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TOWARDS THE FORMALIZATION OF METADATA NETWORK ANALYSIS IN HISTORY | A COMPLEX AND MULTIDIMENSIONAL CASE STUDY
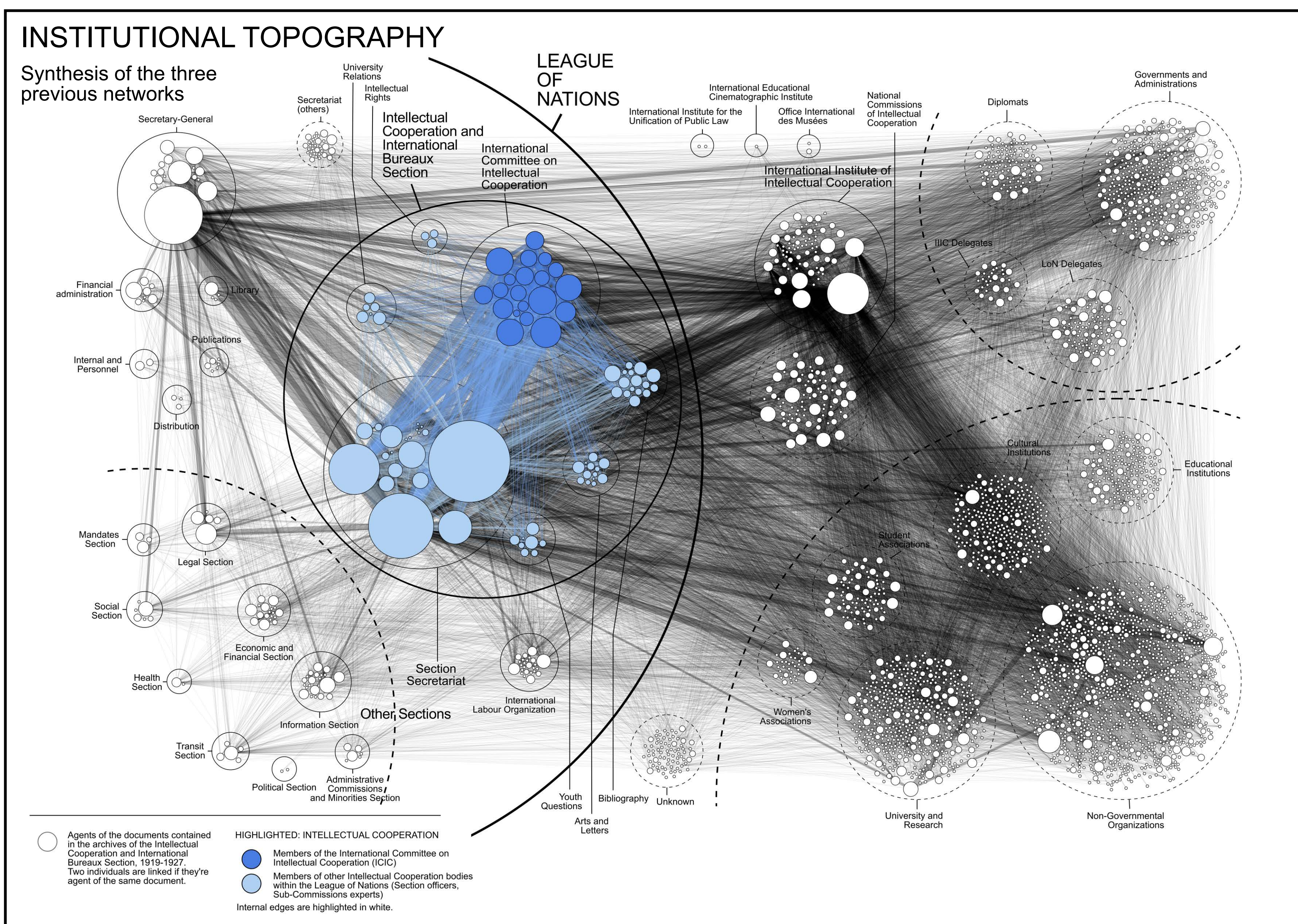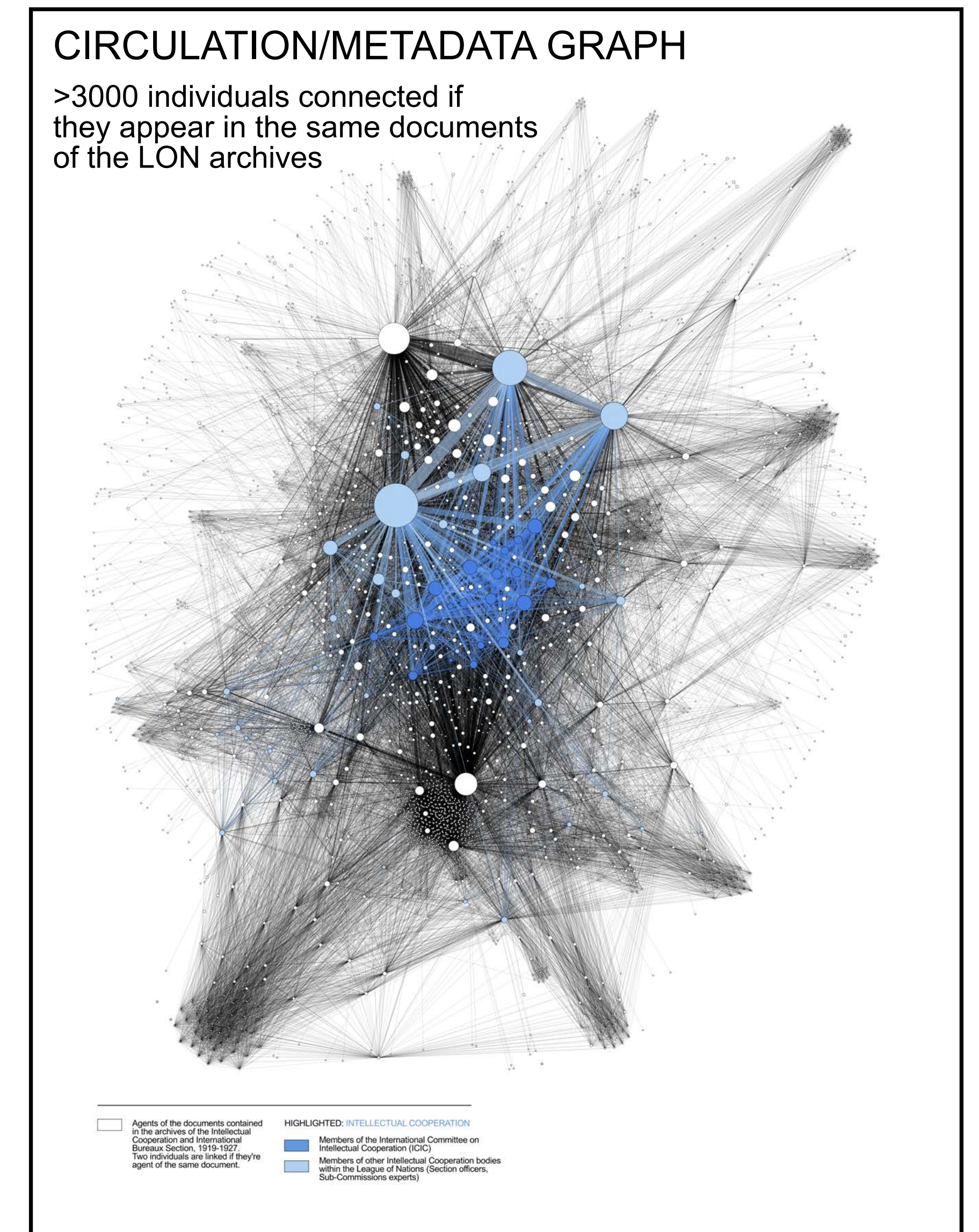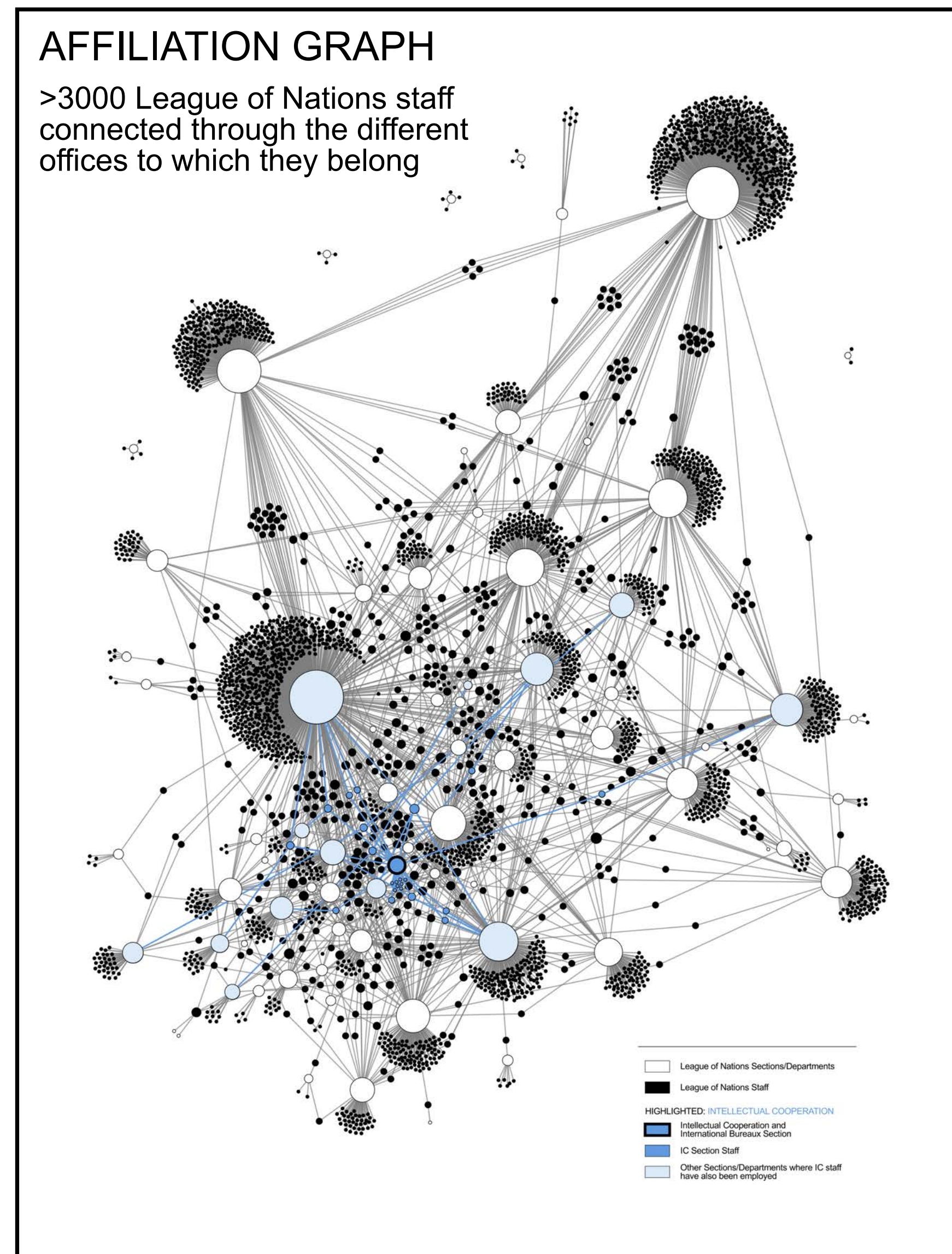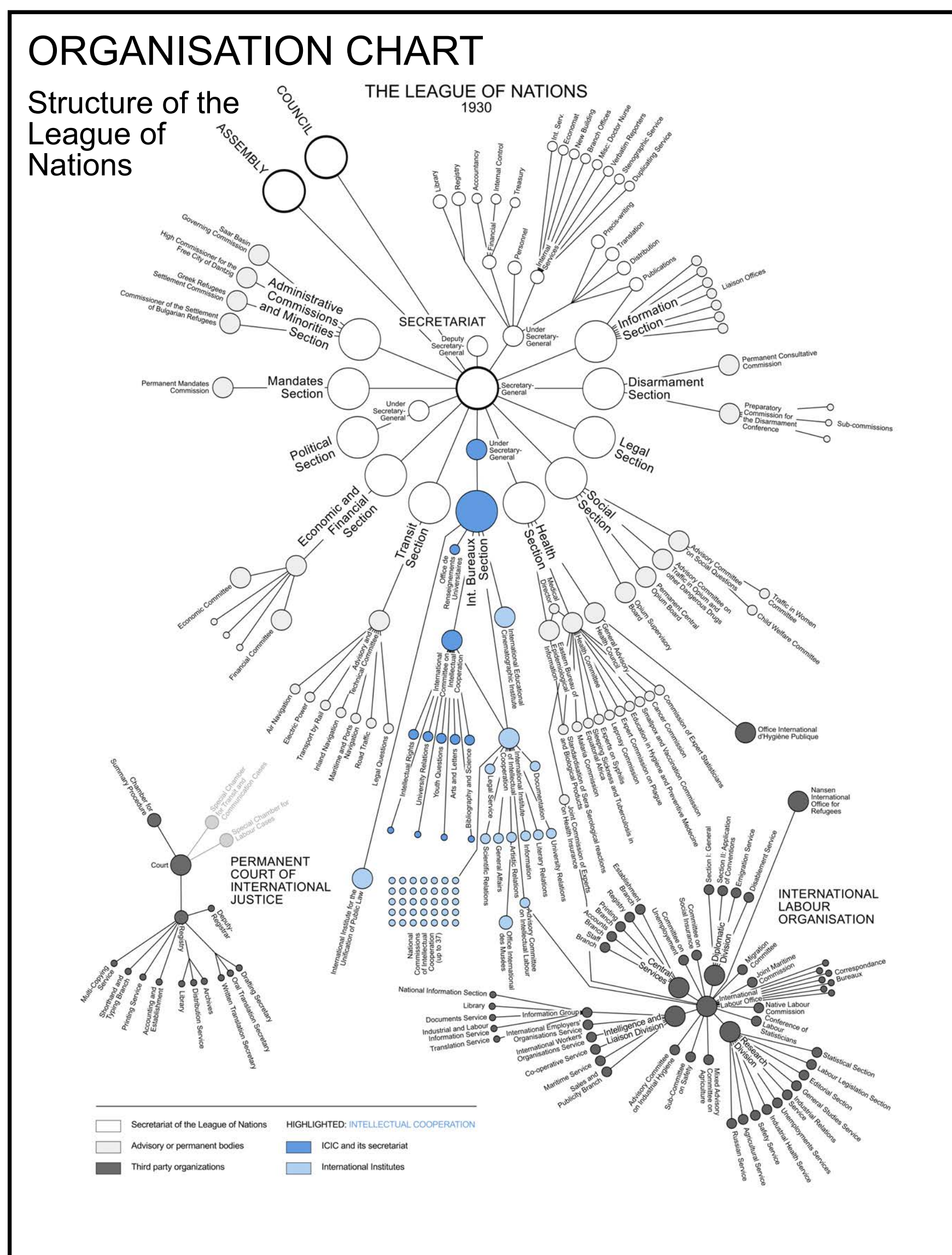
CONTEXT

This research focuses on understanding the structuration of scientific and cultural coordination in the inter-war period, based on the archives of the International Committee on Intellectual Cooperation (ICIC) of the League of Nations. This case study allows the establishment of a plurimethodological reflection on the contribution of network analysis in the humanities in general. This perspective consist in developing a quantitative and structural analysis jointly mobilizing mathematical theories, computer sciences and archival questioning.

It is also a way of questioning the relationship between historical research and digital technologies. Without however making these technical developments an end in itself, the contribution of such methods of social network analysis and visualization makes it possible to multiply the perspectives, to play with the scales and to allow the navigation between a global overview of the structure (here, an international organization) and an approach closer to the individuals.

SUBJECT

Created in 1921, the ICIC is a committee bringing together leading scientists such as Henri Bergson, Albert Einstein, Marie Sklodowska-Curie and Hendrik Lorentz. First constituted as a consultative body, the ICIC gradually built up around itself a full "intellectual cooperation organization" comprising several sub-commissions and secretariats, involving experts in bibliography, copyright, academic exchanges, university relations, etc. It laid the foundations of UNESCO after the Second World War. The rise and bureaucratization of this organization during the 1920s is accompanied by a rapid complexification of information flows.

ORGANISATION CHART

Structure of the League of Nations

AFFILIATION GRAPH

>3000 League of Nations staff connected through the different offices to which they belong

CIRCULATION/METADATA GRAPH

>3000 individuals connected if they appear in the same documents of the LON archives

INSTITUTIONAL TOPOGRAPHY

Synthesis of the three previous networks

DATA AND METHOD

Reversing the process of making a study of international organizations by their discourse or focusing only on the most prominent personalities of the institutions, this research proposes to analyze the activity and the ability of the ICIC to create link through a fine indexing of it correspondence archives. By mapping this circulation in a network composed of more than 3.000 individuals involved in intellectual cooperation during its early years (1919-1927, approx. 30.000 documents), this method reveals the main organizational trends while highlighting the situation of actors that are so far little studied in this context.

This exploratory "datafication" of the archives of the League of Nations leads us to reconsider and recontextualize the personal commitment of the individuals who made up the ICIC. Thus, the development of visualization methods that allows a comparison between the official institutional framework of the international organizations of this time and the structuring of information exchanges at an individual level helps to highlight the discrepancy from a hierarchical level to another. More generally, this research develops a framework for coding, analyzing and interpreting such metadata networks in history.

MAIN ANALYSIS SCENARIOS

► Understanding the overall organization of the archives and establishing a new source criticism

► Analysing the evolution in time (evolution of the structure or of the relations within a predefined structure)

► Comparing thematic sub-graphs

► Analysing the distribution of centrality metrics to qualify individual positions and to unterstand their roles in the network

► Playing with scales to qualify institutional positions

► Detecting unexpected relationships and hierarchies

► Building case studies on a selection of individuals, linked to an institution, a specific debate or subject.

THESIS
GRANDJEAN Martin, *Les réseaux de la coopération intellectuelle. La Société des Nations comme actrice des échanges scientifiques et culturels dans l'entre-deux-guerres*, Lausanne, Université de Lausanne, 2018. 600 p.
Available online: https://halshs.archives-ouvertes.fr/tel-01853903

OPEN DATA
GRANDJEAN Martin, « The Network of Intellectual Cooperation », Data Set, 2018.
https://github.com/grandjeanmartin/intellectual-cooperation
(DOI 10.5281/zenodo.1257288).

PAPER
GRANDJEAN Martin, « Analisi e visualizzazioni delle reti in storia. L'esempio della cooperazione intellettuale della Societa delle Nazioni », *Memoria e Ricerca* 55 (2), 2017, pp. 371-393 (DOI 10.14647/87204).