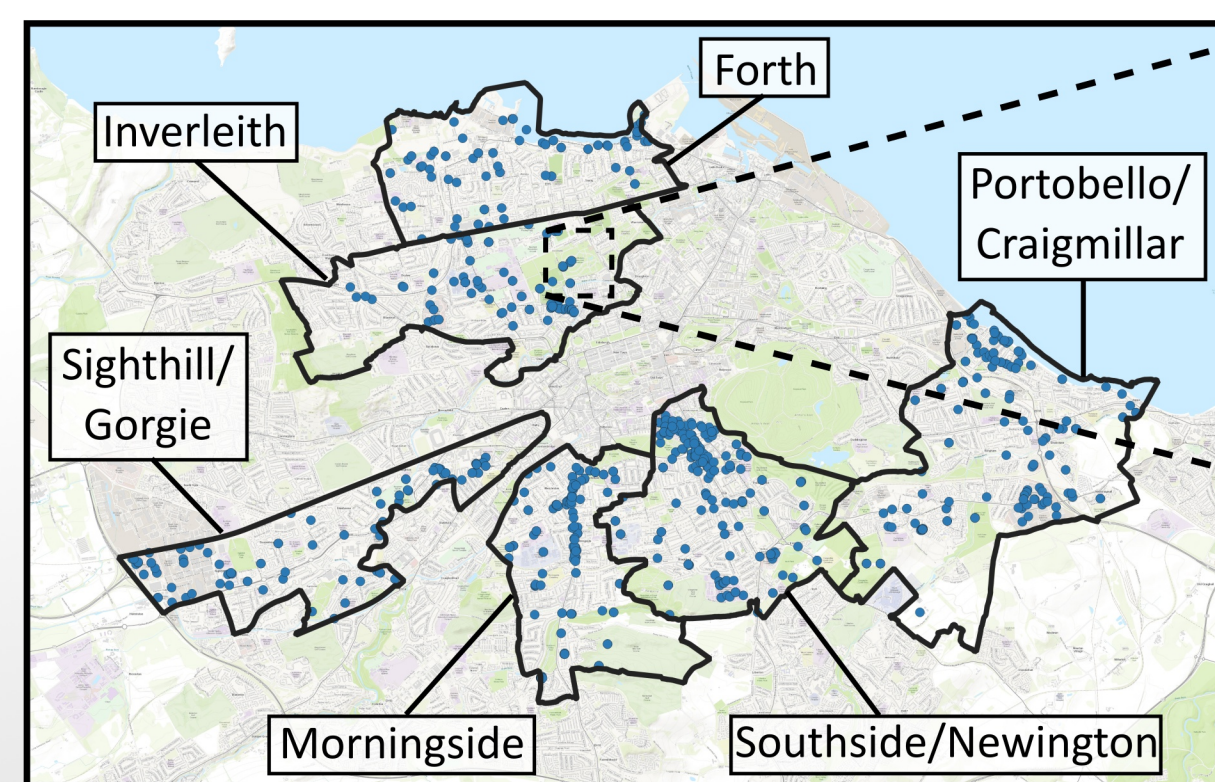


Spatio-linguistic analysis of Twitter discourses in Edinburgh during the COVID-19 pandemic

Location of tweets shows diverse patterns, including **spatial clustering** in some areas

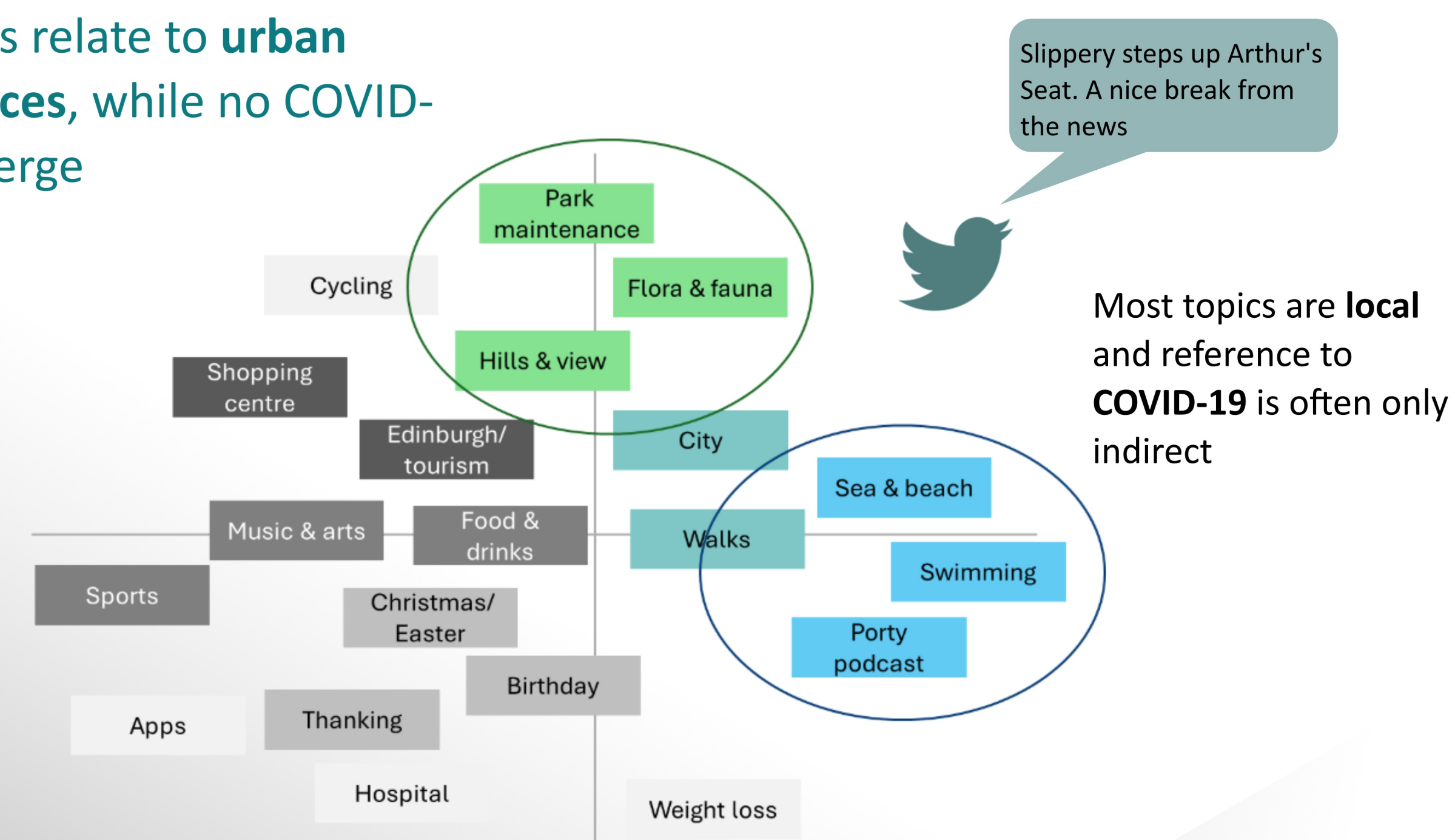
Geolocated tweets from selected districts



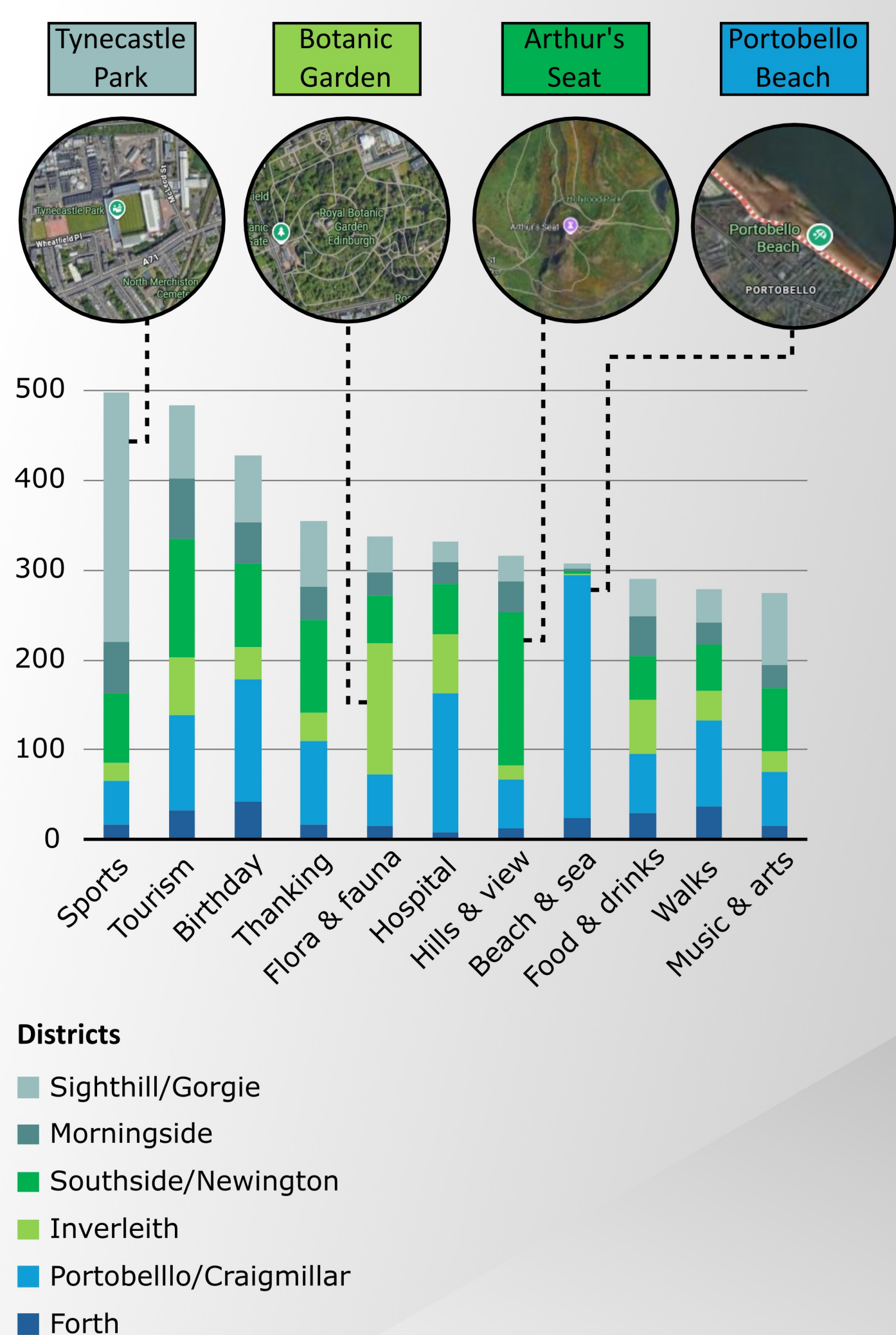
Such a magical evening
#Christmas @The Botanics

40 % of the tweets relate to **urban green or blue spaces**, while no COVID-related topics emerge

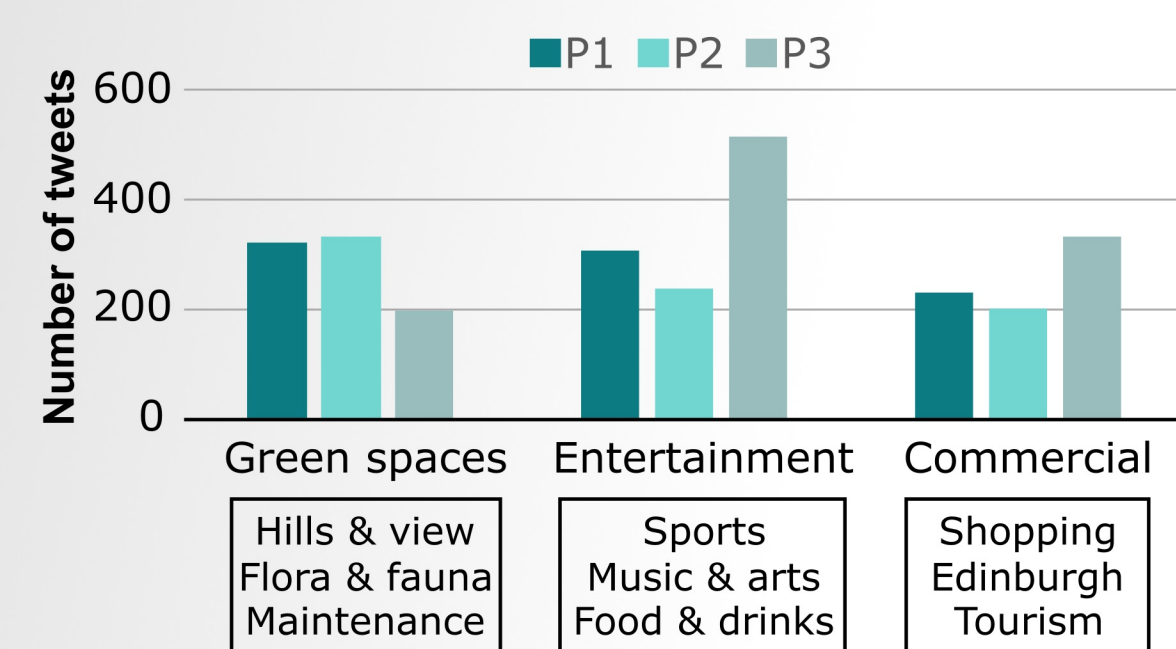
Thematic categories



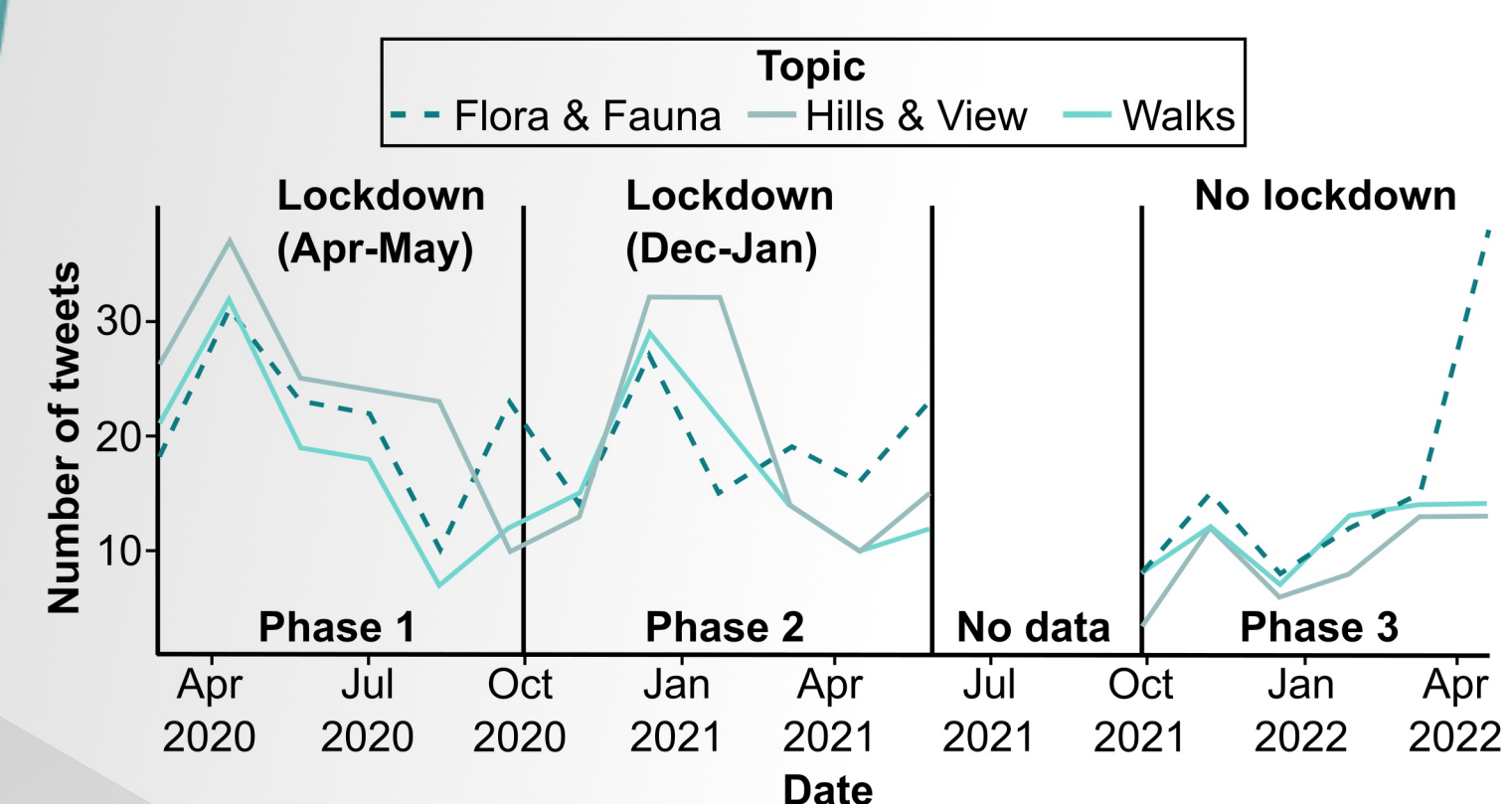
Distribution of topics can be linked to the **geography** (green and blue spaces) and **built environment** of the city (stadium, shopping centre)



Twitter activity and **topics shift** indicating **change in behaviour** in use of spaces



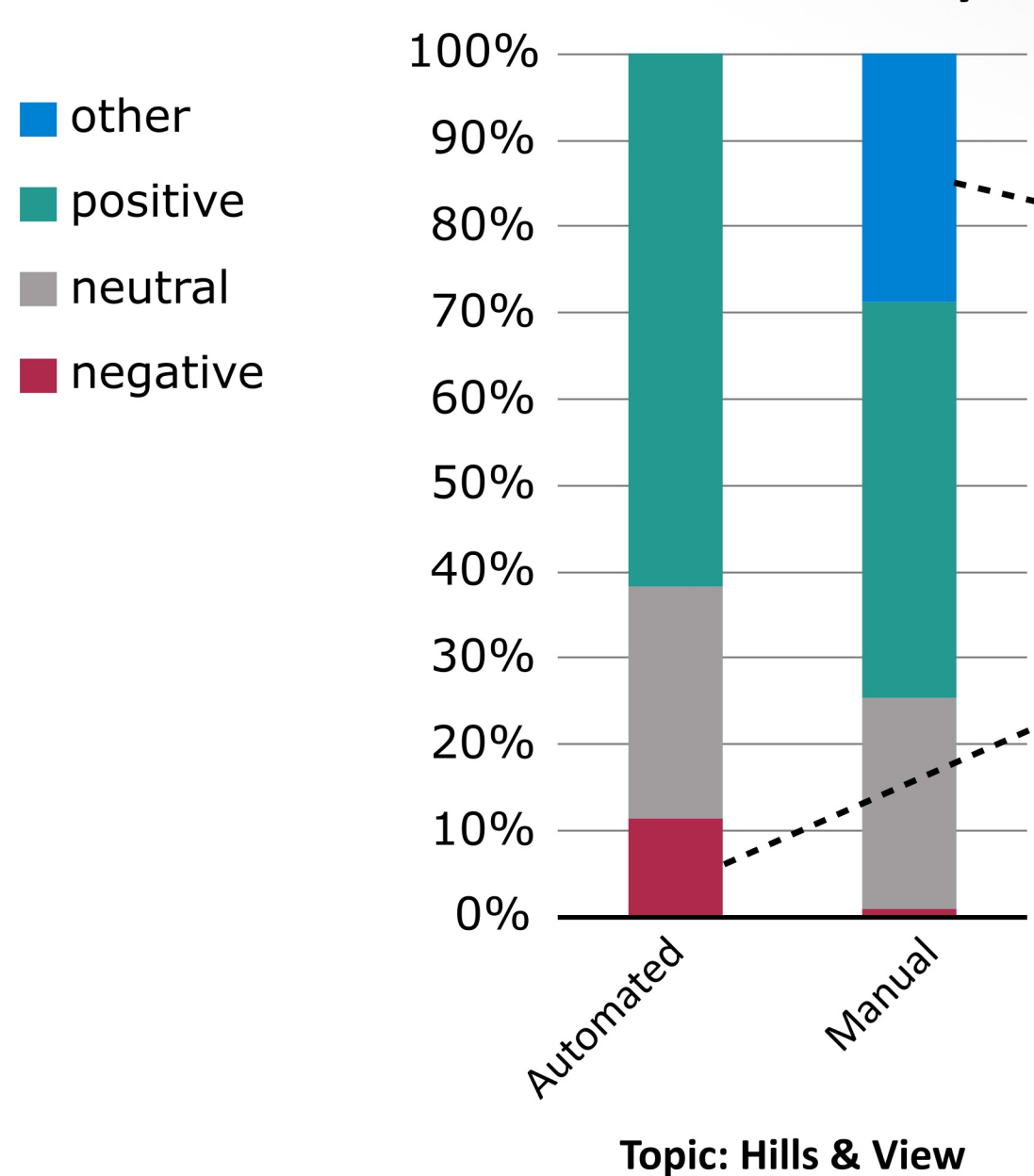
Topics about **entertainment & consumption** re-emerge in P3 when restrictions are lifted



Topics about **urban green spaces** peak during lockdowns

Sentiment analysis indicates general trends, but understanding attitudes requires more fine-grained analysis of **evaluative language**

Comparison of automated and manual analysis



Additional category 'other' for tweets that:

- express mixed polarity
- cannot be interpreted without context

Serenity on the Seat amidst the **Chaos**

Wise words!

Oh my word - what is that bright light in the sky. Gone so long, it was posted missing.

Anyone in the Blackford area lost a cat? This beautiful beast was wandering in the hospital grounds. Please share if it would help.

Evaluative language reflects **perception** of space, **attitudes** towards behaviour, and **emotions**

Polarity	Appraisal	Level of meaning
Negative	Appreciation	Evaluation of objects & states
Negative	Judgement	Evaluation of human behaviour
Negative	Affect	Emotional reaction

Local language features are used to **construct place/localness**

Scottish vocabulary

Enjoying the beautiful gorse on my **dander** up to St Margaret's Loch today
dander: walk without purpose, stroll

Scottish pronunciation

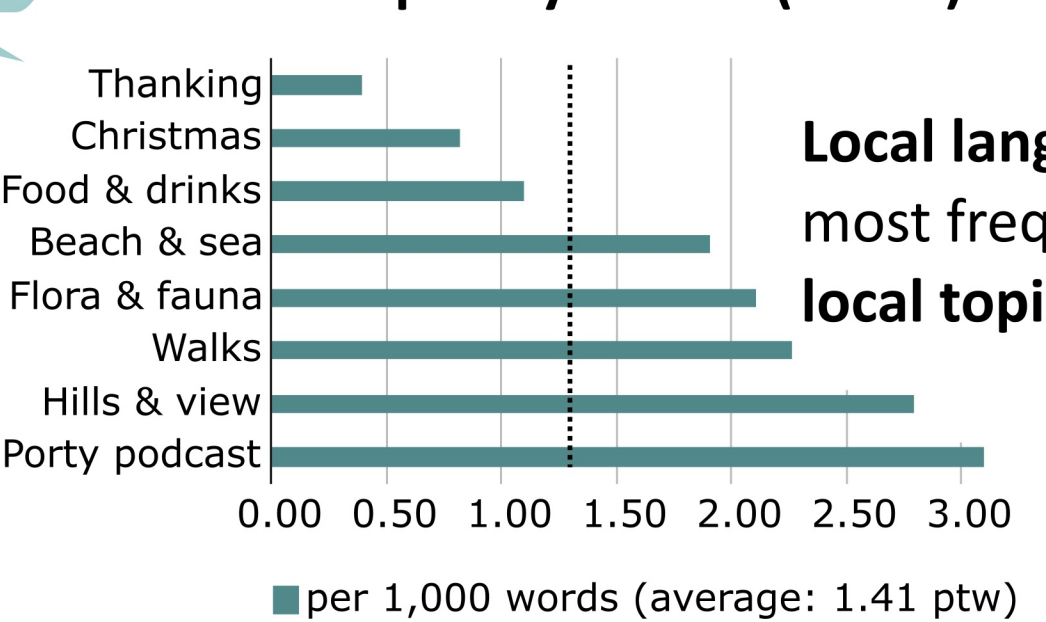
Never too **auld** to hurl yourself **doon** a snow-covered hill!
auld: old
doon: down

Today's walk with my wee dug #ArthursSeat

This just one of the photos I took of the of the park it's a **mess** there's **dirty nappies & broken bins**

Litter picked along the beach to swim, **sad** that **clear messaging doesn't get through to all**. I noticed a **concerning** number of sanitary pads.

Frequency of wee ('little')



Local language most frequent in **local topics**