

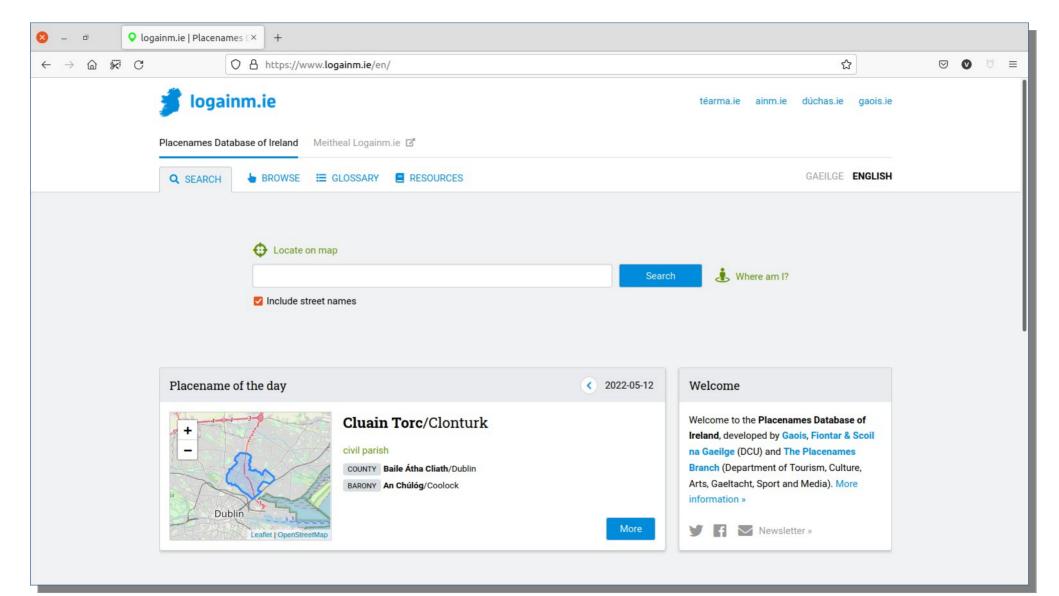
So you want to build a placenames database: an introduction to toponymic data modelling

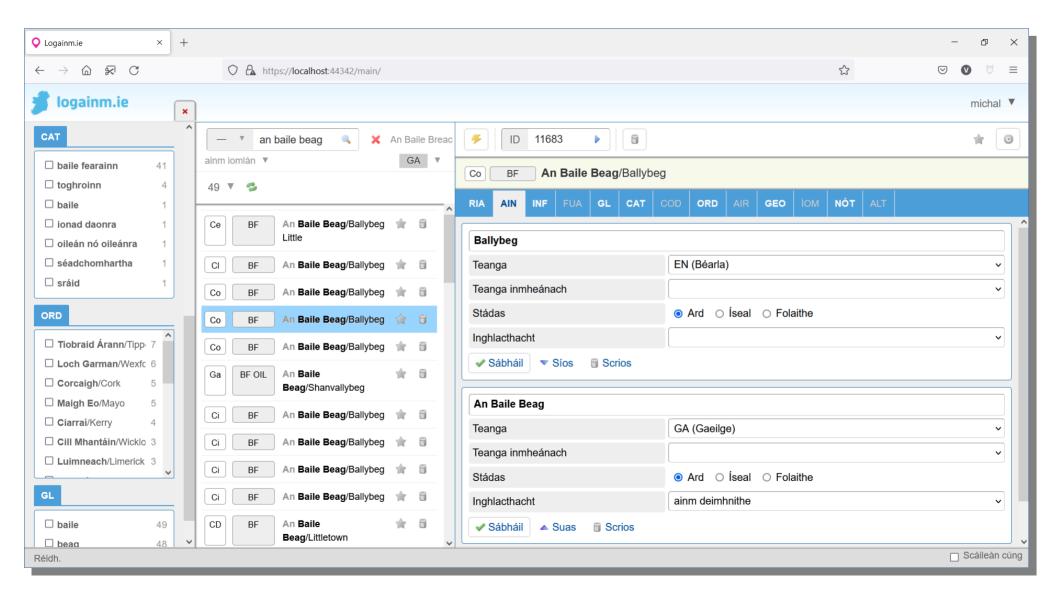
Michal Měchura

Gaois, Fiontar & Scoil na Gaeilge, Dublin City University



Placenames in Bilingual Areas Workshop, Dublin, 13 May 2022





How to model...

- 1. Relations between place and name
- 2. Linguistic properties of names
- 3. Administrative hierarchies
- 4. Place clusters

1. Relations between place and name

GASAITÉAR NA hÉIREANN

AINMNEACHA IONAD DAONRA AGUS GNÉITHE FISICIÚLA

GAZETTEER OF IRELAND

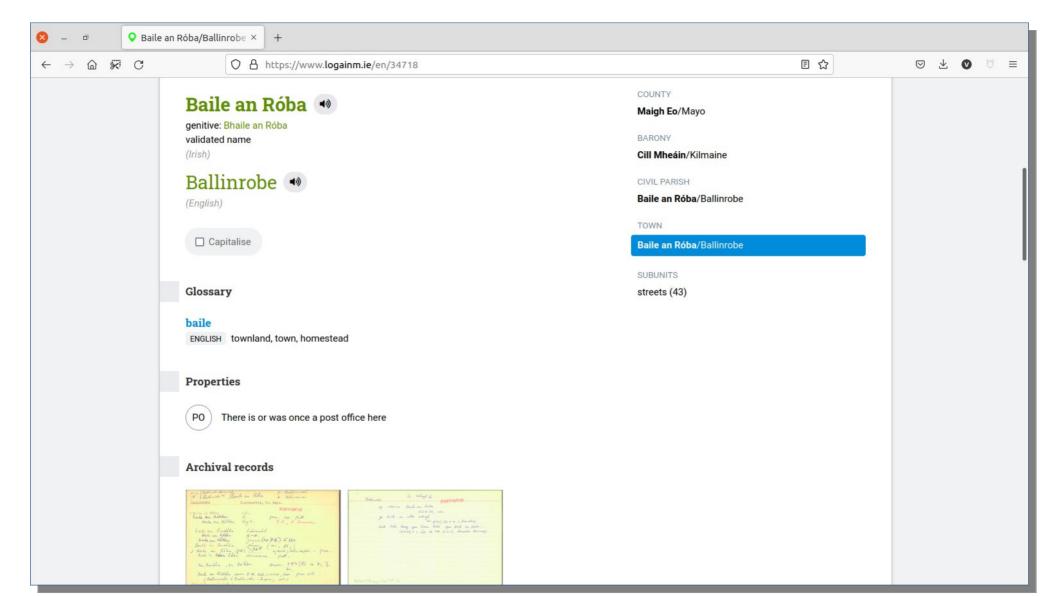
NAMES OF CENTRES OF POPULATION AND PHYSICAL FEATURES

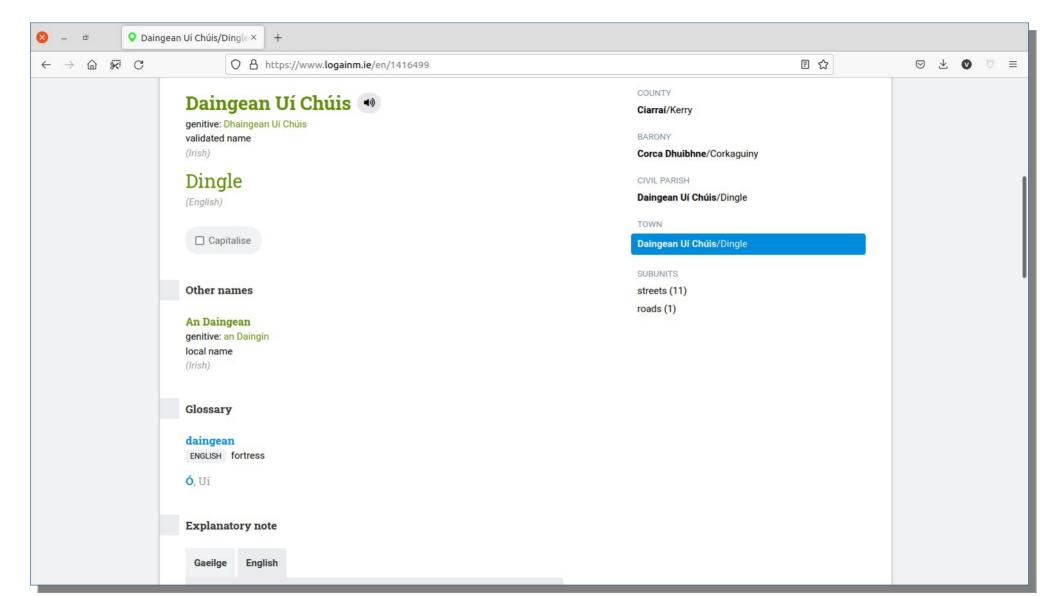
					0	
385	Baile an Locha	po	RC	158277	Ballinlough	261
386	Baile an Londraigh	po	Lm	176125	Ballylanders	382
387	Baile an Longfoirt	id	Ao	345400	Ballylumford	389
388	Baile an Mhanaigh	po	Co	176066	Monkstown	2918
389	Baile an Mhargaidh	po	Do	266430	Bellarena	564
390	Baile an Mhóta	d	BÁC	308367	Ballymount	422
391	Baile an Mhóta	po	Sl	166315	Ballymote	421
392	Baile an Mhuilinn	po	Ao	312388	Milltown	2868
393	Baile an Mhuilinn	po	Ao	331372	Milltown	2869
394	Baile an Mhuilinn	po	AM	296336	Clady Milltown	1002
395	Baile an Mhuilinn	po	BÁC	316230	Milltown	2870
396	Baile an Mhuilinn	po	Ca	234313	Milltown	2871
397	Baile an Mhuilinn	po	Ci	084113	Ballymullen	423
398	Baile an Mhuilinn	po	Ci	082100	Milltown	2872

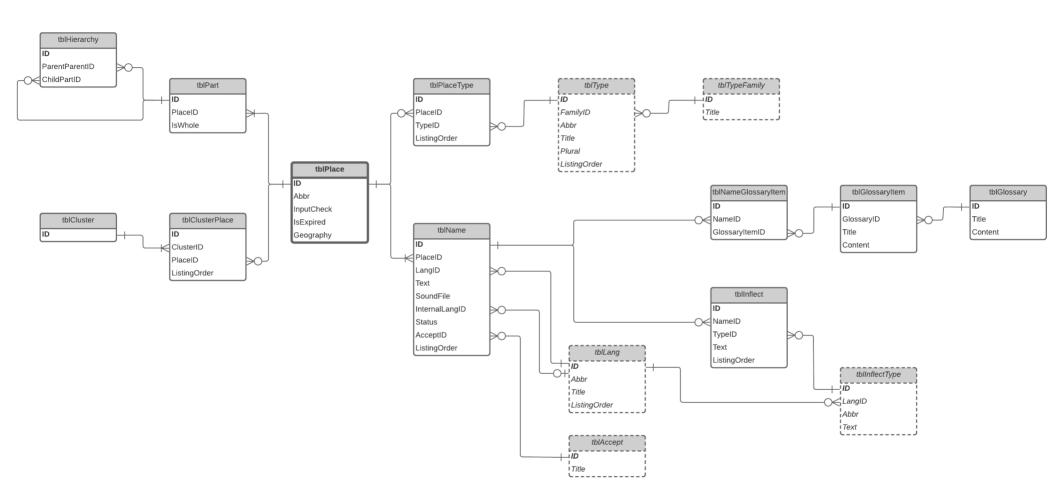
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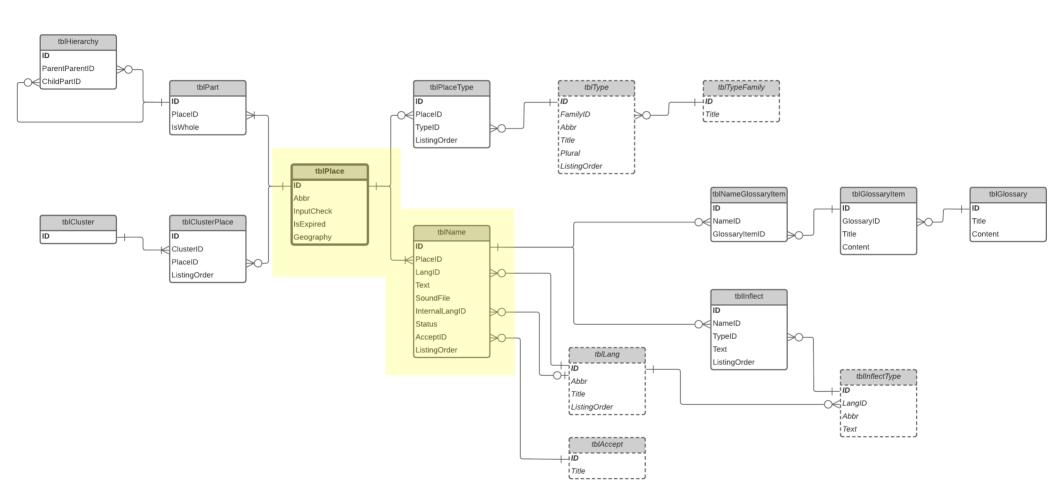
200

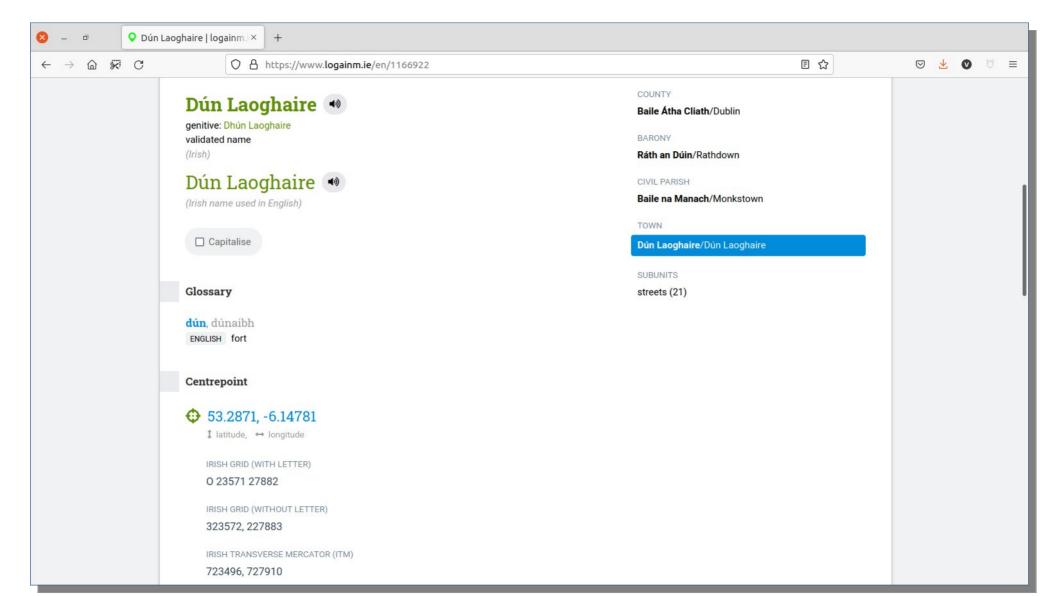
304 Daile all Locha







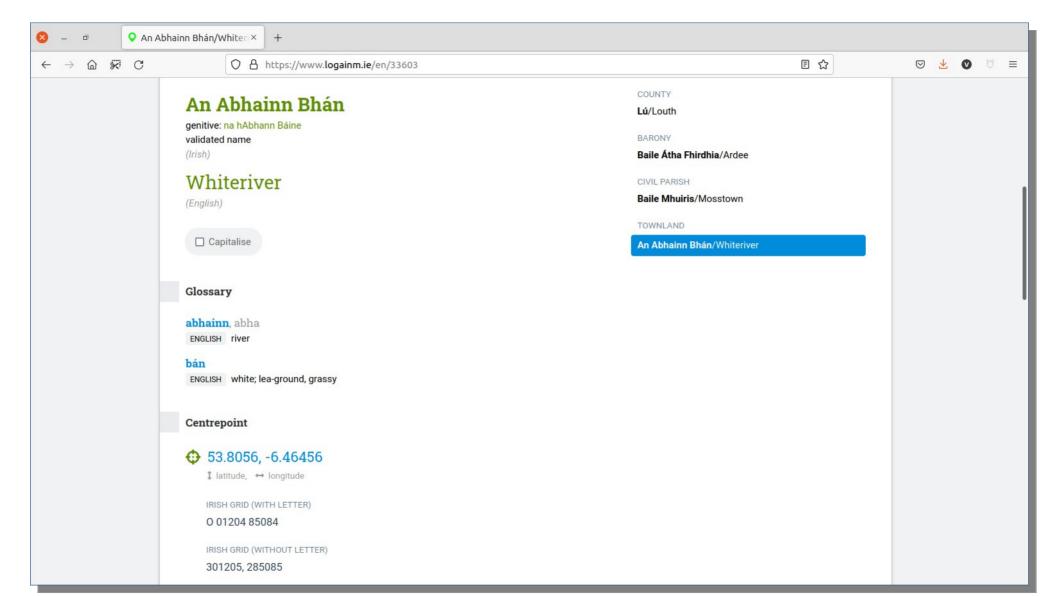


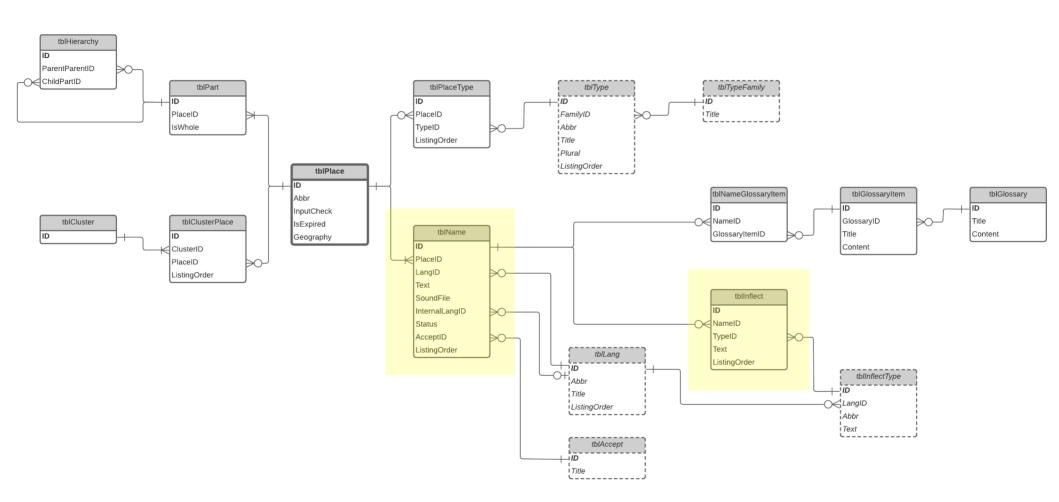


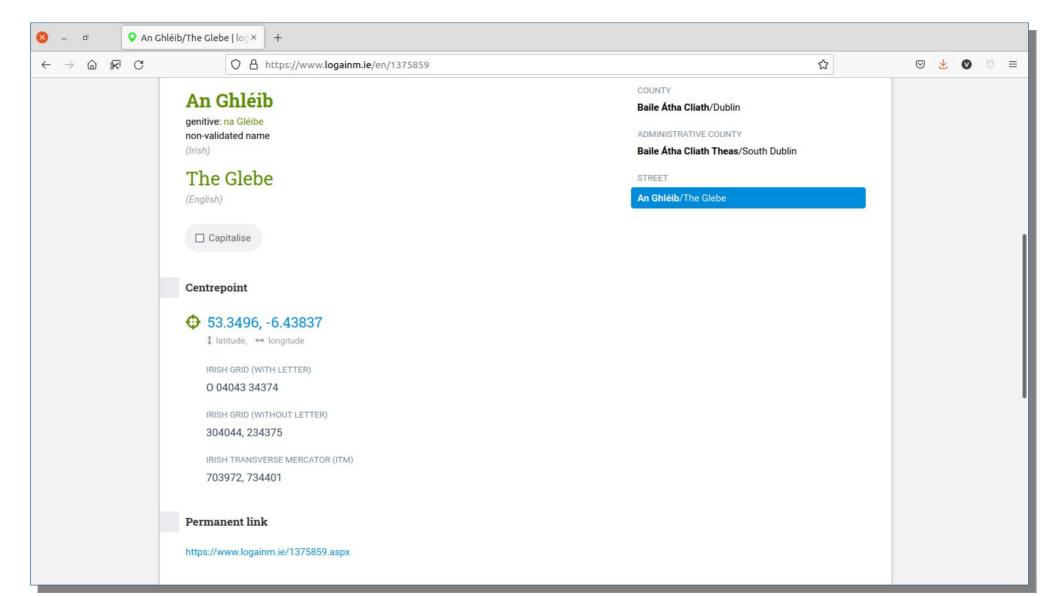
2. Linguistic properties of names

Linguistic properties of placenames

- Inflected forms
 - An Abhainn Bhán → genitive case: na hAbhann Báine
- Initialisms
 - <u>The</u> Glebe, <u>An</u> B<u>h</u>ó Dhearg
- Abbreviations
 - St. Macadaw's Church, Strand Rd.
- Qualifiers, categorizers, disambiguators...
 - Dominick Street Upper
- Composite names
 - An Fhorrach <u>agus</u> An Réabán Thoir, Cooladoon <u>or</u> Dooneragh Point







An Bhó Dhearg 00 101 111111

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An Bhó Dhearg

St. | Saint Macadaw's Church

Dominick Street {Upper}

[Cooladoon] or [Dooneragh Point]

3. Administrative hierarchies

Nested hierarchy

Parent-child relations:

- C1 > P1 (Parish P1 is in County C1)
- P1 > T1 (Townland T1 is in Parish P1)

Question:

- Which county is Townland T1 in?

Answer:

- C1 > T1 (Townland T1 is in County C1)

Non-nested hierarchy

Parent-child relations:

- C1 > P1 (Parish P1 is in County C1)
- C2 > P1 (Parish P1 is in County C2)
- P1 > T1 (Townland T1 is in Parish P1)

Additional fact:

Townland T1 is in that part of Parish P1 which is in County C1.

Question:

- Which county is Townland T1 in?

Answers:

- C1 > T1 (Townland T1 is in County C1)
- C2 > T1 (Townland T1 is in County C2)

Hierarchical shadowing

Partition:

- P1 = P1a + P1b

Parent-child relations:

- C1 > P1a
- -C2 > P1b
- P1a > T1

Question:

- Which county is Townland T1 in?

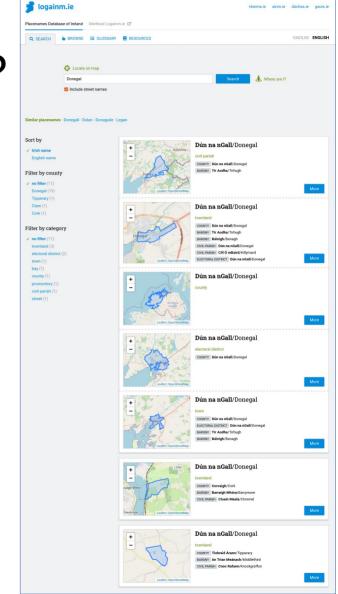
Answers:

- C1 > T1 (Townland T1 is in County C1)

4. Place clusters

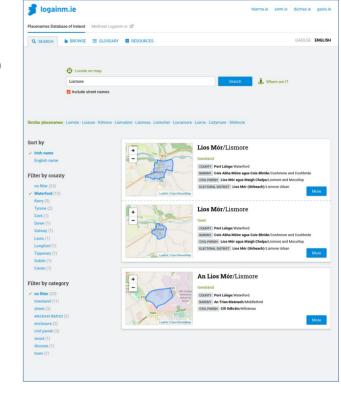
How many Donegals are there?

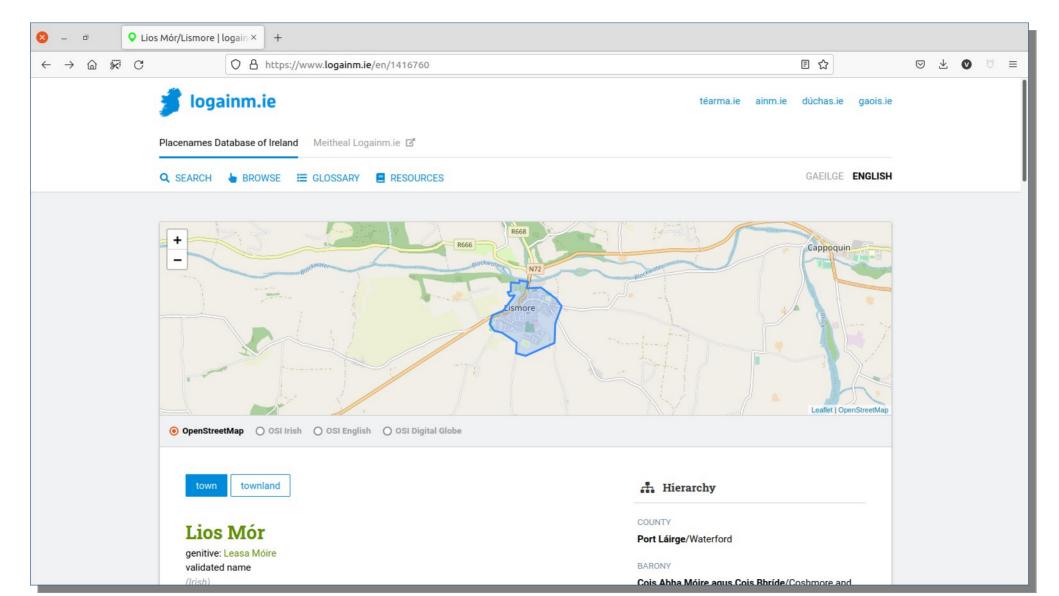
- 5 in County Donegal
 - civil parish
 - townland
 - county
 - electoral district
 - town
- 1 in County Cork
 - townland
- 1 in County Tipperary
 - townland



How many Lismores are there?

- 2 in County Waterford
 - town
 - townland
- 1 more in County Waterford
 - townland
- and many more in other counties





Now we know how to model...

- 1. Relations between place and name
- 2. Linguistic properties of names
- 3. Administrative hierarchies
- 4. Place clusters

