# AN ANALYSIS OF DIRECT RECIPROCAL BORROWING AMONG CREPUQ LIBRARIES





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### INTRODUCTION

#### Spectrum of Resource Sharing:

#### Higher cost

200

-

#### Interlibrary Loan

-

- ILL system •
- ILL staff •

#### **Consortial Shared** catalogue

- circulation system •
- circulation staff •

Direct Reciprocal Borrowing

2.0000

Lower cost

300

### **RESEARCH QUESTIONS**

- How much resource sharing activity is there within CREPUQ (ILL and direct reciprocal borrowing)? What is the ratio of ILL to direct reciprocal borrowing?
- Is the amount of direct reciprocal borrowing activity related to the size of the library's collection, student size, or physical distance from other libraries?
- What can social network analysis tell us about direct reciprocal borrowing within CREPUQ?

### METHODS

- Direct Reciprocal Borrowing
- Total Circulation
- FTE students
- Collection size (physical)

*CREPUQs Statistiques générales des bibliothèques universitaires québecoises (2005-10);* Tables 24, 20, 4, 14

- CREPUQ ILL -COLOMBO Statistiques Annuelles (2007-10)
- Distances between institutions Google Maps
- Analysis: Excel, SPSS, UCInet and NetDraw

#### **RESULTS: GENERAL OBSERVATIONS**



### RESOURCE SHARING BREAKDOWN



TELUQ and INRS were not included in either category due to their multi-campus/online nature

### CORRELATIONS

- Significant positive correlations were observed between total items borrowed and loaned through direct reciprocal borrowing and:
  - Number of FTE students
  - Library's collection size (physical materials)

### EFFECT OF DISTANCE

The total amount of borrowing and lending done between CREPUQ institutions between 2005-10 was averaged and plotted in relation to the distance in kilometers between the two institutions

			Borrowing +
Institution 1	Institution 2	Distance (KM)	Lending
Concordia	McGill	1,4	17455,6
Concordia	UdeM	4,3	7688,2
Concordia	HEC	4,5	476,8
Concordia	Poly	4,3	971,8
Concordia	Sherb	151	722,8
Concordia	Laval	247	322,6
Concordia	UQAC	458	2,6
Concordia	UQAM	2,5	4633,3
Concordia	UQAR	542	0,4
Concordia	UQAT	628	36,3
Concordia	UQO	202	67,5
Concordia	UQTR	139	9,0
Concordia	ENAP	254	38,3
Concordia	ETS	1,7	579,8
Concordia	INRS	254	45,5
Concordia	Bishop's	155	69,0

#### Montréal Universities



Université de Montréal

#### Non-Montréal Universities



#### SOCIAL NETWORK ANALYSIS (SNA)

- Networks are "a general yet powerful means of representing patterns of connections or interactions between the parts of a system"<sup>1</sup>
- "the opportunities for social network analysis research in library specific contexts remain outstanding"<sup>2</sup>

Newman, M.E.J. (2010). *Networks: an introduction*. Toronto: Oxford University Press.
Schultz-Jones, Barbara. (2009). Examining information behavior through social networks. *Journal of Documentation* 65, 592-631.



Network Diagram: CREPUQ Direct Reciprocal Borrowing 2005-2010

### CONCLUSIONS/RELEVANCE

- Different resource sharing patterns between Montréal and non-Montréal libraries; effect of distance, collection size, FTE
- Resource sharing of physical materials may play an important role as questions of storage space escalate (e.g. consortia-wide storage of physical materials?)
- Studying resource sharing patterns will allow us to better understand and plan for the use of these services

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#### CREPUQ

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## Questions?