

ERC Project description

Elites, networks, and power in modern urban China (1830-1949).

Historical “big data” in modern Chinese history

This project proposes a step-change in the study of modern China reliant upon scalable data-rich history. It will deliver precise historical information at an unprecedented scale from heretofore untapped sources - as well as reshaping the analysis of existing sources - to create a new dimension in the study of the transformation of elites in modern urban China. It will deploy an array of cutting-edge digital methods with this information - including data mining, sampling, and analysis within an integrated virtual research environment. To establish the validity of this approach in historical research, this project focuses on elites in the three main and interrelated urban centers of China (Shanghai, in Beijing/Tianjin, and Canton/Hong Kong). The key issue that the project will address is breaking through existing limits of access to historical information that is embedded in complex sources and its transformation into refined, re-usable and sustainable data for contemporary and future study of modern China.

Background and central argument

In the century that followed China’s forced entry into the world order shaped by the advancing Western empires (1842-1949), the nature of elite groups in China experienced a tremendous and radical transformation. The ruling group that had dominated the country for a millennium — a narrow elite of Confucian-trained civil and military scholar-officials selected through a double process of education in the Chinese classics and the highly competitive imperial examinations (Elman 2013, De Weerd 2007 & 2016) — was finally swept away in 1911. Power and social prestige shifted to socially, intellectually and ethnically more diversified groups that included Chinese and foreigners who operated within interlocked transnational networks. Within and beyond China, this period saw the rise of the first global elite that set the pace of multiple entangled histories.

The scope of the project includes the three urban areas (Shanghai, Beijing/Tianjin, Canton/Hong Kong) that had the most profound impact on the course of modern Chinese history. They were the major engines of change in China, they had the highest number of educational institutions, especially foreign-run schools and universities, the largest business communities, the most diverse groups of administrators, the most intense pace of innovation in all fields. They were the space where Chinese and foreigners came into real contact, learned from each other, worked together, and sometimes fought each other. They provided the setting as much as they were the vector of the production of new transnational elite groups. The China-centered and group-based approach dominant in the historical literature of the past two decades has *de facto* drawn all sorts of dividing lines among elite groups and instituted an artificial dichotomy between Chinese and foreigners at the level of elites. We propose a radically new approach.

We make the hypothesis that China represents a case that does not fit in the usual paradigms through which historians have studied the relationship between the dominant Western powers or Japan and more broadly the colonial world. The project envisions **elites in urban China as actors —individual and collective actors —** whose status, position, and practices were shaped by the **power configurations** that developed over time and whose **actions through institutions and informal/formal networks** in turn were a determining factor in redrawing social and political boundaries. By placing the emphasis on the networks through which information, capital, and individuals circulated among Chinese and foreign elites, this approach allows investigating the **transnationalization** of elites as a process that shaped the social profile, scope of actions and expertise of elites in a way that oversteps the limits of institutions and nation states. In our study of the nature and role of urban elites, the project will address these key issues: (1) If we observe urban society in China at the level of actors rather than state institutions or community organizations, who were the individuals and groups that emerged as “elite” in the selected cities and what were the modalities and processes at work in elite formation and the (re)deployment of elite networks in urban China? (2) How did the vectors and patterns of the involvement of elites in public action, which ranged from acting in an official capacity (administrative and military elites), in self-organized associations (native-place associations, merchant organizations, religious

groups) but also assuming the role of opinion leaders, directly (press, publishers) or indirectly (e.g. cinema, advertising) vary in the different urban contexts? (3) What was the impact of economic globalization on the role the economic elites played in the transformation of the selected Chinese cities, in the emergence of public spheres at a time when this elite became much more complex and diversified; (4) Elite groups were at the source of disputes that sometimes led to outright conflicts between competing groups or between state and society. How did the various competing elite groups face, mobilize, manage and interact during such events of short duration or during the major socio-political upheavals (e.g. 1911 revolution, May Fourth Movement, Sino-Japanese conflict, etc.) that gripped the whole country?

The present project emphasizes feasibility. It delimits very precisely the corpus of press, directory, and biography-related materials in three core urban areas and combines the proposed *macroscopic approach* to *selected case studies*. This two-pronged approach is meant to maintain a solid connection between both approaches and to address head on the crucial issue of scalability in data-rich history (Bode 2017).

State of the art

The study of elites by historians represents a rich historiography, but it does not in itself constitute a specific field of history. The term has most often been used loosely about socially or politically leading groups to address issues of modernization or state-society relations (Coste 2014, Korom 2015). Conversely, there is a well-established field of “elite theory” in sociology and political science that provides conceptual frameworks and methodologies to define and study elites and power in contemporary societies (Hartmann 2007, William Domhoff 1967, John Higley 2006, Richard Lachmann 2010, Hertz & Imber 1995). These works point to two intertwined dimensions of power: the capacity of a group, class, or community to combine organizational forms, resources and social morale to achieve its goals; yet also the ability of any group, class, or community to be successful in competition or conflicts with other groups, classes or communities. How do we define elites in this project? The study of elites conventionally conveys the notion of “dominance” and “power”. This is also the major streak in the use of the term “elites” in the historiography of modern China. **This project adopts the notion of power** as “the ability to achieve desired social outcomes” (Domhoff, 2012, 24) and of elites as “those individuals, from whatever class, who held leadership posts within civil society across a range of political and voluntary activities” (Trainor 1993). The project approaches the study of elites not just as specific groups of individuals framed in distinct organizations or occupations, but as individuals acting in multiple and evolving networks, of which formal organizations represented one important but not unique facet.

There is no identifiable field of elite studies in the history of modern China. The seminal works by Chang Chung-li (1955) or Ho Ping-ti (1962) on the literati elites or those of Bergère (1968) and Elvin (1967) on the “gentry/bourgeoisie”, or Bergère’s use of prosopography inspired very few followers. Yet the term “elite” has gained increased currency among China historians. In its most common usage, it has been applied to specific *Chinese* groups (merchants, literati, intellectuals) and used more “in passing” than as a genuinely operative concept. In the study of modern Chinese cities, the focus of historians has moved from broad social constructs (bourgeoisie, workers) to social categories and institutions based on the actual structure of Chinese society (Review essays: Henriot 1996; Stapleton & Liu 2006, He 2014). Within this historiographical trend, the attention to elites has grown out of a general reflection on the transformation of society at the local level, mostly at the provincial level (Chang 1978, Schoppa 1982, Rankin 1986, Esherick 1990, Xiao-Planes 2001), the decline of the imperial state and the advent of the 1911 revolution (Esherick 1976, Rhoads 1975), and the much-debated issue of civil society/public sphere (*Modern China*, special issue 1983, 19:2). A significant number of major works has centered on the role of social elites, especially the economic or business elites, (Bergère 1986, Kwan 2001, Xu 2001, Gabbiani 2011, Han 2016), on their organizations (Fewsmith 1985, Rowe 1984 & 1989, Goodman 1995; Belsky 2005) or cultural practices (Wu Jen-shu 2005, 2007; Paulès 2010). Even when the term appears in the book title (Goodman 1995, Brook 2000, Brook 2005), ‘elites’ was not used as a central heuristic concept. In the literature on Chinese cities since the 1980s, the China-centered perspective has also led to a historiographical bifurcation, with the bulk of studies devoted to various groups in Chinese society and only a short string of works on individual foreign communities and their organizations (Bickers 1999, Ristaino 2001, Gao 2013). The explicit use of network can be found only in a number of works by historians and sociologists on Chinese merchants, mostly Cantonese, in South China and in Southeast Asia (Lee 1991, Lai 1994, Choi 2001, Buiskool 2009, Tagliacozzo 2011, Lim 2010) that examine whole communities (e.g. Chaozhou merchants) and do not necessarily study elite groups. None of these studies is based on the systematic collection of data and the use of network analysis. In summary, apart from a historiographical imbalance, the most striking result is the juxtaposition of group- or community-focused studies, with hardly any attempt to examine whether, how and to what extent contacts and connections emerged and developed between the various components of the elites and how this shaped power in these cities and in China.

Objectives and ground-breaking approach

The project will also enable the PI to build on a large amount of existing work conducted with **a wide range of methods (from archival work to data mining) on large corpora of sources of a very different nature (archives, press, etc.) that resulted in a significant amount of pilot and advanced projects, validated methods and data sets.** More specifically, the project will break down into **five major interrelated work packages** discussed below, and one work package devoted to meetings, training, and publicizing.

The groundbreaking nature of the proposed project can be defined as follows: *Substantially*, it will redefine previous research on the Chinese elites based on narrow samples by introducing a groundbreaking change of scale in the historical information mobilized in the study elite formation, elite networks and the role of elites in the broad realm of political construction, economic exchange, and social control in the three main and interrelated urban centers of China. It will create the conditions for a more sophisticated and refined interpretation of the process of transformation of urban elites in modern China based on rich empirical data. *Methodologically*, it takes up the challenge of solving three crucial bottlenecks in digital methods for historical research: (1) automatic retrieval of the historical information embedded in print materials and their transformation into structured data ; (2) retrieval of historical information in vast digital corpora beyond data mining through text analysis and machine learning ; (3) effective processing of the vast amount of collected data into scalable structured data sets.

Methodologies: From texts to historical "big data"

This section defines ambitious but concrete new approaches to i) **automated extraction** of high quality research data from both unstructured and semi-structured sources—those already digitized as well as from challenging publications on paper previously addressed only through manual transcription; ii) **enhanced formats of data mining** based on computational linguistics and innovative application of machine learning algorithms; iii) **long-term sustainability** of materials in digital form, and of intermediate results arising within research procedures (in contrast and in addition to published results).

A key dimension in this project is to collect historical information on *actors*, namely the *individuals* who in the course of their life, emerged as *significant actors* and joined/formed elite groups, as well as the *institutions* (company, association, club, etc.) to which they belonged. **The first primary block of documentation the project targets consists of the numerous annual directories**—concretely the databases of the time—published from the mid-nineteenth century to W.W.II. Each volume amounts to hundreds of pages of dense printed words that contain very rich and complete information on the individuals from all walks of life that lived and worked in China and Asia. The English-language publications (*Asia Directory and Chronicle*, *Hong List*, *Who's Who*, to name a few) document with precision who was doing what (position, activity), where (institution), and when. The Japanese and of course, the Chinese have produced a wealth of directories, yearbooks, *Who's Who*, professional *minglu* (register) of all kinds. A pilot project on the *Asia Directory and Chronicle* has established a successful proof of concept through a process of intelligent digitization to automatically extract data on hundreds of thousands of actors while keeping full traceability and connection to the original source, down to the relevant fragment of information on page, and to export as structured data into a processing platform. The pilot project makes it possible to reconstitute in its entirety the recorded foreign presence in China and in the whole Asian region over a century (Herren 2017). This approach was applied successfully to Chinese-language treatises in another small unfunded project. Because this process is implemented without human intervention, it constitutes a path-breaking step to retrieve the formidable wealth of information that lay dormant in such publications for and beyond this project.

The second block of primary documentation we use is the press. Newspapers and periodicals provide the most complete set of “observations” on everyday life. They reported on social or political activities, the meetings of associations, ceremonies, sport meetings, the coming and going of ships and passengers, etc. They document the place, time, and nature of actions at the most elementary level. They catch actors in their track, from the moment they appeared “on print” to the time when they vanished or the medium itself disappeared. The PI has identified no less than 20 periodicals for the three selected urban centers available in digital searchable repositories. This amounts approximately to the volume of British newspapers Ian Gregory has explored and mined successfully in a previous ERC project (Gregory 2012-16). We will implement two novel methodologies to retrieve historical information from periodicals. The first one, used mostly in literary studies, but also in a few history projects (Gregory 2015; 2016) relies on the established techniques of computational linguistics for the analysis of large corpora of texts. The second set of methodologies consists in implementing advanced techniques of machine learning. In short, the exploration of texts relies on algorithms that explore a text through successive iterations based on human annotations (Favre 2011; 2013; Prévôt 2015). These annotations serve to determine patterns in the text that the “machine learns” and uses as guides to enrich and sharpen its capability to target the most relevant information. This proposal is based on actual work

implemented by Prof. B. Favre and P. Bellot on a set of historical texts in French, on a data set with millions of live chat exchanges, and on the vast corpora of *Open Edition* scholarly literature. The project will proceed through initial sampling linked to the case studies in two different periodicals per city to build data mining procedures fit to address the nature of sources.

Data processing will rely on **an advanced data platform (*Actoz/freizo*) to clean and refine the harvested data**. What this platform brings into play is speed and scale (Dedieu 2013, Herren 2017). The pilot project on the *Asia Directory and Chronicle* has produced a platform capable of processing massive quantities of data through techniques that brought down processing time by users from months for a given task to a matter of days or even hours. The second component (*freizo*) of the platform enables four functions: (1) it can incorporate and integrate data from any data silo in a unified format and build new comprehensive collections; (2) it guarantees data long-term sustainability independent from the original applications under which the data was created; (3) It records data sets at intermediate stages of research with complete metadata and provides full scalability of data collections; (4) it transforms the data into formats adapted for third-party applications (e.g. network analysis, GIS, visualization tools, etc.). The PI has used this platform in several projects for data set with tens of thousands of individual complex records (cadastre, industry, entertainment).

China elites: From large-scale database to data-rich history

China provides a particularly salient case for the study of the transnational flows of people that created the conditions for the emergence of overlapping, interlocked or juxtaposed elite networks and spheres of power on a global scale. A large part of the debate about the nature of Chinese society has revolved around the issue of civil society or public sphere. In both visions, elites were central as historical actors in the diverging interpretations expressed. We propose to adopt a different perspective based on empirical data on what the elites actually did. This approach does not reject the valid debate on the nature of Chinese society but adds a transnational perspective. The previous debate has revolved around two main historical objects: organizations, in particular merchant organizations, and public opinion as construed by the press, mostly periodicals run by literati/intellectuals. The debate, however, has left out entirely the foreign presence and role in China. **Our approach does not preordain who were the actors that mattered. More importantly it bridges the dominant Chinese/foreigners divide.** The project shifts the focus methodologically by mining vast corpora of mediums that were precisely the privileged vectors of expression of the elites and the very places where public spheres may have been constructed. Qualitatively, it not only permits retrieval of any piece of information from the news articles, announcements, and advertisements that constituted the three main components of any periodical, but creates new - and critically open and sustainable - research collections for scrutiny and scholarly endeavor by future scholars. It will represent a leap forward in our capacity to identify individual and collective actors precisely in relation to specific events, even the most ordinary ones (start of a business, a publication, wedding, etc.)

We propose to address the massive character of the collected data and engage in historical analysis in two steps. The first one is to analyze the data through the lens of social network analysis (SNA), in combination with GIS to enable spatialization and timelines to reintroduce time in the analysis. The second one is to take selected groups as case studies based on a wider documentary base, including archives.

The main methodology for the analysis of the massive amount of *observations* that will result from data extraction and harvesting, is Social Network Analysis (SNA). The PI takes **SNA as a tool for analysis to delve into the massive amount of data, not as a device to “reveal networks”** (Cerrutti 2008, Lemercier 2015). SNA applications such as we have used (Cytoscape and Pajek) can ingest any volume of data and highlight the points of connection and their distribution within the "social ecosystem" created in/as the database. It serves to pinpoint the "places" where to focus the analysis, allowing at the same time the possibility to redraw the lines and contours of identified networks without losing the larger picture. We need to emphasize here that what the *Actoz/freizo* database records is not “raw tabular data”, but cross-referenced relationships linking actors, places and times which are traceable in the source materials. Preliminary work on two different subsets of data on Shanghai (public transport lines and stations; real estate market over a century) has proved beyond doubt that network analysis provides considerable insights into spatial logics, firm strategies, formal and informal networks of land-owners, etc.). SNA will allow us to investigate (1) the venues and arenas of social, political, economic, and cultural transaction such as associations, clubs, companies, etc. to examine the forms of relationships and modes of elite formation; (2) the modalities of constitution, transformation, and extension of self-organizing networks among elite groups based on strong empirical data; (3) the patterns of mobilization and action in the public sphere with a focus on significant events, not as they are known as such by historians, but as they were unfolding; (4) the time-space of elite formation across China and beyond (circulations and migrations) to ground network analysis on actual terrain and questions of periodization in modern Chinese history

The section **also addresses the disconnect between network analysis and the spatial and temporal dimensions of social networks**. The project will rely on GIS, essentially a form of database in which every item of data is linked to a location to which a wide variety of attributes can be linked. Reintroducing space in network analysis is crucial to delineate the spatial gradations among social networks and to shift the emphasis on circulations, migrations, and flows. Can we discern spatial patterns in elite networks in China? How can we factor in space as an explanatory element and what does space reveal about network formation and the nature of networks? Can space be used as an operative agent to categorize networks? To address the second disconnect, time, we propose to re-inject networks into time. Concretely, to use the time-stamped markers of networks in a timeline tool, as experimented in a study of advertising in Shanghai (Armand 2017). We want to reconsider the conventional event-based periodization in the light of elite formation processes and specifically highlight the different tempo, scansion, duration, intensity, etc. of elite networks in the three selected urban areas and case studies.

Case studies: quantitative/qualitative crosswalks

Four specific groups will be used as concrete and in-depth case studies using additional sources, including archives, to pursue the research questions outlined in the previous sections. The reasons are: i. It links the “distant/close” reading methodologies; ii. These groups overlapped or were interrelated to various degrees; iii. We can use data sets produced in previous projects (industry 1932-1947; land ownership 1846-1941; entertainment 1907-1967). **The selected groups include three professional communities and women**. The first group, the **administrative** (or bureaucratic) **elite** embodies formal power in cities with very different bureaucratic histories: a national imperial elite in Beijing, juxtaposed Chinese and foreign bureaucracies in Shanghai and Tianjin, a British-run colonial bureaucracy in Hong Kong, and a local Chinese bureaucracy in Canton. All went through the changes of regimes that produced shifting power configurations at various scales before China was fully reunified in 1949. The second group is **the business elite**, with an explicit focus on finance and industry. Both included Chinese and foreigners and, among the Chinese, significant numbers of two central communities, Ningbonese and Cantonese in all the selected urban centers. It was a group deeply enmeshed in social control and power in Chinese cities. The third group, **press, publishing, and advertising**, was made up of both established and emerging professions that exhibited multiple and dense connections. The rise of the press was intimately linked to the advent of modern publishing, while modern advertising after W.W.I exhibited dense crosswalks at the level of actors with the press, secondarily publishing, and beyond with the business and administrative elites. On **women**, we adopt deliberately the opposite approach, not to start from pre-defined “elite women”, but we seek to explore where and how women figured in urban elite circles and politics, with a special attention to culture and entertainment, fields where women figured prominently.

The present project will offer **a renewed interpretation of the historical experience and complex process of elite formation** in modern China when the country experienced a momentum of drastic and rapid change. The Chinese experience has a direct bearing on our understanding of modern elites in general. It is not indifferent at a time when the formidable transformation of the PRC in the last fifteen years has witnessed the emergence of a new global elite. **Methodologically, the project will create the conditions for the implementation of a virtual research environment beyond the fields of history**. It will elaborate tools and methods applicable to other corpora and usable in various disciplines of the humanities and social sciences.

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