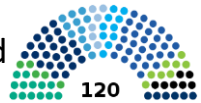


Hedonic games capture voting patterns in Israeli Parliament

Data: The 20th Knesset



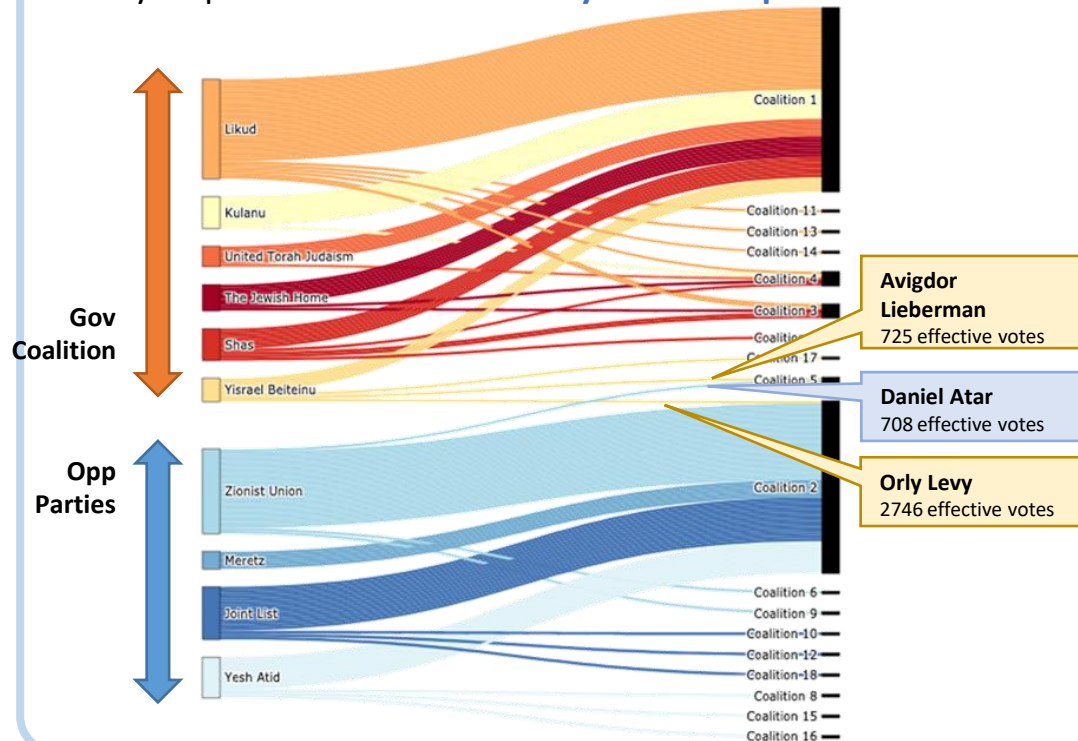
- 147 politicians
- 7515 bills voted



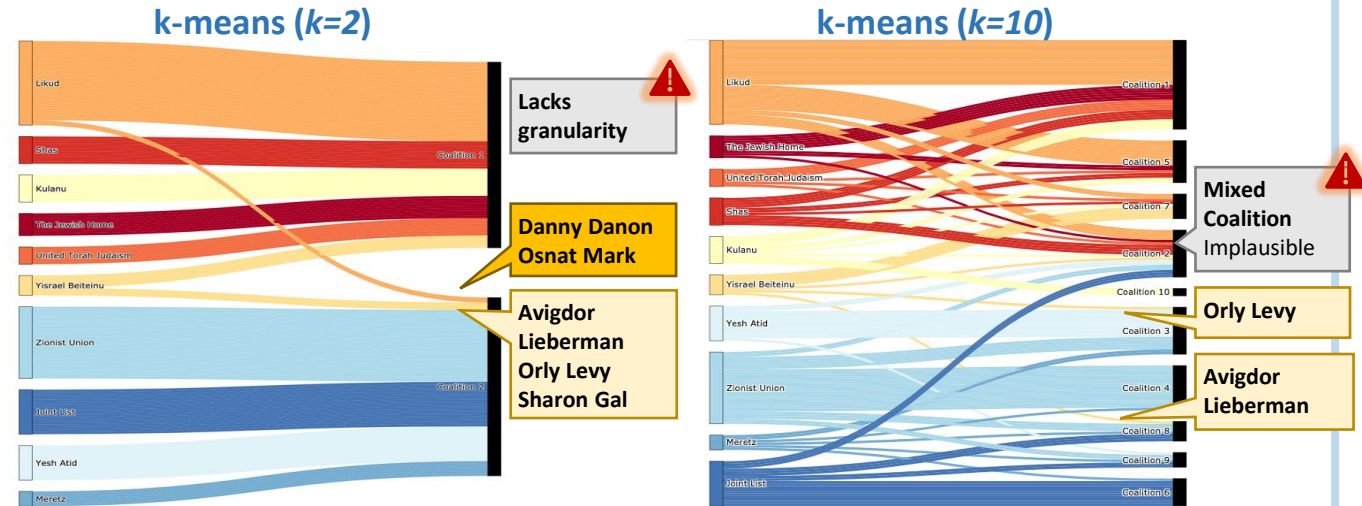
	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5
Red	0	✓	✓	✗	✗
Yellow	✓	✓	✓	✗	✗
Blue	✗	✓	✗	0	✓

Hedonic Game: Appreciation of Friends

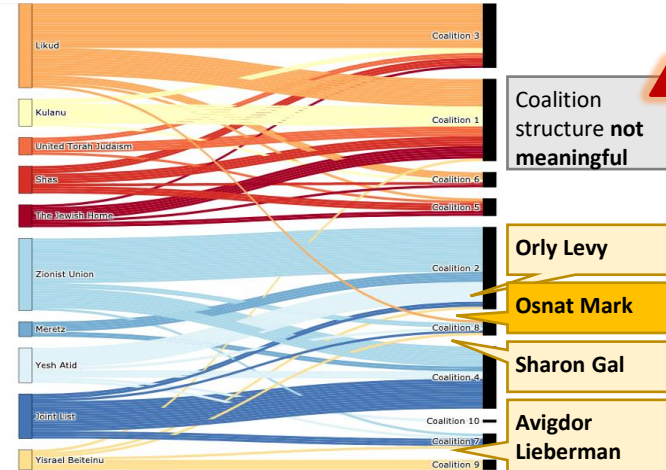
- One of *several* hedonic game models we consider
- Players view all other players as either **friends** or **enemies**
- Players prefer to be with **as many friends as possible**



Competing Machine Learning Models



Stochastic Block Model



Learning Cooperative Solution Concepts from Voting Behavior

A Case Study on the Israeli Knesset

Read our paper!

Omer Lev
Wei Lu
Alan Tsang
Yair Zick



Have a chat! alan.tsang@carleton.ca