

# Artists and Bankers and Hipsters, Oh My! Mapping Tweets in the New York Metropolitan Region

Ate Poorthuis  
Matthew Zook  
University of Kentucky

The maps in exhibits 1 and 2 are based on all geotagged tweets sent in the New York metropolitan area (as defined by the extent of the maps) between June 2012 and March 2014. By looking at specific variables within Twitter data (that is, the content of tweets and self-descriptions of Twitter users), we are able to visualize the spatial distribution of selected cultural-economic indicators and self-defined identities as manifest in this particular dimension of social media. The first map (exhibit 1) is based on tweets with messages containing the words “hipster” (12,319 tweets referencing a subculture associated with progressive politics, indie rock bands, and pretension) or “bro” (239,412 tweets referencing a phrase strongly associated with a college-age partying demographic).<sup>1</sup> The second map (exhibit 2) compares the location of tweets sent by users who self-identified as “bankers” (19,037 tweets) or “artists” (759,027 tweets). Tweet text and user profiles are free form and individuals are free to choose what information to share. The data are drawn from the DOLLY (Digital OnLine Life and You) project at the University of Kentucky that archives an array of geocoded social media, including tweets.

Although these keywords were selected based on their paired dissimilarities, there are overlapping and alternative uses as well, as is the case with any cultural marker. Moreover, this analysis does not place the use of these words or identities into linguistic context (for example, are tweets about hipsters disparaging or positive?). Although such coding is possible (via computer algorithms or hand labeling),<sup>2</sup> the goal of these maps is primarily to highlight differences in the spatial distribution of these indicators rather than take on the much more complicated task of categorizing the more nuanced differences in the spatiality of these markers.

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<sup>1</sup> The definitions provided by the crowd-sourced Urban Dictionary provide a good overview of how these two terms are perceived within popular, online culture. See <http://www.urbandictionary.com/define.php?term=bro> and <http://www.urbandictionary.com/define.php?term=hipster>.

<sup>2</sup> See <http://www.floatingsheep.org/2013/05/hatemap.html>.

**Exhibit 1**

**Map of “Bro” and “Hipster” Tweets**



DUMBO = Down Under the Manhattan Bridge Overpass. NOHO = North of Houston. SOHO = South of Houston.

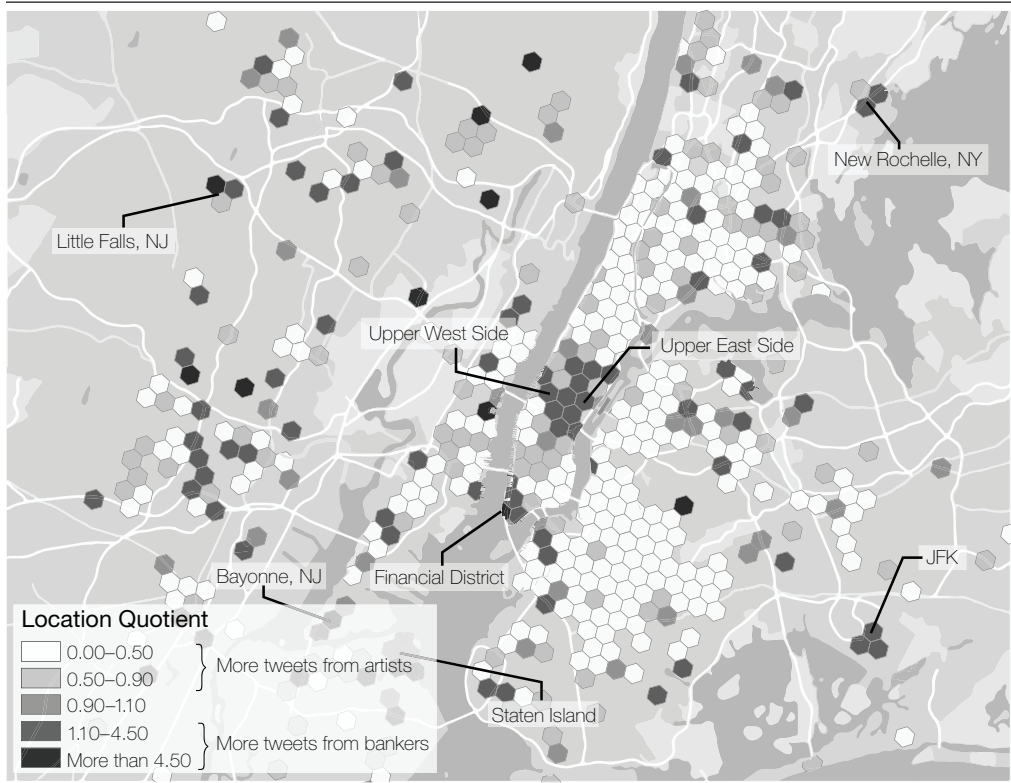
Aggregating tweets to 1,000-meter-wide hexagonal cells containing sufficiently large samples to be normalized by location quotients (LQs),<sup>3</sup> the resulting maps (with hexagons clipped at the waterlines for better legibility) visualize the spatial distribution of (1) “hipster” and “bro” subcultures and (2) self-identified “bankers” and “artists” as manifested within Twitter. The hipster/bro map in exhibit 1 shows concentrations of hipster references (the darkest hexagons with LQ > 1) within Brooklyn (particularly DUMBO, Prospect Park, and Williamsburg) and Manhattan (around SOHO/NOHO and Columbia University), with smaller clusters scattered elsewhere. This pattern corresponds well with commonly known “hipster neighborhoods” within New York and, moreover, these neighborhoods are surrounded by a more extensive belt of tweets containing “bro” (perhaps best referenced as a bro-ghnut), suggesting a relatively clear spatial divide in these subcultures.

The artists/bankers map in exhibit 2 shows a much more variegated pattern with Twitter activity from self-identified bankers (hexagons with LQ > 1) concentrated, not surprisingly, in the financial district of Manhattan but also in exclusive residential areas of the Upper East and West Sides of Manhattan

<sup>3</sup> LQ is a ratio that compares local characteristics (in this case a single hexagon) with regional ones. An LQ of greater than 1 indicates that there are more tweets of a certain type (for example, about hipsters or from bankers) than is the regional norm, and the higher the score the more divergent a locality. Likewise, an LQ that is less than 1 indicates the relatively higher frequency of the contrasting type (for example, about bros or from artists).

## Exhibit 2

### Map of “Artists” and “Bankers” Tweets



JFK = John F. Kennedy International Airport. NJ = New Jersey. NY = New York.

and more suburban locations within easy commuting distance, such as Little Falls, New Jersey, and New Rochelle and Staten Island, New York. Also of interest is the concentration of banker activity at the regional airports, most clearly at John F. Kennedy International Airport but also evident at LaGuardia Airport and Newark Liberty International Airport. By contrast, artists are much more widely distributed within the city and region, with broad areas of activity in Brooklyn, Upper Manhattan, Queens, and the Bronx and also in New Jersey.

These two examples illustrate how social media data and flexible aggregation strategies can provide meaningful insight on the distribution of cultural-economic markers, such as identifying which parts of the city exhibit similar or contrasting patterns of messages and identity. Although social media data such as Twitter data are not appropriate for all questions (for example, it would be incorrect to use it to measure public opinion because Twitter users do not represent a random sample of all citizens or social media users), analysis of tweets also comes with the great advantage of not being restricted to the confines of Census Bureau-defined topics or areal units. The unstructured nature of Twitter messages and profiles allows for any number of topics (including quickly changing social practices) to be explored, and the point-based format of its observations allows for spatial aggregation in novel ways.

## **Authors**

Ate Poorthuis is a Ph.D. candidate in the Department of Geography at the University of Kentucky.

Matthew Zook is a professor in the Department of Geography at the University of Kentucky.