast (i) the development of legal rights, bondage and debt in post-slavery Mauritius and Réunion’ with the apparent transition from “forced” to “free” labour in Madagascar and Mozambique; and (ii) the colonial labour policies of Portugal, Britain, and France in India, and East Africa. Additionally, he and Campbell will provide the historical context for Unruh’s research into the recent to contemporary nexus linking environment, scarce natural resources, human conflict and “unfree” labour in eastern Africa.

Claude Chevaleyre pursues doctoral studies in Chinese history at the Ecole des Hautes Etudes en Sciences Sociales (Paris), under the direction of Professor Pierre-Etienne Will (Collège de France). His dissertation is dealing with the social status and identity of so-called “bondservants” in the Ming (1368-1644) and Qing (1644-1911) dynasties. His research focuses on late imperial social and legal history and pays particular attention to the Ming-Qing transition period.

***Refs:***

2.2 Complémentarité, intégration, et valuer ajoutée
Our interdisciplinary team, constituting historians, economic historians, geographers, economists, anthropologists and geoscientists, possesses the methodologies, techniques, and linguistic competency required to achieve the project goals. Our specialties combine to cover the three core IOW regions under review: China, India, and eastern Africa - regions chosen in order to compare and contrast, over time and place, key issues relating to historical and contemporary forms of human bondage in the IOW such as legal rights and their implementation; debt and dependence; kinship and family structures; migration networks; and the long-run transmission of bondage practices and bondage institutions. This will be the first time that these issues, over such a broad area, form the focus of a single research team.
Team members have an established record of collaboration. Campbell and Stanziani are co-editing a volume on debt and servitude worldwide (Campbell and Stanziani, forthcoming), to which Guérin will contribute; in April 2011 Stanziani will give a talk at McGill on “Servants, wage earners and indentured migrants in 19th century France, Great Britain and the Mascarene Islands;” and in May 2011, Campbell will give seminars on IOW history at the EHESS. Stanziani and Mendes have collaborated in teaching, seminars, panels, and in a publication on slavery from Russia to the Mediterranean. Mendes contributed to a volume Campbell co-edited on Children in Slavery (Mendes, 2009); and Ransmeier to a volume on Sex, Power and Slavery (forthcoming, 2011), also co-edited by Campbell. Further, Stanziani, Campbell, Kalácska and Unruh belong to an MCRI international research initiative on the economic history of the IOW, and Unruh and Campbell to a WOTRO Science for Global Development Integrated Research project on East Africa–affiliations – both of which will bring greater contextual insight into IOW bondage.

This speaks to the value added of Québec–France collaboration. McGill possesses in the IOWC the world’s foremost centre of IOW studies (directed by Campbell), the base of the MCRI project on the making of the IOW global economy, with full facilities to establish the project website, and a server to store and backup the project research data; and houses the Bayesian Networks laboratory of Kalácska who will treat our research data. We have in Quebec world-renowned expertise in servile labour in East Africa and China, but lack experts on comparative systems of forced labour regimes in Asia, the IOW and Europe (Stanziani); and servile labour in India (Guérin) and Mozambique (Mendes), which the French team supplies. Only such a collaboration will permit a comparative analysis of historical and contemporary bondage in the IOW.

3. Pertinence du theme étudié

Human bondage is a major contemporary problem, concentrated in the IOW, perpetuated, even accentuated, by factors such as continued poverty and illiteracy, regional conflicts, and unregulated liberalisation. However, there is generally little understanding that IOW-specific forms of contemporary servitude have deep and complex historical roots; or of the socio-economic, political and environmental forces that often played a major role in shaping them. This underscores the relevance of our research initiative. Only through adopting a more holistic approach, and evaluating forms of bondage in their varying contexts over the longue durée, will their structures, differences, and linkages become clear. This project will for the first time bring the relationship between historical and contemporary dimensions of IOW bondage to the forefront of research agenda, and stands to fundamentally alter perceptions of servitude in the IOW held by academe, concerned institutions, and governments.