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OD Maps for Studying Historical Internal Migration in Ireland

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OD Maps have helped us study historical migration patterns in Ireland (1851 and 1911) because they **preserve spatial structure**, are **non-occluding** and provide **overviews** that can show differences in distance and direction. This is important on a small island like Ireland where internal migration patterns have been difficult to discern.

How OD Maps work



County-county migration flow map



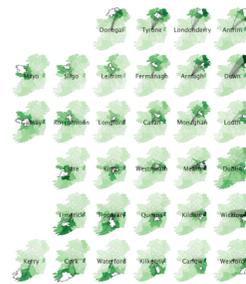
Take the 32 counties...



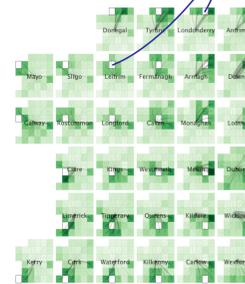
...and transform to...

	Donegal	Tyrone	Londonderry	Antrim	
Mayo	Sligo	Leitrim	Fermanagh	Armagh	Down
Galway	Roscommon	Longford	Cavan	Monaghan	Louth
	Clare	Kings	Westmeath	Meath	Dublin
	Limerick	Tipperary	Queens	Kildare	Wicklow
Kerry	Cork	Waterford	Kilkenny	Carlow	Wexford

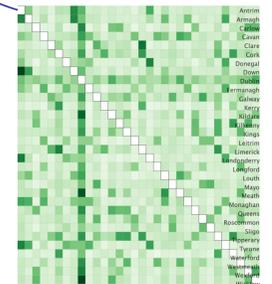
...a grid map, trying to preserve county adjacency.



Nest destination maps in each origin.



Transform nested maps to grid maps. **This is an OD Map.**



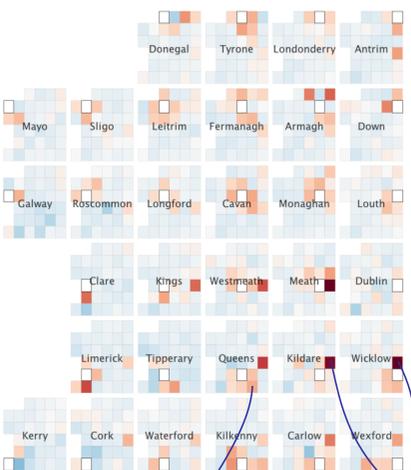
It's just a geographically reordered OD matrix!

Home square, where origin and destination are the same

Gender differences in 1851

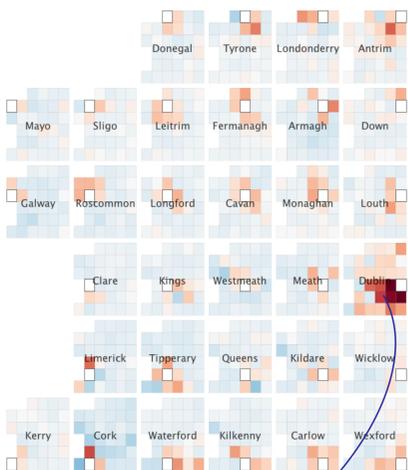
Red indicates a higher proportion of women migrated than men.

Origin-destination



Women migrate more locally than men

Destination-origin



Women prefer Dublin

A higher proportion of women migrate to Dublin than men

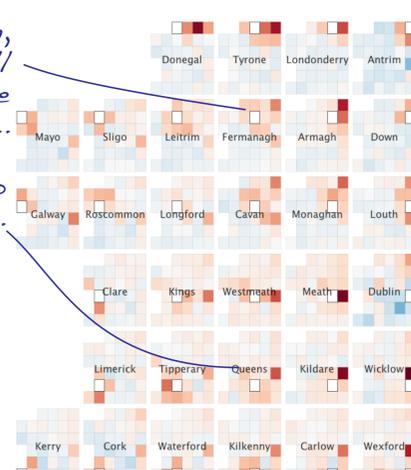
Gender differences in 1911

Red indicates a higher proportion of women migrated.

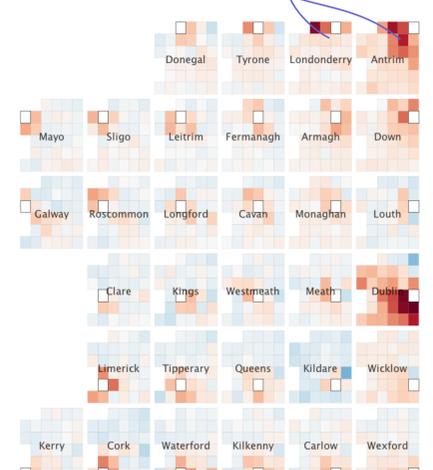
More women migrated to Northern Irish counties from all over

*In the north, women still migrate more locally than men...
...but less so in the south.*

A higher proportion of women migrate than in 1851



Origin-destination



Destination-origin

Diversity of destination counties

Darkness shows what proportion of migrants in the origin county went to destinations in 1911. Darkest colours indicate most migrants went to one county.

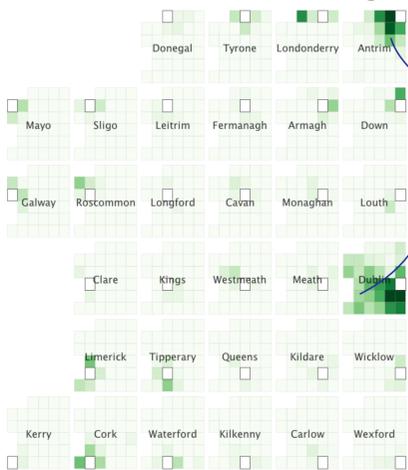
Origin-destination



Many destinations

Counties in the east had lowest diversity of destinations

Destination-origin



The top destination were Antrim and Dublin

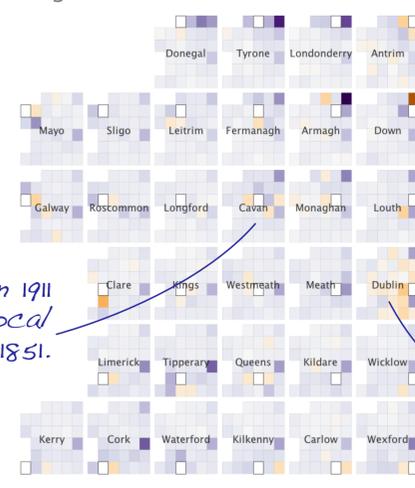
Migration in 1911 was less local than in 1851.

Differences between 1851 and 1911

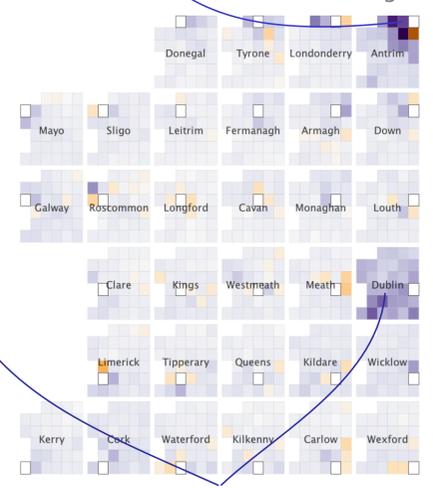
Purple indicates a higher proportion of migration in 1911, orange indicates this was higher in 1851.

A lot of migration into Antrim compared to 1851, especially from local counties, but not Down.

Origin-destination



Destination-origin



Less outward and more inward migration from and to Dublin



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