

Capture and share the city: Mapping Instagram's uneven geography in Amsterdam

“Capture and share the world's moments.”

—Instagram motto

The contemporary city is beset with inequalities, not just in terms of the material distribution of resources and amenities, but also in terms of recognition and visibility. Areas and groups considered undesirable – the *banlieue*, the disabled, the elderly, immigrants, the homeless – are frequently degraded or rendered invisible, while spaces of upscale consumption and sanitized tourist havens are elevated. This uneven distribution of visibility is a well-known aspect of urban visual culture (Mirzoeff 2015; Schroer 2014). Many studies have drawn attention to the ways in which technocrats and developers use their power to promote specific representations of the city and shape it according to their ideologies and interests (Lefebvre 1991; Scott 1998). In this context, the proliferation of distributed media technologies is often heralded as a seismic shift: the power to represent the city is no longer concentrated in the elites controlling the state and the mass media but is distributed as people use their smartphones to produce and circulate messages of their own making (Castells 2009). However, we do not yet know what kinds of networks social media users form and how representations of the city circulate through these networks. While recent scholarship has extensively investigated the interplay of online and offline spaces in social movement mobilizations (Gerbaudo 2012; Borge-Holthoefer et al. 2012; Castells 2012), we know relatively little about city dwellers' use of social media outside of periods of political contestation and turmoil (for exceptions, see Stephens and Poorthuis 2013; *). How do people represent the city on social media? And how do these representations in turn shape people's uses of the city? This paper presents a study of the symbolic geography of the city of Amsterdam on the photo-sharing platform Instagram. We develop a relational approach to study the interface between social media and the city and to grasp underlying relations of image production. While much of the recent literature has emphasized how social media

empowers citizens and democratized urban development, our approach highlights that the networks and representations on social media are highly uneven.

Our paper is organized as follows. First, we provide some background on Instagram, the social photo-sharing platform at the center of this study. We then elaborate our conceptual framework for the following analyses, which centers on the notion of regimes of visibility. This study draws on an innovative combination of data sources and methods, and we describe these before presenting our results. The presentation of our results is organized in three sections. The first draws on content analysis and interviews to understand Instagram as a way of seeing the world. The second section looks at patterns of self-organization among Instagram users. Our analysis finds a high degree of stratification in the ways Instagram users interact with the images they look at and the users who post them. A relatively small number of accounts is able to command a large share of the attention. We introduce some of the figures that predominate in the production of Amsterdam's symbolic geography on Instagram. In the third section, we investigate relations not among users but among landmarks in the city that function as focal points for Instagram users in the city. Here, too, our analysis finds a high degree of stratification. A few high-status places command the bulk of the attention.

Regimes of visibility in the cross-hatched city

The notion that media representations are external and subsequent to actual practices has been thoroughly critiqued but remains implicitly foundational in urban studies. Although debates on the definition of the urban rage on the pages of urban studies journals, there seems to be an unspoken consensus that the object of analysis of urban studies is concrete and material: the city may not be fixed or clearly demarcated, but it is certainly geographically located in physical space. The city thus continues to be seen as a site of unmediated materiality and co-presence while the media is imagined as a distinct sphere of abstract representation (Iveson 2009). While this understanding of the media is grounded in commonsense notions, it also has profound theoretical and philosophical underpinnings in urban studies, not least in the influential works of Henri Lefebvre, who associated “representations of space” with abstraction and authority and saw them in tension with the “lived spaces” inhabited by sensing and feeling city dwellers (Lefebvre 1991). Such a distinction between abstract and concrete spaces is rendered increasingly problematic as media are woven into the fabric of everyday life and progressively “complicate” and

“weaken” the notion of the real (Sontag 1999 [1978]). In the mediatized city, reality only exists in the plural. Realities are present in a crosshatched way, and none of them are able to claim the status of the really Real. Rather than considering the media as external or alien to lived experience, there is a need to “explore how various media technologies are embedded in and flourish through the dispersed practices making up routine urban life” (Rodgers et al. 2009: 247).

While people’s experience of place has always been shaped by communication -- whether informal conversation on the street corner or news accounts drawn from mass media -- the proliferation of media technologies has provided users with the capacity to instantly share their impressions and images with distant audiences. “The key feature of wireless communication,” Castells notes, “is not mobility but perpetual connectivity” (Castells 2009: 69). They increasingly perceive and navigate the city through smartphone applications and wittingly and unwittingly leave traces of data that in turn serve as input to decisions of others. The proliferation of media technologies wraps an amalgam of communication systems around the city, weakening and complicating reality through the multiplication of places in representations. Any city user with a mobile phone can capture and share any thought or view, redefining reality “as an item for exhibition, as a record for scrutiny, as a target for surveillance” (Sontag 1999 [1978]: 82). While mobile technologies allow users to instantly and incessantly feed thoughts and images into “an interminable dossier” (ibid.), it is critical to acknowledge that this process is uneven: only some images and thoughts are recorded and circulated, most are not. Users are, by necessity, highly selective in what they communicate, where they communicate, to whom they communicate, and in which channels they communicate. Mediatization does not usurp reality in its totality, subordinating it to a single “media logic,” but warps it through selective and strategic representation. How media represent and refract reality depends on the specific constraints and opportunities of the platform in question and the creative ways in which users balance these constraints and opportunities.

To capture these selective and strategic dimensions, we develop the notion of a *regime of visibility*. A regime of visibility consists of two dimensions. The first dimension comprises *ways of seeing*. By “ways of seeing” we mean a particular mode of registering and visualizing reality. This describes a subjective practice through which individuals communicate an image of the world and of their identities and that takes places within a discursive context. Such practices of self-representation are by necessity a selective undertaking. “[P]hotographs are

not, as is often assumed, a mechanical record. Every time we look at a photograph, we are aware, however slightly, of the photographer selecting that sight from an infinity of other possible sights” (Berger 1972: 10). On Instagram, users select certain places and moments, choose an angle and a frame, invent witty hashtags, and use one of a selection of filters to produce an image for circulation to followers who have subscribed to their updates. Even if users post images without giving them much thought, they are nevertheless communicating – consciously or unconsciously – a sense of what is beautiful, enjoyable, humorous, or interesting to their followers. This process of communication continues as users see posts of users in their network. Social media, including Instagram, offer users the possibility to curate their feeds by following others which means they get to see the world – and the city – from their perspective. One of the tasks is therefore to discover how Instagram users exploit the platform for their own purposes: how do they produce posts of their own and how do they perceive the posts of others? We are specifically interested in the interface between online and offline places: how do users register and perceive places within the city?

The second dimension of a regime of visibility involves *patterns of recognition*. This describes an intersubjective process that ascribes value to expressions. It, too, is highly selective. In Instagram’s case, posts receive and direct recognition through “likes” and comments, in effect elevating their status among other Instagram posts. Instagram’s symbolic universe is inherently and overtly relational. Users establish relations by following updates, “liking” posts or leaving comments. These mundane practices weave patterns of uneven relations, investing recognition in some posts and people and not others. These individual acts contribute to *stratification* as some users and posts achieve greater recognition than others. Self-organizing systems – i.e. systems that are not designed from the top-down by an architect but result from the bottom-up through individual strategies of selective – are often described as “horizontal” (e.g. Castells 2009, 2012), but the literature suggests that they have highly unequal distributions, with a few users receiving the bulk of attention and a long tail of more peripheral users. This pattern has been found for intellectual debates (Collins 1998), hyperlinks on the world-wide web (Barabási and Albert 1999), and scientific debates (Newman 2001), so we might expect it on Instagram as well. By preferentially associating with some rather than others, users weave asymmetric figurations in which a few emerge as stars and others as peripheral figures. One of the tasks is therefore to discover how recognition is distributed among Instagram users. Which users and posts receive recognition

and which do not? Again, we are specifically interested in the interface between online and offline places: how do users elevate some places by recognizing them more than others?

We propose to study the subjective experience of producing and perceiving posts ethnographically and to use network analysis to study the intersubjective process through which users construct asymmetric relationships. By combining these methods, we hope to illuminate the workings of the different components of Instagram's regime of visibility.

Background on Instagram and Amsterdam

Before going into the details of data collection, it is important to provide some background on Instagram and explain why it is a particularly suitable platform for investigating the interface between the city and social media. Initially used by digital photography enthusiasts to add filters and effects to their photos, Instagram has since its launch in 2010 evolved and ascended to join the ranks of the most popular social networking sites. In 2012, Pew researchers found that 13 percent of online adults in the United States used Instagram. That proportion climbed each year, reaching 26 percent in 2014 (Pew Internet & American Life Project 2012; Duggan et al. 2014). The researchers found the service to be dominated by young adults. In the age category between 18 and 29 years, over half of respondents reported using the service in 2014. Nearly half of Instagram users surveyed in 2014 reported using the service daily. Men and women were initially represented in roughly equal proportions, but adoption by women has sped up at a greater rate than for men (Duggan et al. 2014). Today, the service is used by over 200 million users around the world, and they share 70 million pictures each day (McCracken 2015). In the Netherlands, a February 2015 report stated that Instagram had 1.8 million users, compared to 2.8 million Twitter users and 9.4 million Facebook users (out of a population of just under 17 million). Use of Instagram was up almost 30 percent compared to the previous year, and the number of users reporting to use the service on a daily basis was up 35 percent to 700,000. During the same time, the number of Twitter users reporting they used the service on a daily basis was one million (NU.nl 2015).

Instagram posts are public by default, though users can opt to make their accounts private so only followers that they approve can see their posts. Users upload photos (or videos) and optionally apply filters to them. They then share them, making them discoverable by adding hashtags. In the mobile application, hashtags are clickable, taking the user to a stream of all posts to which the hashtag has been applied. In the image caption, users can also "tag" other users by adding their handle. Tagged users are then alerted. Users can also

comment on posts, but it is notable that, unlike Facebook, Instagram is rarely used as a platform for discussion. The images speak for themselves.

Another option users have – crucial for our discussion here -- is to associate a location with their posts. Unlike on Twitter, where location can be activated for all tweets by setting a one-time preference for an account, users opt whether to attach their location to posts on a post-by-post basis. When they do so, they can either select a location from a database of predefined places, or they can name their location. In either case, coordinates are included in the post along with the location name and identifier. In the Amsterdam city limits alone, we found about 30,000 such named locations. Posts can also be geotagged without tagging a specific location. Instagram recently added a feature to its app in some cities that shows “trending places” being tagged by users in the vicinity (McCracken 2015; Instagram Engineering 2015). This foregrounds the locative dimension of Instagram and suggests that the service is taking on some of the features of check-in services like Foursquare or the now-defunct Gowalla.

The most immediate competitor to Instagram at the time of launch was Flickr, an image hosting site with strong community aspects launched in 2004 and later acquired by Yahoo. Flickr's development at the time had stalled for some time, notably for mobile platforms. Instagram, in contrast, started off mobile-only, targeting first Apple's iPhone and later adding support for Android and Windows Phone devices. Although the platform has since then added a web app that can run in a desktop browser, the mobile app is still the only way to use most of its features. For instance, it is not possible to register for the service without a mobile device. Users of the mobile app are encouraged to move seamlessly from taking pictures to uploading them, so many images posted to Instagram tend to capture a specific moment or a specific place. Instagram is also a popular platform to circulate memes and other visual jokes, with some accounts gaining minor celebrity status.

To date, Instagram has done little to “monetize” its service, that is, to generate revenues and derive profit from what it does. The founders envisage being able to make money by becoming a platform for brands (Laurent 2012; Angelova 2012). After Instagram joined the Facebook empire in 2012 in an acquisition deal worth one billion dollars, the Instagram was able to kick the monetization can a bit further down the road. Instagram remains a standalone product, but users can connect the service to their Facebook account and use their connections on Facebook to find people to follow. While there are other social media platforms that are image-centric -- including Pinterest and Tumblr -- Instagram is the

most widely used platform. It is also the one that stresses location most strongly, making it a good choice to study how spatial and visual media practices go hand in hand.

Since we are interested in how Instagram feeds off and feeds into the city, it is important to contextualize by considering the specific local context in which Instagram users are operating. Amsterdam is a major center of the Netherlands' cultural and economic life. With a population of only 800,000, it is much smaller than London, Berlin and other European metropolises, but its influence in the region far outweighs its size. It is a place to spot the emergence and spread of new cultural trends and social forms. Amsterdam's population heavily skews towards younger people in service professions – the kinds of people that tend to use Instagram. In the wake of urban renewal policies and population shifts, several areas in Amsterdam are gentrifying or have been gentrified since the 1980s.

Data

We collected the data for the spatial and network analysis in this paper through Instagram's application programming interface (API). Most social media platforms provide APIs that make it possible for third-party developers to build clients or services on top of these platforms. Most importantly for our purposes, programmers using the API can access user-generated data in bulk. Instagram allows developers to query for posts published in a geographic area defined by a midpoint (specified by latitude and longitude coordinates) and a radius up to 5000 meters. We found a series of circles that cover the entire area of the city of Amsterdam and queried them at regular intervals using a research tool we developed (Boy 2015).

Our initial corpus consists of over 600,000 geotagged Instagram posts originating from the Amsterdam municipal area gathered over an eight-week span between 19 April and 6 June 2015. Our corpus includes only posts that are geotagged, which comprise an estimated 20-25 percent of all Instagram posts. Since we are especially interested in how city dwellers use social media in their everyday lives, we selected users who had at least two posts at least one week apart to eliminate likely tourists, bringing down the number of posts to 350,000. Figure * provides a map of the geographical distribution of Instagram posts in our sample. While we have no guarantee that this method allowed us to store metadata from every geotagged post in Amsterdam, we are confident that we collected a meaningful share of posts and that there is no systematic bias as far as their spatial distribution in the city is concerned. Previous work using Instagram data either relied on using Instagram posts shared via Twitter,

making the Twitter stream, not the Instagram API, the data collection channel (Silva et al. 2013); or sourced data from Gnip, a for-profit data broker owned by Twitter Inc., to retrospectively gather posts (Manovich et al. 2014a). Our method should provide at least as much coverage as these other data collection methods.

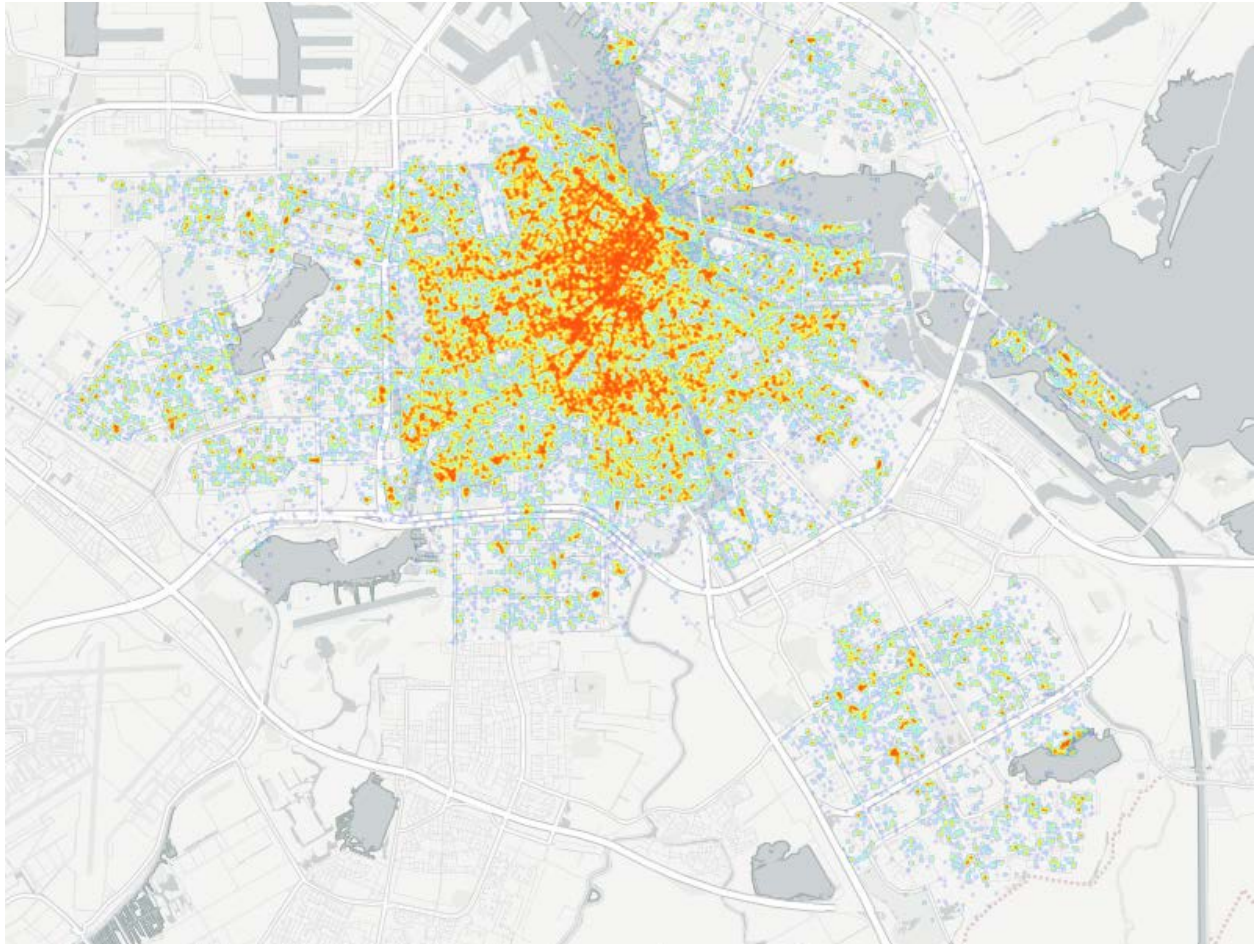


Figure 1 shows the distribution of geo-tagged Instagram posts from Amsterdam in our dataset (hotter colors indicate more posts). Density of Instagram use roughly corresponds with socio-economic status and historicity. The historical center and the gentrifying nineteenth-century districts around it, such as Jordaan in the northwest of the center, are heavily covered. Roads from gentrifying districts to the canal district can also be discerned.

Each post contains more than fifteen pieces of metadata, including a timestamp, user data, location data (coordinates and in some cases a named location), a caption (if provided by the user), hashtags (e.g., #amsterdam or #cappuccino), and data on comments and “likes” the post received. We stored metadata in a database, but in an effort to honor users’ privacy, we did not save the media file attached to posts. When needed for our content analysis, we

retrieved these media files later. We could only do so if the user had not deleted the post in the interim or set the account to private, which means that we could not see posts the users did want to publically display. Even though the users we discuss in this paper often have many followers and share images very freely, we do not report in detail on the users or posts on the assumption that they may not have realized that their posts are publicly available.

Methods

Our approach distinguishes two dimensions of a regime of visibility: ways of seeing and patterns of recognition. We researched how people see their worlds and especially the city through Instagram by conducting content analysis and in-depth interview. To get an understanding of what kind of images Instagram users produce, we selected a random sample of * posts to systematically analyze what is represented in the pictures and how it is represented. This is important because media and scholarly accounts have often assumed certain usages. For instance, it has been suggested that Instagram is used especially for “selfies.” In the absence of information about users’ age, occupation, social class, we also use this sample to get a sense of the kind of individuals and organizations using Instagram in Amsterdam. In addition to analyzing Instagram posts, we also had informal conversations with Instagram users and conducted in-depth interviews with six active Instagram users. During the in-depth interviews, we asked a range of questions to get a sense of our respondents’ backgrounds and subsequently discussed how they used Instagram. We also looked at their feeds and let them talk about images they posted.

The second dimension of a regime of visibility involves the patterns that emerge from the distribution of recognition. To grasp this component, we use network analysis. The basis of our network analysis are the “likes” and comments through which users engage with each other. These mundane practices weave webs of uneven relations, with some posts and users receiving a lot of recognition and acquiring central positions and other posts and users taking up more marginal positions. We consider users to have a tie if they either commented on or liked another user’s posts at least once during the eight-week window we studied. The topology is constructed by considering these ties as directed edges between users, who are represented as nodes.¹ Ties are weighted according to the number of comments or “likes”.

¹ We used the igraph software package (Csardi & Nepusz 2006).

We look at these network topologies for the city as a whole as well as at the neighborhood level. We identified communities using the Walktrap algorithm (Pons & Latapy 2005). Among other things, this method allows us to test how recognition is distributed. If there was no bias toward certain images, users and places, we would expect to find a more-or-less random pattern of ties. There would be some variation -- some images, users and places would attain greater recognition than others -- but there would be no skew in the distribution of ties indicating an uneven pattern of recognition. In that case, the distribution of ties in the network (i.e., the degree distribution) would approximate a normal distribution. If, on the other hand, Instagram users expressed clear preferences for certain other users and places in the use of the platform in how they awarded recognition, we would find a skewed distribution. Most accounts would receive a small amount of recognition, while a few star accounts would achieve a very high degree of recognition.

Seeing the world through Instagram

What Instagram users see when they scroll through their feeds depends on a great many contingent factors: who they follow, where they connect from, and how they use the app. It is easy for users to be caught in an “Instabubble,” seeing only the kinds of images they have signaled a preference for. If a user only follows accounts that post pictures of anime, then she will only like and comment on anime pictures, and she will overwhelmingly have more anime recommended to her by Instagram’s recommendation algorithms. Nonetheless, there is a discernable “signature” to Instagram posts; Instagram projects a certain kind of *Weltbild*. In this section we investigate this view of the world, first through a content analysis of randomly selected posts, then by detailing some of the experiences with the platform narrated by our interview respondents.

Into the stream

Although scholarly and popular accounts frequently regard Instagram mainly as an outlet for the narcissistic practice of posting selfies, our study of a random selection of 130 posts from our dataset suggests that is not, in fact, what it is mainly used for.² Among geotagged posts, outside views of the city predominate. They account for almost a quarter of the images in our

² This is also noted by Manovich et al.’s (2014b) Selfiecity project: “People take less selfies than often assumed. Depending on the city, *only 3-5% of images* we analyzed are actually selfies.”

random sample. These images mainly depict characteristic sights: Amsterdam's canals, tulips in bloom, distinctive architectural details of buildings in the city center, or large groups of cyclists waiting for the green light at an intersection. Pictures are often taken at sunset when the light is favorable. Usually the images are not spectacular; they don't portray a stunning panorama, but rather capture an individual's street-level view of daily urban life and the built environment. Thus, the "art" of these posts is to aestheticize the quotidian.

In terms of images of people, it is the group shot that predominates, not the selfie. Counting images of couples, there are about twice as many depictions of groups as there are selfies of individuals, though of course some group pictures are taken arm outstretched, selfie-style. Groups are usually pictured in moments of conviviality. The overwhelmingly young women and men that appear in these shots are often dressed for a special occasion, smiling, and enjoying drinks or a meal together. Unsurprisingly, portraits of individuals tend to show well-dressed people posing in interesting places.

Users also portray objects, often artfully arranged like still lifes. In one images we see a Jeff Buckley record sleeve propped up atop a record player. We find Easter decorations, book covers, new shoes neatly placed by the wall, and designer furniture arranged on hardwood floors. A related genre of picture is the food shot showing a plate of mouth-watering appetizers or a particularly well executed example of latte art. Unlike the still life compositions, the food shot tends to be taken outside the house, in cafés or restaurants. A small but noticeable number of posts are by store accounts showing their products, usually clothes or shoes.

Pictures taken at events, such as concerts, account for a little over five percent of images in our sample. Users also frequently share images that originated elsewhere, such as memes, pictures with quotes, or photographs of celebrities. These account for one in nine posts. Some of these images are cute (cats) or funny (memes), while others are advertising for events. Except in the case of advertisements, there is rarely a relationship to the location these images were posted from. Finally, and perhaps surprisingly, we found only a relatively small proportion of photographs of pets, and almost no baby pictures.

Instagram posts capture moments -- moments set apart by refined beauty, elevated positive emotion, and heightened enjoyment. As Henri Lefebvre noted, moments can be distinguished from mere instants: "When we say 'It was an enjoyable moment...', for example, it implies a certain length of time, a value, a nostalgia and the hope of reliving that moment or preserving it as a privileged lapse of time, embalmed in memory. It is not just any

old instant, nor a simple ephemeral and transitory one” (Lefebvre 2002: 343). Instagram users train their eye to spot slices of the world around them that stand out. The criterion for whether to capture and share a specific view is its “momentousness.” Does it condense some quality, such as beauty, wit, or glamor? Looking through a stream of Instagram posts, one sees a seemingly interminable series of peak moments. These moments emerge from everyday life and engulf it.

Instagram’s gaze

This bird’s-eye view of the Instagram vista is different from what a typical user sees as she scrolls through her Instagram feed. For one thing, our dataset only contains geotagged posts, while a user feed will also contain posts with no location information. Also, there are certain types of posts individual users may never encounter. If they don’t follow any store accounts, for instance, then they will not see the posts depicting products unless they are directed to them by other users or the recommendation feature. Our interviews suggest that these are differences of degree, not of quality. As users browse through their feeds, they get a sense of Instagram’s aesthetic norms and internalize them to some degree.

In this context, the exception proves the rule. One of our respondents has a highly developed critical reflexivity about Instagram. Worried about the intrusion into her privacy, she disabled the link between her Instagram and Facebook accounts, switched her Instagram account to private, and disallowed Instagram from using her iPhone’s location services. She pokes fun at Instagram users who show off their preference for exquisite food or healthy lifestyles, for instance, by posting a picture captioned “I hate refined deserts” in which she poses next to a well-composed *haute cuisine* desert and sticks out her middle finger to the camera. When asked directly in the interview, she explicitly states she never tags places. However, as the interviewer goes through her Instagram feed, it appears that she does, in fact, geotag many of her holiday photos. One recent post in Amsterdam also has a place tag. It’s a post that pictures her at Walter’s, a bar on Javastraat that is among the most prominent Instagram places in the gentrifying neighborhood Indische Buurt. The respondent is perplexed that she did that.

Respondent: I don't think I have... well, maybe here. Oh! It says...

Interviewer: You tagged the location, Walter’s. This is on Javastraat.

Respondent: Yeah, I did. Interesting. Yeah, I did it here. Yeah. That was nice. ...

Yeah, it was new then, and it was very nice, it was very... dinner was very good, and a

friend of mine worked there, she was our waitress. Maybe, I don't know why... maybe also to show, "I went to the new cool place!" I don't know what was going through my mind.

We think that this illustrates that Instagram's functionalities entice even reflexive and critical users to engage in strategies of distinction and the digital marking of space.

More generally, Instagram users seem acutely aware that the pictures in their feeds are taken and curated to convey that their posters are happy, healthy and hip. While the beauty and grandeur in their feeds may cheer Instagram users up, they also express their awareness and frustration that these pictures present a sanitized ideal that has been purged of negativity and blemishes. The same pictures that cheer them up confront them with the imperfections of their own lives. While they acknowledge this, they also cannot escape it, as the above-cited example of the critical Instagram user shows. She explains:

When you really think about it and analyze it, it's very stupid. It sounds so stupid. But we're doing it all. It's nice to show. I mean, when you are happy, when you are proud, or content, you just want to share it with the world, show people. You know?

Another respondent says that she often feels social pressure when reading her social media feeds because everyone always seems to be doing impressive things. But mostly she appreciates how Instagram users curate their images: "You can just scroll, and you're looking at it, like, 'pretty!' And the pictures are always very happy, and everybody is so healthy!" This exclamation is at once delighted and exacerbated.

Instagram promotes particular types of viewing and valuing people as well as places. Instagram is a navigation tool that helps users explore unknown territories by marking noteworthy places and making them visible through the eyes of selected users. Just like some people used to put flags on a map of the world to mark where they have been, our respondents switch on geolocation for the pictures they take on their travels. When we looked at the maps with their geotagged pictures, the first thing that comes out is that they are often abroad, both because they take many pictures when they travel and because they want to have their pictures' geographical coordinates. Such geotagged histories in turn serve as maps that help others navigate. Our respondents typically look up Instagram pictures when they travel somewhere to get a preview of the scenery and the places and their patrons. One respondent as planning a trip to Morocco and had used Instagram to decide which places to visit; another respondent was at the time of the interview selecting a number of Parisian Instagram users to see what places she could visit during her study-abroad semester Paris. The same logic

applies when respondents use Instagram to navigate in their own city. When they see the appealing pictures their contacts post, they may get the idea to join the user or to visit the place at a later point in time. One respondent explains: “Sometimes you see a post, and there isn't a name of the coffee shop, and it has a nice picture, and I always want to know, like, ‘Oooh, where is this?’ And then you can see the location, so then you do know where it was. That’s very convenient.”

The stratified world of Instagram

Intersubjective processes of recognition on Instagram result in stratification, making some posts, users and places stand out while others remain an undifferentiated part of the stream. Who and what comes out on top in these processes? Who is able to shape the image of the city and how it is perceived? Which places rise to prominence? This section presents some of the findings of our relational analysis of the data we collected. First we introduce the figures that sit at the zenith of the symbolic universe, enjoying the lion’s share of the attention and recognition given to Instagram users in the city. Then we introduce the places and networks of places (or “scenes”) that come out on top.

The stars

Our relational analysis is able to identify prominent users whose preeminence is not simply a function of their high follower numbers, but of their location in the local network of Instagram users. The “stars” are the central nodes in these networks who are the center of attention in their local area. Looking at the most central accounts on the neighborhood level, it is striking how similar they all are. A few accounts manage to rise to the top in several neighborhoods, indicating that networks between users span across these spatial divisions. But even the accounts that do not recur as stars in more than one part of the city share many similarities. For one, they are overwhelmingly run by women. In the 21 areas³ of the city we studied, eighteen had accounts run by women in the most central location of the local network. Only three areas had male accounts at the center, and because the same account recurs in two of these, there are only two men who can lay claim to running locally central accounts. A second characteristic the central accounts share in common is that they are run by young people. According to our estimation, the average age of the women and men running

³ We disregarded the area of Noord-West due to the small number of users local interactions in this area.

these accounts is about 25 years. Only four appear to be in their early thirties, while others were estimated to be as young as 18 years of age. We know from surveys that Instagram users, at least in the United States where these surveys were conducted, are overwhelmingly young adults, and we know that a greater share of women using Instagram is greater than the share of men. In this regard, the central nodes are quite typical. It is also noteworthy that, although these users are overwhelmingly white and Dutch, there are a few exceptions. For instance, in several of the neighborhoods that make up the South-East area of Amsterdam, the central accounts are run by black Instagram users.

A third characteristic most account owners share in common is that they work in the creative professions, broadly conceived. Six work in marketing or public relations, three work in entertainment (dj, choreography, party organizer), and one works as a nutrition and lifestyle consultant. Of the remaining users whose occupations we could determine, two are students (interior design and dental hygiene), and one works as driving instructor. While these occupations, particularly in marketing and entertainment, are strongly represented in Amsterdam, the cultural capital of the Netherlands, it is nonetheless striking that they are so strongly represented among the star accounts. At the same time, it is not too surprising, either. These professions prepare people to be successful symbolic entrepreneurs. The skills learned in these fields can be applied to craft a successful image and identity online. Also, it is not clear whether these users' Instagram activity is even distinct from their professional life. Their "social life" on Instagram may just be an extension or outgrowth of their professional life and vice versa, to the extent that the lines are completely blurred. If we look not only at the number one users in each neighborhood but at some of the lower-ranked top users, we mostly find accounts run by individuals that share many of the same characteristics: young, female, with a connection to marketing, public relations, fashion, entertainment, and lifestyle. These users may not work directly in fashion, for instance, but they are fashion enthusiasts that maintain blogs on the subject. Similarly, we find food bloggers who are hobbyist restaurant reviewers. In these cases as well the distinction between work life and social life is blurred. Lastly, we find full-time city marketers who hype local scenes and explicitly turn to Instagram to promote what the city has to offer. For these individuals, too, the personal and the professional overlap: their feeds combine pictures of their clients' places (including stores or restaurants) with personal impressions of waterfronts or parks.

The hot spots

In June 2015, the Rijksmuseum, a popular art museum in Amsterdam, opened its doors after hours to a select group of Instagrammers with a sum total of two million followers. The hope was that, in allowing these Instagram users to share their views of the usually crowded museum, the museum could reach out to younger target audiences. Similarly, the INK Hotel, a recently opened boutique hotel in the Amsterdam city center, gave free rooms to Instagram users as part of their publicity campaign. While these are instances of top-down place marketing hoping to mobilize potential customers and visitors through the social network, our analysis suggests that there are more lateral and multifarious processes at play that also work to elevate certain places in the city. Even without a coordinated, planned campaign, Instagram raises the visibility and status of some urban destinations.

A former theater in the gentrified neighborhood of De Pijp now houses a coffee house. Its brick walls have been whitewashed in such a way that the uneven pattern of bricks underneath the coat of paint is still visible. Patrons at wooden tables sit either on white designer chairs or giant gray seating cushions as they sip excellent coffee and eat homemade cake made from organic ingredients. This hangout frequented by twenty-somethings bearing laptops is the central node of the largest cluster of places our analysis found. Other places in the cluster cover a wide range of establishments, but they tend to share several characteristics in common. If not located in the city center, they tend to be located in gentrifying or gentrified neighborhoods. They tend to be cafes or eateries serving premium coffees, fresh-pressed juices, fresh-baked bread, micro-brewed beers, and creative appetizers. These places are distinctly local. Though their aesthetic is a global one found in many gentrifying urban areas around the world, they are originals with a strong relation to their contexts. They are not chains like Starbucks or H&M, let alone McDonalds or Burger King. Instead, they are run by local entrepreneurs, some of whom own two or three places that appear frequently in the symbolic geography of the city, suggesting the entrepreneurs are favorably situated and/or skillful enough to ensure the visibility of their establishments. Each sandwich shop, coffee roaster or brunch spot in this cluster of places has a personal twist. Apparently Instagram users pick up on this and contribute to sacralizing these places by picturing and tagging them. In this way, these local places, which mostly do not have a dedicated online marketing staff, are nonetheless able to tap into wider publics. Their patrons essentially donate marketing labor, supporting these places not only with their economic capital but also with social, cultural, and symbolic capital.

Another much smaller yet visible cluster of places consists of night clubs and lounges. While the Instagrammers in the first cluster of places presumably post during daytime while picking up lunch, coffee or artisanal skincare products, the users in this cluster are posting pictures of parties hosted at clubs and parties at nighttime. The remaining clusters of places consist mostly of upscale restaurants. The presence of these places is not surprising given the frequent appearance of food shots on Instagram. The self-declared “foodies” and food bloggers who post many of these pictures are constantly checking out new restaurants. Whether to signal that they’ve “discovered” a new place or simply that they are paying it a visit, these users post geo-tagged images of their dishes for their followers to see. This is also a way to confirm their belonging to the foodie scene.

One thing that stands out is that the vast majority of places in this subset of the dataset are distinctly local. Although Amsterdam’s city center, like any other city, has many establishments of large chains, they do not appear at all in users’ posts. Amsterdam’s Instagram users do not at all tag establishments of large corporations but instead picture places established by local entrepreneurs. Many of the posts tagging these places also call attention to their intimate, authentic, and distinguished character. We frequently find allusions to the entrepreneurs establishing their very own and distinctive designer store, coffee salon, or sandwich shop. Apparently Instagram users feel the need to market and sacralize these places by making well-composed pictures of the interior, the products, the menu, or the clientele. It seems that Instagram and Facebook (and perhaps also review sites like Yelp, Tripadvisor or Iens) provide a boost to places that cannot afford (national or international) marketing campaigns. Their clientele supports them not only with economic capital but also with social, cultural, and symbolic capital. In doing so, they of course not only provide favorable impressions of these places but also of themselves. What the respondent we quoted above said explicitly – that she wanted to show that she went to the “new cool place” – is quite clearly the subtext of many pictures; they signal that Instagram users either discovered a new place or that they have developed an intimate relation with the places they picture. To put this another way, the users elevate the status of these places through their posts and simultaneously elevate their own status.

Conclusion

While much of the literature emphasizes that the wide distribution of social media results in horizontal networks with considerable critical potential, our case study of Instagram paints a

more complex picture. We find that Instagram users act out aesthetic and lifestyle ideals as they strategically zoom in on aspects of their life-worlds and bodies. Instagram constitutes a distinctive way of seeing that composes an images of the city that is sanitized and nearly devoid of negativity. The everyday is relentlessly aestheticized to the point that it never appears as the merely ordinary or mundane. Instagram feeds are full of desirable items, attractive bodies, beautiful faces, witty remarks, healthy foods, and impressive sceneries. Instagram users are acutely aware of this selectivity; it is what excites them about the platform and it is also what, occasionally, makes them anxious as they feel they have to comply and produce images that their followers will appreciate. As Instagram users “like” pictures and comment on pictures, they construct asymmetric relationships within Instagram’s symbolic universe. Our results indicate that these networks are far from horizontal: there are a few “stars” who receive the bulk of attention and many more peripheral users who receive comparatively little attention. The figures with the greatest capacity to shape the image of the city on Instagram are emblematic of the post-Fordist urban economy.

The ideals that are cultivated and visualized on Instagram and the uneven relationships that are constructed also implicate the city: some places are elevated and feature center stage, others remain peripheral or are altogether ignored. We find that the places that are elevated above all others are part of a neo-bohemian local scene centered around high-end consumption. Our results point towards a process of recursive elevation: as Instagram users boost their status by picturing themselves in certain places, they also boost the status of those places. Instagram users serve as voluntary marketeers for trendy and classy bars, restaurants, coffee salons, and stores by producing and circulating high-quality and appealing pictures of these places. While it is therefore plausible that Instagram users help to accelerate and sugarcoat commercial gentrification, they do so in particular ways. They do not bring attention to large chains or big brands but picture distinctly local and often small places. The proprietors of these places lack the scale to set up massive marketing campaigns but their patrons advertise their products through social media, thus giving a boost to their businesses.

While some details of our discussion are unique to Instagram, our findings also have broader implications. Social media platforms come and go, but even if Instagram were to shut down tomorrow, the culture of connectivity (van Dijk 2013) of which it forms a part is here to stay. The city will continue to be perceived and processed through digital networks, and this will continue to shape how people conceive of and navigate urban spaces.

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