

PLACELOGGING

Mobile spatial annotation and its potential use to urban planners and designers

by

Rajesh Kottamasu

Bachelor of Arts in Psychology
Harvard College
Cambridge, Massachusetts (2003)

Submitted to the Department of Urban Studies and Planning
in partial fulfillment of the requirements for the degree of

Master in City Planning
at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

June 2007

© 2007 Rajesh Kottamasu. All rights reserved.

The author hereby grants to MIT permission to reproduce and to distribute publicly
paper and electronic copies of this thesis document in whole or in part.

Signature of author:
Department of Urban Studies and Planning | May 24, 2007

Certified by:
Professor Lawrence J. Vale, Department of Urban Studies and Planning | Thesis Supervisor

Accepted by:
Professor Langley Keyes | Chair, MCP Committee, Department of Urban Studies and Planning

PLACELOGGING

Mobile spatial annotation and its potential use to urban planners and designers

by

Rajesh Kottamasu

Submitted to the Department of Urban Studies and Planning on May 24, 2007
in partial fulfillment of the requirements for the degree of Master in City Planning

Abstract

With the rise of 'Mobile 2.0,' digital telecommunications are beginning to provide deep resources of information to mobile city dwellers. Particularly striking among recent applications is *placelogg*, defined here as the practice of digitally annotating physical places with user-generated text and media accessible onsite to other mobile users. Placelogg presents potential as a means of engaging citizens with each other and with their environment, as well as distributing authority over defining what Kevin Lynch called "the image of the city." But as an emerging practice, its uniqueness as a mode of communication distinct from other forms of spatial annotation has not yet been proved.

To investigate the uniqueness of placelogg, the thesis first establishes a taxonomy of spatial annotation through which to consider the different forms, functions, and trends in official adoption of a wide range of annotating media. Next, annotations made through various media, including placelogg projects [murmur] and Yellow Arrow, are catalogued in two neighborhoods each of Toronto and New York City. A preliminary methodology

is defined to analyze and compare trends in distribution, placement and content of annotations. Placelogs are found to distinguish themselves by annotating a wide range of public and private places, identified as what Margaret Crawford calls the 'everyday space' of city residents, with predominantly subjective, first-person content, which is described as marking 'everyday time.'

Participant interviews and research on related technologies are used to support claims that placelogg could be used to identify sites of shared meaning in the city as well as to foster place attachment, claim to space and social connections among participants. Uses in community development are considered through three cases of implementation: [murmur] in Toronto, Yellow Arrow in Copenhagen and Proboscis' Urban Tapestries in London. Uses for revealed meanings are proposed in preservation, identification of development priorities and sensitivity of response in urban development. Lynch's visual image of the city is revisited as a 'meaning image' that encourages design practices of 'interactive ethnography' and 'sometimes' urban design. Finally, unfamiliarity with and differential access to technology are considered in the context of public uses for placelogg and its derived data.

Thesis Supervisor: Lawrence J. Vale

Title: Professor and Department Head, Department of Urban Studies and Planning

Contents

Introduction The city that speaks	7	3 The value(s) of placeloggging	80
Case projects	9	Placelogs as indicators of shared meaning	80
Aim and structure of the thesis	18	Impact on participants	84
1 Use and meaning of spatial annotation	21	4 Implications for planners and designers	90
Monuments	23	Placeloggging as community development tool	90
Graffiti	24	Placelogs as guides in meaning- centered design and development	98
Signage	27	Politics of participation	106
In situ media	28	Toward Place 2.0	109
Walking tours	30		
Maps	31		
Other narrative media	34		
Back to placeloggging	35		
2 A survey of annotated places	39	Appendices	
Methodology	39	A Kensington Market annotation survey data	113
Notes on the data	41	B The Annex annotation survey data	123
Kensington Market, Toronto	46	C Lower East Side annotation survey data	132
The Annex, Toronto	52	D NoLIta/North Bowery annotation survey data	148
The Lower East Side, New York City	58		
NoLIta/North Bowery, New York City	66		
Places logged across neighborhoods	73		
Content of placelog annotations across neighborhoods	75	Bibliography	162
		Acknowledgments	169

INTRODUCTION

The city that speaks

A year ago, I made a regular evening stop in Inman Square to pick up some dinner from Punjabi Dhaba, my favorite cheapo Indian take-out place in Cambridge. On my way in, a gloved hand thrust a piece of folded-up paper in front of me.

“Would you like to buy a copy of *Geogra-flight*?” a thin voice asked. Beside me stood an earnest-looking beanpole of a man wearing a suit, a black trench coat and leather motorcycle gloves. Under one arm, he carried an umbrella and a small stack of pamphlets identical to the one he was offering me. I muttered a no-thank-you and pushed into the restaurant, but as I waited to place my order, I couldn’t stop looking over my shoulder at him, making the same offer to passers-by on the corner of Beacon and Cambridge Streets. It wasn’t just the man’s peculiarity that struck me. It was my growing awareness that I’d been told about him before, by two independent strangers who had seen him on this block.

At the time, I was operating a neighborhood art project called The Daily Museum of Amazement.¹ My neighbors, and anyone who had passed through the neighborhood and seen my posters, could call into a hotline during the day when

they experienced something that amazed them—an image, a conversation, a memory. They could leave messages with the answering service reporting on their amazements. Every evening, I assembled the day’s messages into a broadcast that was then available for a few hours, both on the hotline and on the web, to those neighbors who wanted to listen.

In the week and a half prior to this particular evening, the Museum had received two messages about the man selling *Geogra-flight*: one from a woman sitting at 1369 Coffee Shop around the corner from Punjabi Dhaba and marveling at the strange clothing—a motorcycle helmet, leather gloves and a suit—of a person handing out brochures on the corner; another from a man who had been so charmed by the word “Geogra-flight” that he had to buy a copy, even though it was dark and rainy, and the man selling the newsletter was rather suspiciously hanging around outside the neighborhood bars on Cambridge Street. The caller described the puzzling contents of the pamphlet once he got it home: articles that were, in fact, only ideas for articles; half-thoughts and musings; gobbledegook.

The messages were not fresh in my mind that night, so as I pieced together the identity of the man that I had seen, it came as something like a revelation. Here was the same person that these two strangers had reported on, and now my experience was tied to their stories, which also happened on pretty much the same corner. I had only lived in the neighborhood for six months, and I didn't know my neighbors. But now, triangulated by this man, the reports of strangers, and the geography, I felt suddenly grounded, woven into a fabric of local experience. I quickly took out my cell phone and called into the Daily Museum to report on my amazement to the others.

The Daily Museum is how I became interested in what I call *placelogging*, a practice of using portable electronic devices to annotate the urban landscape in a public way that even strangers can process and share in. My experience with the man on the corner made me wonder what it would be like to know what special or strange experiences had happened at every corner or park bench or grocery in Cambridge. Calls made to the Daily Museum often made reference to specific locations, but the broadcasts were accessible from anywhere. What it would be like for places to speak their own stories to everyday citizens who had happened to amble by?

Placelogging allows such stories to be indexed and accessed at the same geographical locations where they happened. The most popular placelogging projects use mobile phones as their

primary medium. Some projects work like this: noticing a physical marker in a given location, a mobile user can call or text message the number or address given by the marker in order to receive a message uploaded by someone else. Depending on the project, the message might be text, a photo, audio or video. Users are free to tag other places with their own annotations in the same way. Some projects don't use physical markers but instead rely on global positioning systems (GPS) to anchor content to geographical coordinates; participants in these projects are usually required to download software to their mobile device in order to be alerted when they are near placelog content. A number of projects also have websites through which users can access and sometimes add annotations.

At least 40 placelogging projects have been initiated worldwide since 2002 by a mix of artists, urbanists and technology developers. The biggest surge in project development happened between 2003 and 2005, prompted by a rise in mobile device usage and the exciting first taste of 'pervasive' or 'ubiquitous' computing—the integration of computer functions into the physical fabric of everyday life. All projects have what might be called a narrative component, communicating experience of or reflection about places, but beyond this, their ambitions tend to fall into one or more of six categories:

storytelling: seeks to share personal thoughts or memories tied to places

expression: allows a channel for location-linked and mobile-accessible digital art, whether text, image, audio or video-based

platform: offers citizens an opportunity to voice and share opinions about stores, restaurants, public art, development projects, the state of neighborhoods

guide: provides information about available services, events and products at particular locations, for the benefit of both tourists and locals

social network: uses annotations as the basis for personal profiles through which users can identify shared interests and interact virtually

document: engages users in observing and recording the occurrence of noteworthy events or particular conditions of the surroundings

Exhibit 1 provides a partial inventory of placeloggging projects. Some refer to themselves as ‘spatial annotation’ or ‘locative media’ projects; I have chosen the term ‘placeloggging’ to refer specifically to a subset of projects falling under those umbrella terms which focus on engaging everyday citizens—as opposed to government agencies or media outlets—in a practice of location-specific authorship. This thesis will focus on two of the projects that have been most successful at rallying a sizable participant base: Yellow Arrow and [murmur].

Case projects

YELLOW ARROW According to its website, www.yellowarrow.net, Yellow Arrow is “the world’s first global public art project...united



Yellow Arrow sticker. (photo courtesy of www.yellowarrow.net)

by the use of a common symbol”, a 2”x3” yellow arrow sticker. The project encourages users to leave stickers in places they wish to annotate. Each sticker, purchasable through the web site, bears a unique code. After calling the Yellow Arrow phone number and entering the unique code, a registered user can enter a text message, upload a photo, audio or video taken with his or her cell phone to a remote server. The message is indexed to the unique code. Other registered users who then happen upon the sticker can dial into Yellow Arrow, enter the code and download the indexed message. They can also send a text message response to the maker of the original post. **Exhibit 2** presents a sampling of Yellow Arrow annotations.

Exhibit 1: Partial inventory of placelogging projects

GUIDE

STORYTELLING

Annotate Space

(www.panix.com/~andrea/annotate)
Interactive walking tour of the Brooklyn DUMBO neighborhood blending historical information and current events. Write and post immediate, on-site responses about places and people encountered.

GUIDE

STORYTELLING

FoundCity (www.foundcity.net)

Annotate locations with photos and keyword tags via cell phone or web interface in the creation of maps to share with friends, keep private, or publish openly on the website.

PLATFORM

STORYTELLING

(area)code (www.areacode.org.uk/)

Text message phone numbers given on signs posted around Manchester, London to receive or share histories about the given place or to convey a public message.

STORYTELLING

Geostickies (www.andrew.cmu.edu/user/noriyuki/artworks/geostickies/index.html)

Leave and read geo-located text messages about places using cell phones with installed location-based software. Receive alerts via phone when near posted messages.

EXPRESSION

Blockies (www.blockies.net)

Take pictures and place a special, printable sticker with a unique code at or near the site where the photo was taken. Send photos via MMS to the Blockies server with the unique code. Text messaging the server with the code returns the uploaded photo. Other participants can also upload more photos to the same unique code.

EXPRESSION

Grafedia (www.grafedia.net)

Make real-world hyperlinks by uploading photos to keyword@grafedia.net via Media Message Service (MMS) and scrawling the underlined keyword in blue marker on any surface. Sending a text message or e-mail to that address returns the image.

DOCUMENT

SOCIAL NETWORK

GUIDE

PLATFORM

EXPRESSION

STORYTELLING

E-lens (mobile.mit.edu/elens)

Place and photograph stickers with unique mosaic visual codes to deliver and access place-based news, sports, weather and entertainment, to make reports or give input to civil authorities, to connect to social networks, or to engage in placelogging, collaborative art-making or gaming.

DOCUMENT

EXPRESSION

STORYTELLING

MobileScout (www.mobilescout.org)

Call into the hotline and pick an exploration "mission" to catalogue experience of an event or object via voice annotation. Browse indexed recordings of others on the web site.

GUIDE

STORYTELLING

[murmur] (www.murmurtoronto.ca)
Staff records stories about places from people who contact them or from people they find through community networks, makes them accessible via phone numbers and unique codes printed on green metal signs posted on telephone poles near sites.

DOCUMENT

PLATFORM

STORYTELLING

Open City (www.terirueb.net/open/)
Record messages, ambient sounds, conversations, stories or opinions about the present state of downtown Washington, D.C. via cell phone or public pay phone. Listen and contribute to recordings on the subjects of technology, public space and civic identity, also archived on project website.

SOCIAL NETWORK

GUIDE

PLATFORM

Plazes (www.plazes.com)
Add Flickr photos, comments and reviews to profiles of mapped locations; share personal real-time location and notes about those locations via Plazer application for PC or cell phone.

GUIDE

Semapedia (www.semapeda.org)
Create printable tags linked to Wikipedia (www.wikipedia.org) content with unique mosaic codes on them. Taking a picture of the barcode using cameraphones with 2D Barcode Reader applications installed calls up the Wikipedia page via mobile web.

SOCIAL NETWORK

GUIDE

PLATFORM

STORYTELLING

Socialight (www.socialight.com)
Map and share geo-tagged digital photo- and text-based Sticky Notes via web or mobile. When mobile, get automatic alerts when near Sticky Notes from affiliated social networks and subscribed channels of content. Includes professionally authored content (reviews, attractions).

EXPRESSION

Tactical Sound Garden (www.tacticalsoundgarden.net)
Plant or remove sound files at specific locations using a WiFi enabled mobile device (PDA, laptop, cell phone). Drift through wireless “hot zones” listening to located recordings and songs with headphones and a WiFi enabled device.

DOCUMENT

GUIDE

PLATFORM

STORYTELLING

Urban Tapestries (urbantapestries.net)
Use GPS-enabled PDAs and cell phones to map and share ‘threads’ connecting sites of text, audio, video and photo annotations. Research project to explore social and cultural uses of the convergence of place and mobile technologies.

DOCUMENT

SOCIAL NETWORK

GUIDE

PLATFORM

EXPRESSION

STORYTELLING

Yellow Arrow (www.yellowarrow.net)
Place a Yellow Arrow sticker at or near a site and upload text message, photo, audio or video to the Yellow Arrow phone number, with the unique code printed on the sticker. Text messaging the phone number with the code returns the uploaded content and offers the option of text response.

Exhibit 2: A selection of Yellow Arrow annotations, New York City



Days just locked here, small bike with a duck-tape banana seat. It seemed to say "Can I come over to play?"

posted by sirHC
Bedford Ave
at North 7th Street,
Brooklyn



My girlfriend and I had our first date here 2 and a half years ago. It's Café Habana and it's still one of our favorite places.

posted by new612
Elizabeth Street
at Prince Street,
Manhattan



These guys always have the record I'm looking for. Gil Scott-Heron, Chicks on Speed, Devo.

posted by BChico
218 Bedford Ave,
Brooklyn



"Take it out on the streets, in the avenues. Play it loud like you always wanted to." - The Alternate Routes

posted by tgal
Spring Street
at Mulberry Street,
Manhattan



I recommend walking this block listening to Lyle Lovett. What is it about country music that shapes melancholy?

posted by Ziztrrr
Forsyth Street at
Delancey Street,
Manhattan

photos and annotations taken from www.yellowarrow.net

An informational video on the website brands Yellow Arrow as a tool in “reclaiming public space” from mass media marketing and in creating an alternative or independently-minded tour of the everyday in a given city. The project positions itself both as heir to countercultural sticker art and as facilitator of what might be called 'punk-tourism.' Its catchphrase, “What Counts,” is printed on each sticker and does the dual job of supporting the brand (Michael Counts is company’s founder) and adding emphasis to the sticker: the suggestion is that “What Counts” is what any given individual decides to mark with a Yellow Arrow sticker. To find out why it “Counts,” users must download the message attached to the sticker.

The project’s website also offers a sleek index of all messages, Yahoo! Maps of their locations, the opportunity to respond to the original message through the website, and a record of all responses to the original message via web and cell phone. Further, it allows users to organize “projects,” grouped collections of their arrows that can be used in creating a sort of guided tour around a given theme or interest. So as not to instigate strong objections to their placement, the stickers are removable, and many are eventually removed by property owners and city workers. As a result, the website archive becomes all the more important as a record of stickers placed. To date, the project reaches almost 400 cities in 35 countries, and over 10,000 stickers have been placed.

And yet, for all of its success, Yellow Arrow is soon coming to a close. The enterprise was never self-sustaining, and

having identified no way to transition from public art project into full-fledged company while maintaining the project's integrity, its founders have decided to move on (J. Shapins, personal interview, December 18, 2006).

[murmur] The website for [murmur], www.murmurtoronto.ca, describes it as “an archival audio project that collects and curates stories set in specific Toronto locations, told by Torontonians themselves.” A green [murmur] sign—in the shape of an ear, with a telephone number and a location code printed on it—is posted on a telephone pole or lamppost at each location where a story is available to cell phone users. Because the medium is exclusively audio, the messages available through [murmur] can be several minutes long, as compared to the relatively brief one- to three-sentence messages uploaded by Yellow Arrow users. Some



[murmur] sign.
(photo via
flickr.com)

Exhibit 3: A selection of [murmur] annotations, Toronto



“The first apartment I ever had was right here, uh, right above the Moonbeam Café. The time that I lived here it was a t-shirt store called *Altern-atus* something, and I had a crush on the guy who ran it, so I would sometimes go in there to look at the t-shirts. But mostly to look at him. And what is the back of the Moonbeam Café was, in fact, my living room. They sliced up what used to be the house that I lived in. And if you go to the very back of the Moonbeam, that’s where I used to chase a cat around that I didn’t like. It was the filthiest apartment you ever saw in your life. It was my first apartment, and apparently the first apartment of the other people I was living in—living with—as well, because, boy, was it filthy. I lived with a dominatrix who had a rooster alarm clock that she’d leave on, even when she wasn’t in the house. Anyway, so there’s a story to how I left this place. Essentially, I was there in the summertime one day in my bedroom which was at the back of the building; you can’t see that. And I heard what sounded like wood being broken. As if someone was breaking pieces of wood over their knee. So I descended the stairs, went out through the front door that’s just to the right of the door that you see in front of you. I opened the door, and I was hit by this wall of heat that actually made me step back and shut the door, the wall of heat was so intense. And this wall of heat was generated by the flame emanating from the building directly across the street from the Moonbeam. And, basically, the entire building was on fire. I went upstairs and looked out through the windows that you can see above the Moonbeam, and saw that one of the electrical wires, I guess as a result of the fire that connects—connected our building to their building, the one across the street had somehow disconnected and was exploding sparks, and basically stood there a while in shock watching this building across the street burn. It was a big fire. And what was interesting about it was, it became for me a symbol that I needed to leave. And so, I moved out shortly thereafter. And I always think that the turning point where I really decided that it was time to go was when that fire happened. My name is Chris Williamson.”



“The perfect dress came to me when I walked into Courage, My Love and found the perfect size dress, It was long and black, halter top with a high neck, and a yellow, gold, and red African pattern on it. I wore it out, maybe a week later, it was full length to the ground with heels, and I walked into one of the music stores in the market, and the man behind the counter called me an African goddess, and that was the best dress I ever had. My name’s Emma, and I love the Market, because it made me a goddess.”



“Here we are on Augusta Avenue, on the site of what was once Kruskey’s Meat Market. In the late 1960s, I used to come down here regularly with my mother on our weekly shopping expedition. I must have been around four years old, only in kindergarten or nursery school half days. So, come down here and there was always lots of excitement. Live chickens in crates and sometimes running around on the street. There was sawdust on the floor and people arguing in Yiddish. It was an exciting place. One such trip down to Kruskey’s Meat Market, the two butchers behind the counter were arguing even more fervently than usual. And one pulled out a meat cleaver and started chasing the other one around the butcher shop. It was quite a scene. That’s what I remember from this site, is just the excitement from all the chickens and the butchers. It was a fun place. My name’s Warren Morris, and I’m now 39 years old. So if I was three or four years old, that would probably make it 1968.”

photos and annotations taken from www.murmurtoronto.ca

messages suggest that the listener walk around or follow a particular path.

The project was established in Toronto's Kensington Market neighborhood in 2003 with the assistance of the Canadian Film Centre's Habitat New Media Lab. [murmur] specifically identifies itself as a storytelling project; its website asserts that, "Once heard, these stories can change the way people think about place and the city at large. These are the stories that make up Toronto's identity, but they're kept inside of the heads of the people who live here. [murmur] brings that important archive out onto the streets, for all to hear and experience." **Exhibit 3** presents a sampling of annotations.

While [murmur] stories are accessible via cell phone to any casual passer-by, storytellers are recorded by [murmur] staff, usually onsite, using recording technology that ensures comprehensible audio playback. They are also edited for length and coherence. The project is not citywide, but isolated to three Toronto areas: Kensington Market, the Annex, and along the well-trafficked Spadina Avenue. [murmur] has also launched in San Jose, Calgary, Vancouver, Montreal and Edinburgh, Scotland. Its creators position [murmur] as a project to be co-opted by community groups and sponsored in part by cultural councils.

The stronger institutional ties for [murmur] than for Yellow Arrow translate into the way it reads: it doesn't grow virally, but with the same designed and measured handsomeness of its signs.

Its annotations are also not as brief and off-the-cuff as Yellow Arrow's, likely due to the planning and purpose that must go into recording a story. However, another important distinction is that once a sign is placed, it becomes an opportunity for other people to share their stories about that particular place, to add to the archive for that site or for other nearby sites. Though there are fewer annotated places through [murmur] than through Yellow Arrow, it is much more common for a given site to host multiple annotations.

The stories are also available through the website, indexed to colorful and charmingly hand-drawn maps of the neighborhoods they annotate and accompanied by photographs (taken by [murmur] staff) of the sites annotated.

Other placeloggging projects have generated interest among scholars and journalists, but many have been employed only for special trials like festivals and exhibits, or have been regarded by their creators merely as prototypes for consideration in the next iteration of technology design, or have failed to reach enough of a public to take off. Potential participants have likely been deterred by unfamiliarity with using mobile devices for other purposes than making calls, and popular enthusiasm for location-linked content has largely migrated to the Web since Google introduced its powerful and easily amendable Google Maps application in 2005, which has made the capacity for collaborative and 'mashup' mapping easy.

Moment of the Mobile

But the story isn't over for placelogging. Mobile applications serve a different function than the Web: the interface of a cell phone or PDA is smaller and less maneuverable than a PC, and content is delivered to users who are in motion, in crowds, or away from their desk. Perhaps most importantly, mobile applications provide opportunities to deliver information relevant to where (and when) the user's *body* is, to allow for immediate response to a given environment. Location-based content delivery is considered the keystone of mobile web—or 'Mobile 2.0'—applications (de Waele 2006), and in this light, the prototyping done by early placelog developers was highly valuable. Newer projects like Plazes, which orient around social networking, have enjoyed promising starts, and spatial annotation of various kinds—placelogging, gaming, directory information—features in the forthcoming offerings of a number of major cell phone manufacturers and service providers.²

Placelogging's integration into major corporate offerings might suggest the nearing obsolescence of many existing independent projects, but it also promises a much broader participant base. The technology is also evolving to lower procedural barriers to participation—projects like Semapedia and E-lens forgo dialing in for photographing unique mosaic code stickers; Socialight and Urban Tapestries operate without physical tags altogether, simply relying on GPS technology and automatic alerts.

Many prognosticators expect user-authored content to feature prominently in the future of mobile web use. The popular photo-sharing and video-sharing sites Flickr and YouTube already both allow users to geo-tag their contributions to global and searchable maps. A host of mashup geo-tagging and mapmaking sites encourages users to create maps of their own personal experiences and interests to overlay on the global base map. The open adaptability of sophisticated web mapping applications like Google Maps has not only satisfied popular fervor but built upon it, cultivating interest both in subjective and revisionist mapping, and in situating individual experiences in geographic context.

But what does it mean?

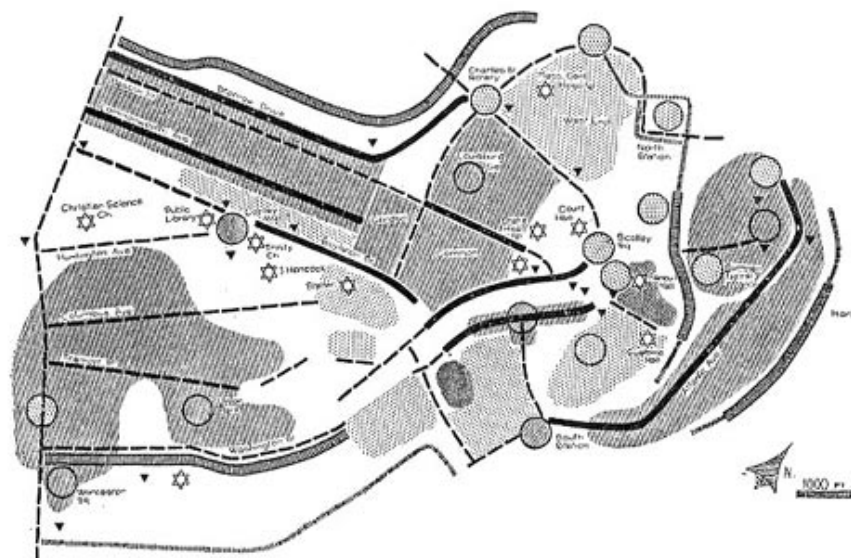
The promise of a virtual layer of user-authored messages, opinions, stories and media about, generated at and tied to specific places in the urban landscape requires a significant shift from considering authored content and commentary on sites like Flickr and YouTube. Buildings and city spaces are considerably different than photos and videos; the stakes of their ability to engage are much higher, and the people who make decisions to shape them are answerable to many more people, including many of the people who might be making annotations. In recent decades, there has been both heightened interest and heightened imperative to solicit and incorporate public input and participation in decision-making processes affecting the development of the city. In this

context, then, it seems pertinent to consider the potential utility of placelogging to urban planners and designers. Technology and new media have been increasingly adopted by professionals in these fields to engage community awareness and participation, as well as to unearth local knowledge, identify assets and gauge the strengths and weaknesses of plans and proposals. Perhaps placelogging could assist in that effort.

Meanwhile, several placelogging projects position themselves in direct opposition to traditional planning and design practices, as tools in redistributing public recognition of important places in the city. Urban Tapestries' director Giles Lane goes so far as to write:

The possibilities for using these technologies to weave our own structures of narrative and creation through the fabric of the city enable a radical shift of capabilities, allowing for people to become both their own urban planners, defining their own visions of the city, or...designers of new conduits for navigating urban experience (Lane 2004a, 6).

It's particularly bold to suggest that subjective experience, organized by placelogging, can be a tool in rejecting and replacing the city as given. The claim stands to challenge Kevin Lynch's seminal 1960 work *The Image of the City*, in which Lynch and his team collected and composited subjective experience of the city to better inform the practice of planning and designing it. Lynch's approach was



A composite cognitive map of Boston from Kevin Lynch's *Image of the City* (1960).

based on visual and spatial form: his recommendations strove for a singular, robust public image of the city based on the legibility of its paths, nodes, districts, edges and landmarks. Though he acknowledged that subjective meaning and memory could contribute to the weight of those designations, he held that visual and formal enhancement of the landscape was sufficient to solidify a city's identity and navigability. Forty years later, with media saturation allowing citizens access to an endless and dynamic supply of meanings and memories—even while in transit—perhaps it's now time to reconsider the weight of that contribution.

I recently attended a conference on place-based mobile content development where a number of researchers and technologists presented work about enhanced experience of place history, negotiation of meeting points and evolving social structures through locative gaming. Remarkably, almost none of the presenters at this three-day, place-focused conference mentioned the built environment! Every discussion of place and its significance centered on the self-organized activities that happened there with the aid of mobile devices—one researcher called this phenomenon ‘Space 2.0,’ meaning that its primary purpose, like Web 2.0 and Mobile 2.0, would be to enable sharing and collaboration among users. There was no mention of obelisks or plazas or architectural character or streetscapes in this discussion of the function and use of urban space.

While I don’t think that built and visual form are becoming quite as irrelevant as my conference-mates might have suggested, it does seem like communication and information are becoming hardy allies in both navigating and understanding the city. Placeloggging seems to offer a view into the personalized meanings that people attach to places—specifically, personalized meanings that other people can use and respond to in real-time, onsite. Rather than posing a challenge, this function actually seems like it would be of some value to urban planners and designers in gaining new awareness of city form.

But it’s worth questioning the ‘radical’ nature of this contribution, and just how unique placeloggging really is. There are many other media of spatial annotation. Some of them have been around for a long time and already have established uses and users (including urban planners and designers). To be of particular value, then, placeloggging would have to offer new and distinct ways of both engaging a public and expressing the meaning and significance of places in the city.

While the means of placeloggging will quite possibly undergo significant change over the next several years, let us assume that the capacity will persist for annotating places with content relevant to experiencing them. The question this thesis aims to address is: what distinguishes placeloggging from other types of spatial annotation, and of what significance and use might it be to urban planners and designers?

Aim and structure of the thesis

Chapter 1 will undertake a comparative study of previously existing modes of spatial annotation, their benefits, participant bases and the dialogue that surrounds them. I will situate placeloggging in their context based on shared utility in claiming space and engaging citizens, and introduce the claims of project developers that distinguish placeloggging from other forms of spatial annotation.

Chapter 2 will ask, what types of places do placeloggers annotate, and in what unique ways are those places annotated? Part of the challenge of this research is developing methodologies for analyzing the siting and content of annotations and for interpreting their meaning. Lynch solicited cognitive maps of spatial form and structure from his subjects to identify what formal elements contributed to the navigation and identity of a city. I will conduct a visual survey of annotations in selected neighborhoods of Toronto and New York City, two cities where [murmur] and Yellow Arrow are hosted, respectively. I will draw comparisons among the distribution, types of places annotated and the content of those annotations for a variety of media. From this comparison, I will build a profile of both the redundant and the unique contributions of placelogging indicated by the two projects.

While analysis of Yellow Arrow and [murmur] does not constitute a representative study of existing placelogging efforts, these are the only two projects in North America that I am aware of which have generated substantial and varied participation in a narrative form of mobile spatial annotation over an period of several years.³ They are, therefore, the best and perhaps only real data sources available to me. My analysis of the annotations made in neighborhoods hosting each project can serve, then, as a study in methodology, if not as a definitive investigation into the placement and content of placelog annotations in general.

Chapter 3 will assess the value of placelog contributions identified through Chapter 2's analysis. I will gauge the capacity of placelog annotations to indicate shared meanings and significance, and I will review surveyed annotations, personal interviews and existing literature on placelogging and other digital communities to verify project developers' claims of particular participant benefits. Both assessments will include a brief discussion of what distinguishes these contributions from those made by other media of spatial annotation.

Chapter 4 will present the argument that placelogging projects could be of use to urban planners and designers. Building on the contributions identified in Chapter 3, I will present two primary types of uses for placelogging projects, as community development tools and as indicators of shared meaning for use in urban design and development. I will offer three case studies in which placelogging projects were used for directed community development goals: along Spadina Avenue in Toronto, where [murmur] was recruited to help tell the stories of the area's various cultures as part of the city's cultural plan; in Copenhagen's South Harbor, where Yellow Arrow was adapted to engage discussion about development goals between residents and political candidates; and in West London's Southall, where Urban Tapestries was tested as a means of building social connections and constituency for shared concerns among estranged residents of a low-income neighborhood. I will also discuss the possibilities for using placelog

annotations as data in the evaluation, development and design of public space and revisit Kevin Lynch's formal elements of imageability in the context of shared meanings and significance. Finally, I will identify some concerns about the adoption of placeloggging, including variable comfort levels with and differential access to the technology required to participate.

Notes

¹ <http://www.thatwasamazing.org>

² See Nokia's Mobile Augmented Reality Applications (<http://research.nokia.com/research/projects/mara/index.html>), Siemens' Digital Graffiti (<http://www.siemens.com/ct-pictures/ct200502001>), Microsoft's SlamXR (http://msi.ftw.at/papers/MSI07_Counts.pdf) and Yahoo!'s Zonetag (<http://research.yahoo.com/zonetag/>) for examples.

³ Urban Tapestries and Socialight are two other projects that have generated a relatively sizable number of participants and annotations, though neither is a primary case study here. Urban Tapestries is a UK-based research project into the modes and uses of spatial annotation in community building, local knowledge sharing and urban regeneration. I will consider the project in Chapters 3 and 4 in regards to its use in community development practices, but participation is based on research groups (albeit drawn from the public the project hopes to serve) and annotations are not publicly available.

Socialight is a public project with a moderately sized participant base (at least 600 users), but it lacks the spatial concentration of user-generated content in any given area to make it useful as a primary case study. I will, nonetheless, include its annotations in my neighborhood surveys, simply to offer comparison across different placeloggging projects.

CHAPTER 1

Use and meaning of spatial annotation

We can draw bloodlines between placelogs and a host of other media used for spatial annotation. Spatial annotation is the practice of linking location-relevant messages, art or other forms of communication to specific places in the physical landscape.

Exhibit 4 charts out its various forms, distinguished by medium, onsite or offsite manifestation and the degree to which they involve physical marking of the landscape. Of course, not all instances of each medium constitute spatial annotation: a sign promoting trips to Tahiti does not directly communicate a message that is relevant to its location; neither does a summertime ‘in situ’ projection of *Raiders of the Lost Ark* on an exterior wall.

There are some further ambiguities of distinction in this taxonomy. The distinction between onsite and offsite media is hazy: increasing mobility of electronic resources undermines the notion of ‘offsite’ altogether. Even printed media like maps and guidebooks can be accessed from any given location, on- or offsite. But while annotated maps and other narrative media might all be amenable

to onsite access, they are not anchored to the site and are equally accessible remotely. Finally, while I list placeloggging among non-physical annotation, projects like Yellow Arrow and [murmur] also have physical marking components. The crossover with so many different media is, in part, what distinguishes placeloggging, a topic that I will return to at the end of the chapter.

Each listed medium in the taxonomy has its own history, utility and set of connotations in use and adoption. The remainder of this chapter will review the use of each medium and its consideration as a tool by community groups and urban professionals in annotating the city. In addressing each medium, I will try to answer the following questions:

- What are the different forms of each medium of annotation?
- What functions do these forms serve?
- Who tends to make these annotations?
- What are the political issues surrounding use of the medium?

Exhibit 4: Taxonomy of spatial annotation

mode	medium	type
onsite marking	monuments	<ul style="list-style-type: none"> commemorative markers (structures, objects, plaques) depictions (murals, sculptures) heritage trails
	graffiti	<ul style="list-style-type: none"> depictions (scenes of local events, portraits of local people) tags (authorial symbols, names, territorial markers) messages (critiques, directed speech)
	signage	<ul style="list-style-type: none"> messages (location-specific announcements, requests or directives) advertisements (for local events or amenities) narratives (scientific explanations, development plans) district identifiers (neighborhood branding)
	in situ media	<ul style="list-style-type: none"> installations (projected video critique, location-specific audio playback) mobile spatial annotation <ul style="list-style-type: none"> [onsite] placeloggng locative gaming (geocaching, role-playing, strategy) resources (directory information) local broadcasts (short-wave radio)
onsite unmarked information	walking tours	<ul style="list-style-type: none"> personal orientation (from neighbors, friends) niche interest tours (amenities, plants, wildlife) historic tours
	maps	<ul style="list-style-type: none"> single author maps <ul style="list-style-type: none"> guidebooks individually authored maps (online or paper) dynamic collaborative maps <ul style="list-style-type: none"> projects (tour guides, documentation, [offsite] placeloggng) incidental collections (georeferenced media)
offsite information	other narrative media	<ul style="list-style-type: none"> reviews (online or paper) documentary media (text, film, photo, audio) histories (oral or written) located fictions (novels, films)

- How have community groups and urban professionals adopted the medium?

Monuments

Monuments need not be enormous and domineering structures. Here, I use the term ‘monument’ to refer broadly to any physical intervention that commemorates or celebrates an event, individual, group or condition. This set includes memorial sites like New York City’s Freedom Tower and the Lincoln Memorial as well as other built markers like historic plaques and the preserved homes of celebrated figures. It also includes public art that monumentalizes the local, such as murals or sculptures that depict a key event in the civil rights movement, a prominent neighborhood personality or a local cultural myth. Physically marked heritage trails, like Boston’s Freedom Trail or Nashville’s City Walk, are a third type

of monument, marking a series of sites as part of the celebration of a singular history or culture. Monuments do not always annotate the site on which they are located specifically, but they often bear relevance to the culture or geography of the immediate vicinity.

Monuments serve various functions. Explicitly, they aim to cultivate shared cultural narratives, celebrate political, social and cultural contributions, and provide sites for collective reflection or grief (Fogelson 1989; Osborne 2001). Writers and scholars have also identified many implicit functions: purveying ideology, guarding against cultural amnesia, solidifying or altering the identity of a site or region (Hayden 1995; Osborne 2001). These very political connotations draw from the authoritative claim to collective memory made by monuments: “Something happened here that we should all remember.” That they are commonly built or identified by government agencies—historic commissions, the Department of



Different types of monuments. From left: the Lincoln Memorial in Washington, D.C., (commemorative marker); a mural in Mexico, NY connecting local sites to abolitionist history (depiction); a portion of Boston’s Freedom Trail (heritage trail) crossing the street to connect sites in a historical narrative. (photos via flickr.com)

Public Works, the Mayor's Office, the National Trust—only enhances their political valence.

It's an unwieldy and politically prickly process to designate historical moments for an entire, diverse populace. The dialogue around government-sponsored monument-making has generally found it to be insufficient at marking sites where individuals and communities hope to preserve shared memory (Hayden 1995; Osborne 2001). As a result, informal or temporary monuments appear all the time without state sponsorship, approval or awareness. Members of a community might place flowers, photographs and candles outside private homes or on street corners in the wake of tragedy that might not otherwise be publicly memorialized. Graffiti artists might annotate a building or sidewalk with text or images to mourn or mark an event, especially if city agencies and property owners would otherwise not choose to preserve the public memory of that event (Hanauer 2004, 34).

Despite these ubiquitous processes of ad hoc monument-making, the vast majority of permanent monument makers are government agencies. Over the last few decades, community groups and public historians have sought to redistribute the power involved not only in marking sites, but also in validating particular histories (Lowenthal 1996; Osborne 2001). In particular, a large movement has swelled in response to the omission of public monuments that tell the story of marginalized or underrepresented populations, specifically those of race, class and gender (Hayden 1995; Dwyer

2000). In the early 1980s, Dolores Hayden's Power of Place Institute began working with community organizations in Los Angeles to identify sites of historical significance to those communities and to produce site-specific, permanent monuments to those histories. On a street in L.A.'s Little Tokyo, The Power of Place partnered with the L.A. Community Reinvestment Authority to build a public art sidewalk into which brass-outlined imagery of wrapped shopping bundles were inlaid and combined with text from residents' personal statements (in both Japanese and English) to illustrate the street's history and value as a home for Japanese small businesses (Hayden 1995, 221). The project aimed both to commemorate history and to support the survival of family businesses on the strip in the context of real estate redevelopment. This type of sensitivity and commitment on the part of public historians and community organizations has made it easier to rally local institutions, agencies and arts grant-makers around the production of locally relevant monuments, but demand still outstrips financial—and sometimes legal—capacity.

Graffiti

Graffiti, by contrast, is a cheap medium of annotation whose common illegality is a minor barrier. Through image, text or abstraction, graffitiists make unsolicited marks on publicly viewable, though not always publicly owned, surfaces (Hanauer 2004, Ferrell 1995)—even on other forms of annotation like monuments and

signs. Despite its transgressiveness, though, most graffiti does not make explicit political or social gestures (beyond the aforementioned do-it-yourself monument-making). A fair amount of graffiti is message-based, like that found in the stalls of public toilets. More common in outdoor public spaces are semi-abstract ‘tags’—the stylized signature of the mark-maker—or image-based depictions (Hanauer 2004). The materials of production have branched out from the classic can of spray paint, but are mostly still materials that can be applied quickly: marker, chalk, even house paint. Paper and sticker-based graffiti present important distinctions from traditional drawn graffiti: they offer the ability to produce tags, statements or images in large batches and to quickly apply them to a multitude of sites in the tradition of guerrilla advertising. They also allow graffiti artists to make more intricate imagery and to work more in mixed-media fine arts traditions.

The elaborate quality of much graffiti imagery, as well as the stylization of tags, supports the notion that graffiti functions as a public form and forum of personal expression (Hanauer 2004). Sometimes that expression is simply one of presence: since the property doesn’t belong to the graffitist, the mark is the only way to establish the record of his or her being there. Many scholars and writers have linked that record to a sense of empowerment by enhanced territorial claim (Ferrell 1995; Hanauer 2004). Jean Baudrillard wrote: “The graffitists themselves come from the territorial order. They territorialize decoded urban spaces—a



Mixed media graffiti. (photo via flickr.com)

particular street, wall or district comes to life through them, becoming a collective territory again” (Baudrillard 1993, 79). Graffiti tied to gang turf designation illustrates the extreme of this type of territoriality. But even in the removal of comparatively innocuous tags and images by property owners, there is an implicit recognition that graffiti constitutes a claim to the marked space, and that its removal is a way of wresting back control (Ferrell 1995; Childress 2004).

The exclusion to which the graffitist’s claim responds is variable. Lack of property ownership among the young or

disenfranchised is commonly cited (Childress 2004); so is social exclusion, whether by race, income or other status (Bandaranaike 2001, 4). The crossover of these groups with criminal perpetrators, as well as connotations of lawlessness, disrespect for property rights and property owners, keeps most communities wary and intolerant of graffiti (Ferrell 1995). At the same time, graffiti constitutes an otherwise rare opportunity for the dispossessed to actively shape the public realm. As the online art and research collective Social Fiction writes:

The purpose of each tag is to turn its writer from a spectator of architectonic form into a self-professed creator of urban experience. When done properly, a tiny tag can attract more attention than the building it is written on (Social Fiction 2007).

In this sense, graffiti can be considered an act of critical engagement with the city.

It can also be an act of social engagement. Graffiti artists not only come to recognize each other's tags, but also to physically respect and visually respond to each other's work. There is a social structure that develops within a community of graffiti artists, even though they may only interact through the interface of the surface (Ferrell 1995). Through its own particular sort of call-and-response and collaboration, graffiti can be seen as a link between Surrealist Exquisite Corpse drawing practices and open source knowledge depositories like Wikipedia (and many placelogs).

The positive aspects of graffiti have not gone unconsidered. Especially since the art world began to formally recognize graffiti in the 1980s, a growing contingent of urban dwellers have come to recognize beauty in it and to believe that it can be a relatively safe and productive mode of expression and exchange (Alonso 1995, 13). Nonetheless, most cities have anti-graffiti laws, and vandalism remains a concern. Youth development groups have begun to seek out existing graffiti communities in the interest of marshalling their energies toward sanctioned sites of expression, whether murals or legal graffiti walls. The Up Your Street Project¹ in Leeds, sponsored in part by the Leeds City Council, runs workshops called 'graffiti

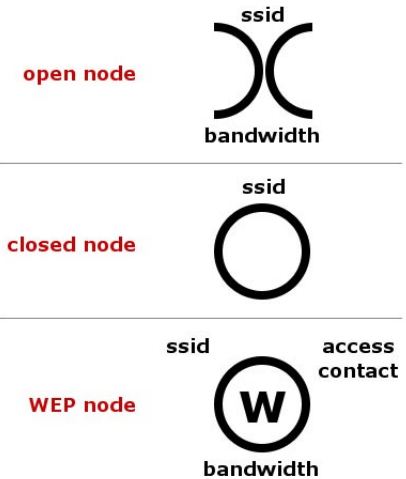


Collaboration among graffiti artists creates a varied canvas. (photo via flickr.com)

jams' with youth through which artistic skills and personal and social development are nurtured while marking sanctioned walls. In St John's, Newfoundland, a similar project is located right beside City Hall. Reflecting on it in an article called "A Starter Menu for Planner/Artist Collaborations," Stephen Dang wrote, "The Wall has become a public discourse in images and an important means of personal and political expression for an often ignored, and indeed often silenced, community of urban youth" (Dang 2005, 124).

Signage

It's usually easier for communities to accept the presence of signs than that of graffiti, because signs more often have an explicit purpose and don't tend to spread into private property. Signs are informational or directional communications, usually in verbal or graphic form, that are printed onto media and placed in the landscape. That media can be paper, metal, cloth, plastic or another medium—or the communication might be inscribed directly on a surface, like a wall or a rock. But what differentiates signage from graffiti is its discursive communication of information or direction. A valuable distinction is given by the yet-unpopular but innovative urban practice of 'warchalking': the drawing of symbols in public space to indicate open Wi-Fi networks. Warchalkers who find Wi-Fi nodes draw special, standard symbols on nearby objects—walls, sidewalks, lampposts—to indicate an open, closed or Wireless Enabled Privacy (WEP) node. While warchalking makes use of



Warchalking indicates an open node (photo via flickr.com); a primer for warchalkers (via wikipedia.com)

traditional graffiti materials and practices and promotes a flip attitude toward ownership and property rights (encroaching on both the physical space and the network space of others), it is fundamentally an advertisement and only incidentally an expression, akin to a poster alerting you of free donuts.

Signage has a number of functions. I will set aside way-finding and site identification (including general street signs and commercial signs) and focus on four other functions that communicate knowledge about the life and inhabitation of places: advertisement, messaging, narrative communication and district identification.

The types of advertisements I would consider spatial annotation are those made about places (stores, restaurants, galleries, venues) and about events and amenities (public meetings, performances, garage sales, free Wi-Fi, donuts, even lunch specials). Messages include location-specific announcements, requests or directives: lost and found objects, pleas not to tread on the grass and “No trespassing” signs. Narrative signs provide information about sites: local histories, scientific accounts of native flora and fauna, development plans. District identifiers can be used to brand a neighborhood based on a prevalent activity, dominant cultural presence or history, and may take the form of banners or special street signs.

As the variety and varying formality of signage indicates, its production doesn’t fall to a specialized group of people. Advertisements and messages, especially, can be printed on flyers and posters and put up by anyone, though some cities have anti-postering laws that limit legal posting sites to private property and designated bulletin boards. Narrative signs and district identifiers are typically conceived and produced by city agencies, which can include departments of urban planning and design.

Community groups, planners and designers have used signs for all types of purposes: to advertise public meetings; to announce the presence of a neighborhood watch; to inform passers-by of their voting rights. District identification is a less frequent motivation

for sign-making, but it has a well-recognized role in placemaking and district legibility strategies. Its use in historic preservation and historical tourism has been well supported by public funders like the US Department of Housing and Urban Development’s (HUD) Community Block Grant Program (Department of Housing and Urban Development 2004). However, as in the case of monument-making, narrative- or identity-based signage runs the risk of excluding valuable narratives or identities and undermining them as a consequence (Osborne 2001). Activist groups and individuals have used signs to augment more elaborate or expensive institutional designators: in Toronto, activist Tim Groves has organized a group of volunteers to create large posters challenging common historical accounts of places with narratives describing racial violence, politicized exploitation and the whitewashing of history (Duncan 2003).

In situ media

In situ media is non-physical communication via media that only exist onsite. This category is the newest and fringiest form of popular spatial annotation in the taxonomy, and perhaps because its earliest practitioners were artists and activists, it has focused more on marginal and underrepresented populations than the other forms. In situ media tends to include media-based public art projects, like the projections of politically challenging images onto buildings by artists

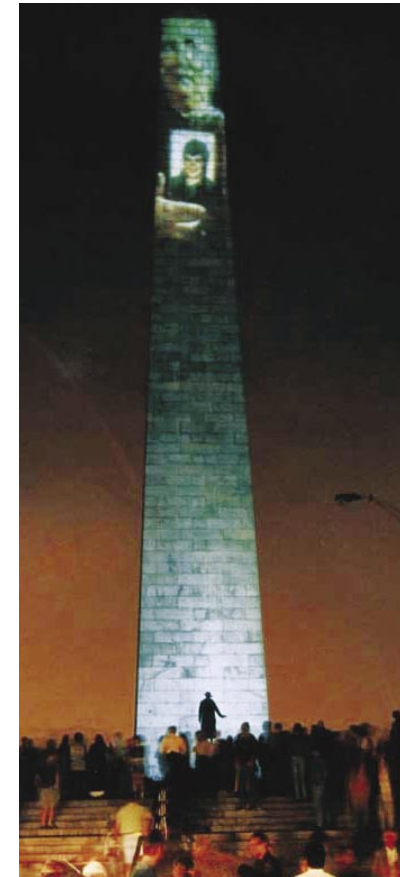
like Krzysztof Wodiczko, whose works juxtapose a “memory of the nameless” with monumental structures (Wodiczko 1999), or Graffiti Research Lab², who use the media and sites of graffiti expression (and suppression) to communicate the concerns of the graffiti community. These projects exist only onsite, but their annotation is not tangible.

Similarly, low-power radio transmissions are in situ because of their limited range. Non-commercial broadcasters who wish to communicate to a listening audience in a limited area can make low power broadcasts within a maximum range of 3.5 miles in which they share opinions, stories or music.³ Because of the small range of such broadcasts and the non-commercial, fringe-nature of their practice, content is often locally specific or simply first-person based. Low power stations tend toward reporting on locally relevant issues and available services like health care and educational facilities (Kelliher 2003).

While the political critique delivered by artists and collaborators who work on most media installations usually speak to concerns shared by some greater population, authorship remains limited to a small group. By contrast, community radio can provide a pulpit for a large number of participants over time, and a number of community groups across the U.S. have initiated low power broadcasting projects with great success. The Southern Development Foundation operates KOCZ 103.7 FM, a station enlists local residents in programming music, community spotlights,



Above: digital projection by Graffiti Research Lab on the side of a warehouse protests the arrest of graffiti artist and writer AVONE. (still from Quicktime movie at graffitiresearchlab.com)



Right: a 1998 video projection by Krzysztof Wodiczko on the 221-foot Bunker Hill Monument in Boston's Charlestown. Struck by Charlestown's high murder rate, the artist filmed interviews with mothers speaking about personal experiences around themes of violence, freedom and tyranny. (photo via pbs.org/art21/)

announcements of public meetings and events, and dialogue about local issues (Fuller 2003). WRTE-FM “Radio Arte,” a youth project of the Mexican Fine Arts Center Museum in Chicago, broadcasts music and original programming, including a multi-segment look at local housing displacement. The 73-watt transmission serves the

predominantly Mexican neighborhood of Pilsen—it is hard to pick up at two miles’ distance (Charlé 2003).

As it also provides onsite, non-physical communication, mobile spatial annotation qualifies as in situ media. I will return to placeloggging at the end of the chapter, but here I would like to mention two other types of mobile annotation, locative gaming and public resources. The practice of locative gaming can be similar to that of placeloggging: participants receive digital clues, instructions or alerts that prompt them to make strategic decisions in urban space. Locative games can be treasure hunts or manhunts, mysteries or physical challenges (Chang & Goodman 2006), but what differentiates them from placelogs is that the messages they convey to participants are either closed to user authorship or largely instructional rather than narrative. While a number of locative gaming projects do have a social networking slant to them, they have not yet been adopted by community development professionals as community-building tools.

By public resources, I mean information databases provided by a central structuring system. A number of mobile service providers already offer these resources. Sprint’s Garmin Mobile service⁴ offers information on local attractions and gas stations, real-time traffic updates and weather forecasts. The Wiki City project, under development at MIT’s SENSEable City Lab, aims to offer real-time, sensor-based information on human and vehicle clusters,

locations of friends, environmental sensor input, location-based wikis and services in the interest of fully-informed urban navigation (Brown 2007).

Walking tours

The simplest way to receive information about places is, of course, to have someone tell it to you. Walking tours are trips on which a guide shares information with his or her companions about the places they visit. Tour focuses range from topics as popular as architecture and art to those as specific as bakeries and plant life. Many tours address sites of historic significance, which can vary widely depending on the guide and his or her relationship to the city and it’s official history. To complement Boston’s Freedom Trail, the National Park Service runs a “Black Heritage Trail”⁵ through Boston’s Beacon Hill to provide a tour of the city’s 19th Century African-American history.

Oftentimes tour guides are live people, but mobile devices have provided a growing field of other options. MIT’s History Unwired Project⁶ in Venice is one: PDAs are used to access recorded audio and video clips of locals talking about their favorite places, and the pacing of the tour takes its cues from GPS and Bluetooth signposts in the environment. Another project called Talking Street⁷ provides MP3 tours by non-traditional authorities like local celebrities and politicians, which can be downloaded to mobile music devices. Even with the technological shift, though, the aim of



A map of tour paths guided by MIT's History Unwired project in Venice. The narrative structure of the tour is mostly linear, but digressions happen through interactive art installations, suggested interactions with local people, and videos. (image via project website, <http://web.mit.edu/frontiers/>)

walking tours remains the same: to distribute the accumulated knowledge of experts to non-experts. These non-experts are often tourists, but can also be residents.

The 'expert', meanwhile, doesn't have to be a historian—anyone can lead a walking tour. Say I am visiting my cousin in Seattle and he guides me past all of the places he thinks are important, and tells me why they're important—he's just given a walking tour. In this way, walking tours are openly authored, and anyone can have his or her say about what distinguishes a particular

place. Because the content of walking tours evaporates upon utterance and leaves no physical traces, individual walking tours are largely uncontroversial. The only real political issue surrounding tours is the contentious construction of selective or incomplete narratives followed by tourist bureaus, historic commissions and private companies (Evans 2002).

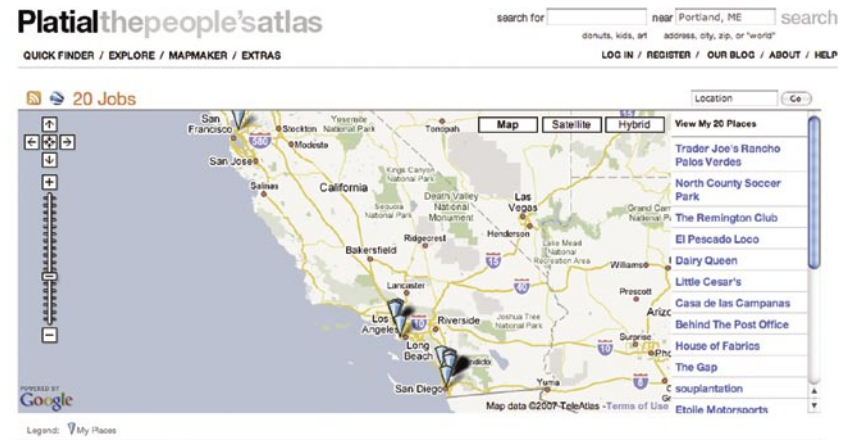
As a result, many community and historical groups offer their own tours, even of overlapping territory. In Boston, the Asian Community Development Corporation, Chinese Historical Society of New England, and the Chinese Youth Initiative of the Chinese Progressive Association jointly offer walking tours⁸ of Chinatown's markets, restaurants, and points of interest, weaving in the stories of community members. They also run youth led-tours. Similarly, Boston's mytown, inc. (Multicultural Youth Tour of What's Now)⁹ trains and employs low- and moderate-income Boston teens in leading historic walking tours and presentations. The company's website says: "mytown believes that young people and communities can realize the power local history has in increasing youth activism and decreasing the stereotypes that stigmatize urban neighborhoods."

Maps

Maps are visual indices relating information to geography. Some maps are used for directional way-finding, some for spatial annotation, some for both. Of those that are made and used for

spatial annotation, there are two primary types: single-author maps and dynamic collaborative maps. By single author maps, I mean to include both maps made by multi-person entities like guidebooks (which usually contain other information as well but are, at base, about providing readers knowledge about places marked out on maps) and maps made by individuals. Guidebooks can be oriented toward tourists or residents and often include historical profiles of neighborhoods and sites, catalogues of attractions and reviews of hotels and restaurants. Individuals might similarly make maps for friends or strangers to highlight spots of particular interest or recommendation. Or individuals might make maps to document their own geographical knowledge or understanding, as in Kevin Lynch's cognitive mapping exercises from *The Image of the City* and in many activist and artistic practices of the 20th and 21st centuries (kanarinka 2005).

Somewhere between this personalized endorsement and reflection lies a current swell of online map-authoring sites. Sites like Wayfaring¹⁰ and Platial¹¹ use the Google Maps API to let users create quirky guide maps like “*Dirty Harry* Bike Tour” and “BBQ places along I-95” as well as narrative maps like “Thanksgiving 2005” or “20 Jobs and How I Got Fired From Them: A Geobiographical E-zine.” In these ‘autobiogeographies,’ the map provides a framework into which memories may be located, whether those memories are recorded in text, image, audio or video. This use is similar in its motivation to placelogging, though



"20 Jobs and How I Got Fired From Them: A Geobiographical eZine" by Platial user Jamesinger. (screen capture from platial.com)

annotations are accessed through the map rather than through interaction with the physical locations themselves. Unlike the placelogger, the diaristic mapmaker derives the satisfaction not just of tying experience to geography, but also of taking that geography and its context into full account—tracking a physical pattern of activities and events, locating his or her own individual narrative in a spatial system that extends well beyond any one person's grasp. Spatially annotated maps are, then, used as guides, as media for documentation and storytelling, and as lenses into personal identity.

And collective identity, too. The web plays host to a vast array of dynamic collaborative maps—constantly updatable and evolving collections of spatial annotations to which anyone with

web access can contribute. One form of dynamic collaboration are project maps, like a “Fly Fishers Wiki” on Wayfaring into which fly fishers describe and comment on sites they have visited. Project maps are not only a way of building databases of collective knowledge, but also exercises in community-building around shared interests.

Dynamic collaborations also include incidental collections like those created by geo-tagged Flickr photos or YouTube videos, where the map is often the byproduct of a different media authoring process. Incidental collections are a sort of inductive, media-based community portraiture, in addition to being venues for media authors to identify nearby potential collaborators.

While it’s true that, in the past, anyone with a writing implement could draw out and annotate a map (of a scope commensurate with the map’s purpose and with its author’s geographical expertise), digital tools have made mapmaking a much easier and more popular practice for the general public. There is a longtime dialogue about the politics of mapmaking: what sites gets included or excluded on a map? What neighborhoods? Who gets to decide? Maps are diagrammatic and have a history of being read as objective documents, but every map comes out of a positioned knowledge of some sort or another (Crampton & Krygier 2005). The wider spread of mapping tools and practice, as well as the shift toward more explicit subjectivity, is as much a political movement as it is an intellectual one.

Urban professionals have long been aware of the power of maps. Urban designers are still using cognitive mapping as a tool in investigating how citizens read and image the urban environment, 30 years after Kevin Lynch introduced it (Isaacs 2005). Community development agencies have also adopted mapping practices as a way of representing knowledge, opinions and stories about the shared landscape of local residents. In the 1980s, British environmental organization Common Ground¹² began its Parish Maps project, involving thousands of community groups and local artists in mapping their own towns and the features they deemed important in them. The project continues today. More recently, the practice of public participation GIS (PPGIS) has become a well-established tool in helping community development and urban planning professionals to identify local assets that might be overlooked (Hoffman 2002). PPGIS is a way to engage citizens in observing and reflecting upon their neighborhood landscape and how it might change. More expressive takes on digital community mapping include the Somerville Community Corporation’s East Somerville Community Mapping Project.¹³ The online map offers location-based photos of flowers and smiling neighbors, an inventory of community gardens, bus stops, graffiti and public art, and audio interviews with neighborhood residents about the places they value in the neighborhood as well as their own personal hopes and priorities. Maps like this one are not just useful in laying the ground for future development, but also, like the Parish Maps, for building



The Somerville Community Corporation's East Somerville Community Mapping Project allows online visitors to survey various resident-generated inventories of the area. (screen capture from www.somervillecdc.org/communitymap)

positive narratives about the neighborhood and an awareness of its stewardship.

Other narrative media

Narratives have a significant impact on perceptions of place, among both locals and non-locals. ‘Other narrative media’ means to include texts of any kind or medium that refer to places in locating scenes, stories and actions: films, photographs, radio stories,

newspaper articles, novels, blog entries. Many of these media deliver what might be considered incidental spatial annotations—the point of my blog entry might not be that my break-up happened at this particular 7-11, but that it happened at 7-11—but that information is often tied to specific locations by readers and consumers of media. Even fictions that take place in real cities serve to annotate them—my own conception of Vienna is informed by two films set along its streets and at various landmarks, Richard Linklater’s *Before Sunrise* from 1992 and Carol Reed’s 1949 classic *The Third Man*.¹⁴

Urban planners and designers understand the power of narrative media in shaping perceptions of places. Press releases and news coverage have always played a key part in any strategic development plan, but urban professionals are also starting to consider what bloggers and filmmakers and writers have to say about the city (Vale & Warner 2001). While planners and designers have tended to use policy and programming to shape narratives, community groups have often sought to counterbalance popular narratives with alternative visions. New media tools have enabled an extension of this agenda: as digital tools become cheaper and access to them increases, more people have opportunities and channels through which to share their stories with a large and far-reaching audience. A number of community groups have incorporated video-based local storytelling into their youth development programs, both as media training and as an avenue toward documenting local life from the inside. Boston-based Creative Narrations¹⁵ and the

Carol Reed's *The Third Man* (1949) has annotated various sites in Vienna—this Ferris Wheel among them—with potent narrative, for me and many others.



Berkeley-based Center for Digital Storytelling¹⁶ have partnered with various community outreach and development groups, in those cities and others, to initiate video storytelling projects. With the rise of video-sharing web sites, these narratives, like any other, can now be shown to a large and wide-ranging public.

Back to placelogs

I have situated placelogs within two of the above-mentioned categories in the taxonomy, in situ media and maps. Onsite placelogs, the use of mobile devices to post and receive communication about immediate locations, fits within in situ media in that location becomes the interface for mediated information. Many projects—both Yellow Arrow and Socialight, for example—also have an offsite component through which participants can

manage, browse and even add mobile-accessible annotations through dynamic collaborative maps online. Though this capacity might be available, it is often accorded secondary status to onsite placelogs; without the mobile component, it bears strong similarities to digital mapping. I will continue to focus on onsite placelogs in this thesis.

There is some overlap between placelogs and other categories of spatial annotation as well, and it comes through clearly in the language that project developers use. Projects like Grafedia and Blockies identify as graffiti hybrids; Geostickers and Socialight's Sticky Notes directly reference Post-Its; [murmur] co-creator Gabe Sawhney describes that project like a walking tour: "listening to [murmur] stories is much like walking through the city with somebody who knows its stories" (Micallef, Roussel, & Sawhney 2007). But these are not the only identities these projects hold to: in addition to claiming ancestry from Post-It Notes, Geostickers also bills itself as allowing for the construction of 'personal invisible monuments.' And Yellow Arrow makes use of multiple references in framing itself as a sort of annotation mash-up: first, its website positions the project in the tradition of graffiti and sticker art, encouraging new users to "assume a tagname" and "claim your own gallery space" in public space. Meanwhile, it also identifies the project as a "M.A.A.P—Massively Authored Artistic Publication," emphasizing each user's empowerment by becoming a mapmaker for "an ever-evolving global travel guide created by locals."

The next chapter will conduct a preliminary analysis about what uses participants have found for placeloggging, but project developers and scholars indicate a strong and fairly robust sense of its residual functions, at least. Their claims tend to concentrate around three major contributions: place attachment, claim to space and social connections. I will describe each benefit, review the other media that contribute it as well, and consider the capacity for placeloggging to contribute to it uniquely.

PLACE ATTACHMENT Place attachment is a bond between people and their environment based on cognition and affect (Altman & Low 1992). In the context of spatial annotation, the meanings and experiences that generate cognition and affect can arise either in the production or reception of spatial annotations. Graffitiists might develop attachment to a particular tagging spot or site of creative exchange, but so, similarly, might non-graffitist pedestrians. There is, in fact, potential for producers and receivers of any of the outlined forms of annotation to build place attachment, either through the act of annotating and distinguishing a place or by recognizing meaning or value in someone else's annotation. The distinction of placeloggging from other media, then, rests not upon its ability to generate place attachment, but perhaps upon the type of attachment, and the set of places annotated. [murmur]'s website suggests that the project strives toward a sort of empathic attachment to overlooked—perhaps under-annotated—places:

“The city is full of stories, and some of them happen in parking lots and bungalows, diners and front lawns. The smallest, greyest or most nondescript building can be transformed by the stories that live in it. Once heard, these stories can change the way people think about that place and the city at large.”

Yellow Arrow stakes out similar territory, not just through the reception of annotations, but also through their production. It suggests that participants seek out unconventional but meaningful sites in the city and mark them as places that “Count.” Placelogggers, in general, must make reflective choices about what sites are important to them, and then play host to those sites—and their experiences in them—for strangers. Other media can also offer empathic annotations, but among them, only graffiti offers onsite annotations of nondescript and mundane places. Graffiti, however, is not always likely to be amiably received because of its related associations with property defacement and criminal behavior.

CLAIM TO SPACE The use of graffiti in claiming space is also often problematic, as I discussed before. Claim is about territoriality and custody, and though the production of any form of spatial annotation can constitute claim, it is especially strong among those annotations with physical marking components. The physical mark is a form of presence; in the case of graffiti, that presence might be seen as pernicious and unwelcome. In the case of monuments, it is often a collectively or officially sanctioned presence, and can

lend a sense of largely undisputable claim. But monuments are not dedicated to individuals—at least not living ones. Of the forms of annotation in the taxonomy, only graffiti, signage and in situ media can be used to establish onsite presence of individuals. But graffiti can be erased, and a “Please don’t park on my lawn” sign is only good within a limited range. As for in situ media other than placelogs, low power radio, for example, can stake out both presence and claim to space, but broadcasting equipment can cost hundreds to thousands of dollars.

Placeloggging offers a cheaper version of presence: Urban Tapestries' Giles Lane writes that "it is not hard to imagine mobile data services like Urban Tapestries becoming powerful tools for maintaining a sense of one’s own presence in a place or community which is physically distant, but emotionally close” (Lane 2004b, 4). Further, placeloggging offers an alternate sense of claim. Yellow Arrow’s website encourages users to “claim your own gallery space” in public space, but the project doesn’t base the claim staked by participants solely on the sticker (which is removable). It also emphasizes empowerment through the personal and collective dynamic maps created by annotations. “Map your world. Publish your life. Create Your Journey,” the website encourages. Similarly, PDPal’s website encourages users to “write your own city,” and Urban Tapestries suggests that participation brings a “sense of ownership of our environment.” The claim the map makes is not to just one site or to a diffuse territory, but to a network of individual

sites in the city. Or, better, a network of *individualized* sites—a map of personal preferences that I can share with others. As FoundCity co-founder Christina Ray said, “The idea is that you just go out with your cell phone and bookmark your city” (Moore 2005). With the incorporation of social networking and placeloggging, the territory to which claim is staked is not just geography, but also identity as composed by one’s own tagged places in the city.

SOCIAL CONNECTIONS The integration of social networking with placeloggging sets it in the socially-bound company of graffiti and collaborative mapmaking. Other forms of annotation might make weak connections—monuments often provide occasions for physical proximity to others, but lack a structure through which to forge relationships, while walking tours involve live conversation but are often either scripted or delivered to a large group. Placeloggging, graffiti and collaborative mapmaking, on the other hand, tend toward asynchronous interactions—I make a contribution now, and someone else responds or adds to it later—but their orientation around user contributions creates a community of exchange. Appropriately, then, both Plazes and Socialight describe themselves first not as spatial annotation projects, but as fun, new communities.

Grffiti communities are fringy and not always well regarded, and collaborative mapping communities often lack a forum for interaction in the physical world. Placelog annotations, on the other

hand, offer opportunities for both virtual and real-world interaction among a potentially broad base of participants. Virtual interactions center around annotations and the comments different users have about the places annotated. In addition, some projects supplement annotation with a blog-like space for reflection: Yellow Arrow offers each participant a personal Arrow Journal page that “contains your personal thoughts and experiences and provides a place where people in the community will respond.” Again, the idea being promoted is that the annotations are simply a gateway to the rest of a participant’s identity.

Physical interaction isn’t required by participation in placelogs, but if someone annotates a restaurant with a rave about the mussels, I might be more likely to meet that person if I’m actually outside the restaurant. I’m also likely to meet other people inside the restaurant because I heeded the recommendation. Beyond the possibility of meeting strangers, though, placelog developers promote the ability to reinforce existing social networks—by establishing a virtual presence through annotation in places my friends visit, say—or by learning more about the people I know through the places they value. Lane writes that through placelogging, “It is possible to imagine a rich and vibrant culture of exchanging stories and local knowledge, where our sense of how we value our neighbours is derived from the richness of the knowledge we all share” (Lane 2004b, 4).

Notes

¹ http://www.lmusu.org.uk/club_homepage.asp?clubid=6631

² <http://www.graffitiresearchlab.com>

³ The Federal Communications Commission created the Low Power (LPFM) class of broadcast in 2000, in part to regulate pirate radio broadcasts. Today, more than 800 stations have been licensed (Prometheus Radio Project 2007). But shortly after the FCC issued its order creating LPFM, the broadcasting lobby convinced Congress to pass legislation limiting LPFM stations to rural areas with less crowded spectrum. Legislation is now pending in both houses of Congress to overturn the restrictions.

⁴ <http://www.garmin.com/garmin/cms/site/us/onthego/>

⁵ <http://www.afroammuseum.org/trail.htm>

⁶ <http://web.mit.edu/frontiers/>

⁷ <http://www.talkingstreet.com>

⁸ <http://www.asiancdc.org/heritage/projects/tours.html>

⁹ <http://www.mytowninc.org>

¹⁰ <http://www.wayfaring.com>

¹¹ <http://www.platial.com>

¹² <http://www.commonground.org.uk/>

¹³ <http://www.somervillecdc.org/communitymap/>

¹⁴ In fact, a long-running and still-popular walking tour in Vienna highlights locations featured in *The Third Man* (<http://www.viennawalks.tix.at>).

¹⁵ <http://www.creativenarrations.net>

¹⁶ <http://www.storycenter.org>

CHAPTER 2

A survey of annotated places

Residual functions aside, a medium of communication is only valuable if it provides a channel through which users can express themselves in a unique way. The aim of this chapter is to determine whether placelogging distinguishes itself from other forms of spatial annotation in terms of the types of places it annotates or the way in which it annotates them. What unique communication does it allow? The basis of my analysis will be comparison of spatial distribution, place type and content across different forms of annotation within four sample areas.

Methodology

To gather data for comparison, I toured areas annotated by [murmur] in Toronto and by Yellow Arrow in New York and catalogued and mapped each instance of spatial annotation I came upon. The full range of place and content types I encountered are listed in **Exhibits 5a and 5b**. I will use these color-coded place and content types to draw comparisons across annotating media. In each data set I have composed a set of ‘meters’ indicating the distribution of place types and content.

No inventory of observed annotations can be comprehensive, since their presence and content can be momentary or difficult to discern. Nor can it be objective, since both my alertness to particular types of annotations and the way in which I judge their function and content are based on subjective definitions (the less straight-forward of which are listed in **Exhibit 6**). I liken my relationship with the neighborhoods surveyed to that of an informed and observant tourist: I came to them with a cursory knowledge of their history and culture and walked their streets for a period of approximately four hours. I had lunch and several cups of tea. I kept my eyes open and tried to note each instance of annotation, but incidental events and conditions like the time of day and the weather undoubtedly had an impact upon what I saw and was able to see. My goal, then, is not to arrive at an absolutely quantitative measure of annotations in these neighborhoods, but an impressionistic portrait of their relative proportions of presence and content, and a preliminary methodology for building more robust portraits of a similar nature.

Exhibit 5a: Range of place types

Place types are arranged in descending order based on subjective evaluation of how public they are. 'Public' can mean a variety of things; in this case, I grouped place types by 1) the broadness of their physical accessibility, 2) the degree to which they are publicly owned, and 3) decreasing inclusiveness, both in terms of how many people they can accommodate and how selectively they welcome people (skylines are thus considered more inclusive than streets, and hospitals more inclusive than schools).

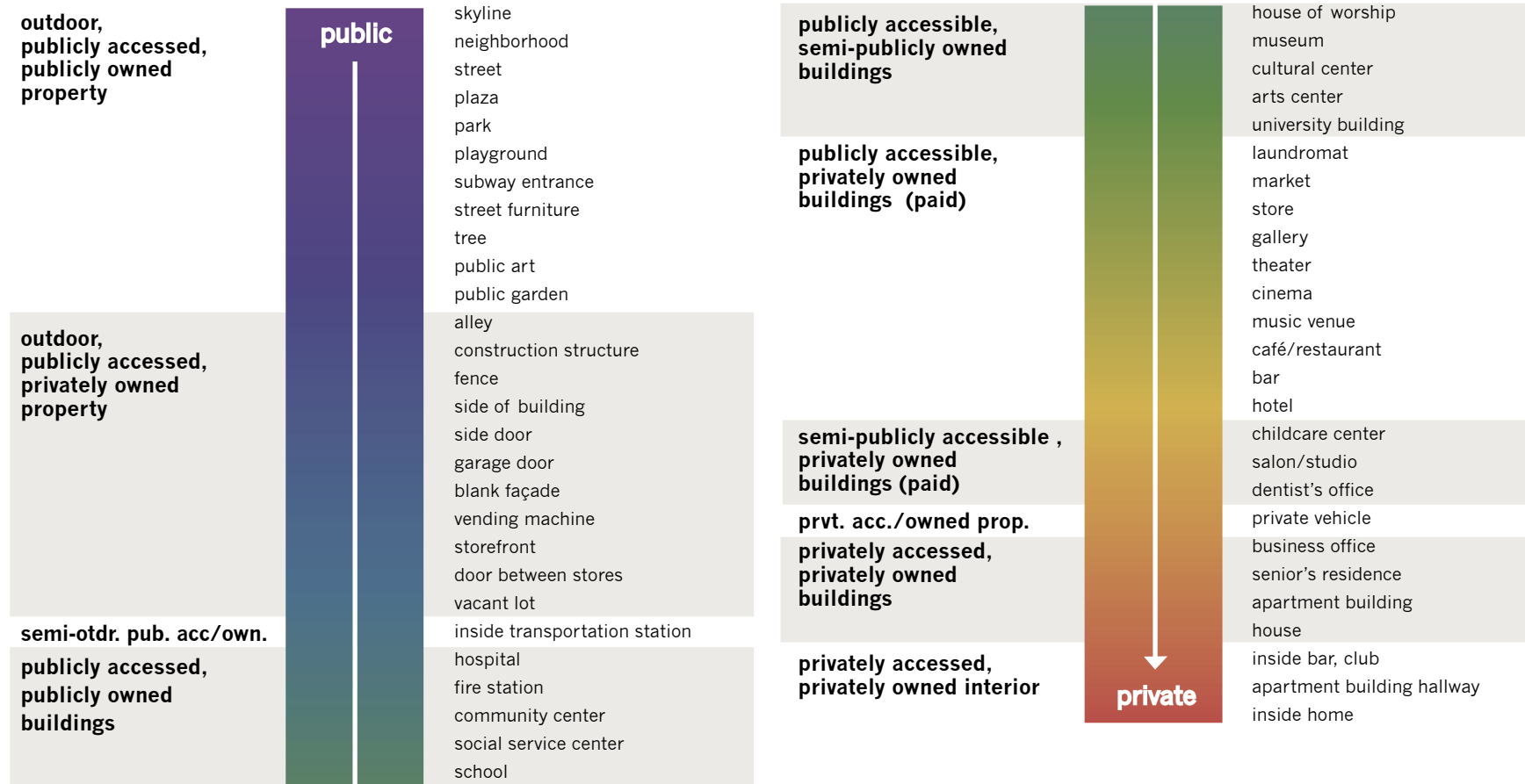
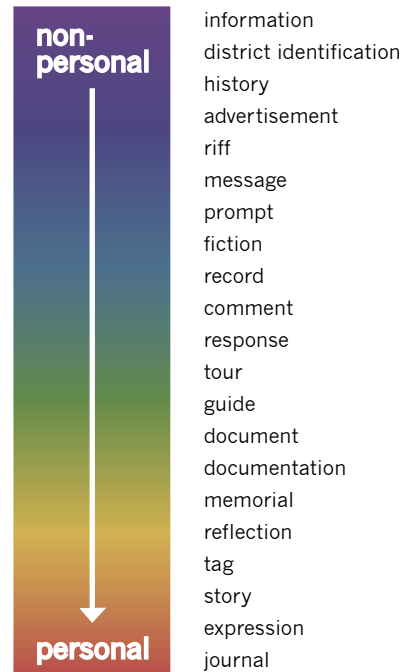


Exhibit 5b: Range of content types

Content types are listed in descending order of the degree of personal intimacy involved in making each type of annotation—how much annotators reveal about themselves and their private thoughts and feelings.



I chose Toronto and New York because, as the home cities of each project, they host the largest number of annotations, as well as the biggest participant base. For each city, I made a survey of two neighborhoods annotated by each placeloggging project. In Toronto, these were the Kensington Market neighborhood and the Annex, the only two neighborhoods annotated by [murmur] (the third area, Spadina Avenue, is not a neighborhood, but a street). In New York, where Yellow Arrows can be found in most parts of Midtown and Lower Manhattan, as well as in pockets of Brooklyn

and Queens, I tried to find a pair of neighborhoods comparable in visual and cultural character to those I selected in Toronto, and with a reasonable density of Yellow Arrow annotations. These were the northern section of the Lower East Side and a combination of the relatively upscale NoLIta neighborhood and the transitional northern end of the Bowery.

Notes on the data

My survey of annotations makes some departures from the taxonomy outlined in Chapter 1. I have left out non-placelog in situ media as well as ‘other narrative media’. In the case of other in situ media, I am simply not aware of projects in these areas, beyond which, either the geographic scope of these projects tend to be different from other forms of annotation (projection focuses largely on just one site, while low power radio and locative resources annotate everything within their range equally), or the aim of their annotation is substantially different (locative game content is often only relevant to the moment of play). In the case of ‘other narrative media’, the field of possible annotations is infinitely large, and no premier narrative stands out for the purposes of sampling.

I have also separated out media not otherwise distinguished in the taxonomy. Though posters function as signs, I quickly realized that they were located at different places than other signs: telephone poles, lampposts, trash receptacles and other street furniture. They tended to bear less direct relevance to

Exhibit 6: Subjective definitions of selected place and content types

Place types

neighborhood: any geographical zone definable by a radius of distance

street: the road itself, the sidewalk, a street corner

street furniture: telephone poles, lamp posts, postal boxes, power supply boxes, benches, bus stops, trash receptacles, parking meters, street signs, dumpsters

park: official publicly accessible grassy leisure space

alley: paved space between (usually commercial) buildings

construction structure: temporary walls or fences, scaffolding

side of building: the surface of a building often facing an ancillary street or rooftop

side door: the often-unmarked door on the side of a commercial, warehouse or institutional building used as an exit or for deliveries and trash removal

garage door: residential garage door

blank façade: the front of a non-residential building that does not have windows: either a blank wall or a garage door/grate

storefront: the façade of a store, restaurant, market, bar, business or any place of commerce

door between stores: in mixed use buildings, particularly, a door that sits between storefronts but does not service a commercial use

community center: an organized place for activities and meetings for members of a particular community

social service center: public or private agency providing housing, financial or social services to under-equipped citizens

house of worship: a formal gathering space for religious practice

market: any place where groceries, baked goods, flowers and other fresh items are sold for consumption elsewhere

store: any site where non-perishable goods are bought and sold to consumers

business office: the residence of a private company

Content types

information: third-person knowledge relating to a place, untied to narrative, opinion or touristic purpose

district identification: brand applied to a particular area based on culture, history or prevailing use

history: third-person account of something that happened in the past

advertisement: promotion of goods, services, organizations or events

riff: facetious, playful, fanciful or teasing remark

message: command, request, correspondence, alert, addressed to an individual, group or to the general public

prompt: encouragement to perform an activity or seek or provide an answer to a question

fiction: made-up story

record: third-person description of the former or existing condition of a place

comment: opinion not tied to recommendation

response: makes reference to or builds from another annotation

tour: sequentially leads through a series of sites

guide: recommendation of places to visit or what to do there

document: first-person account of immediate sensual experience

documentation: first-person explanation of the author's process in producing some component of the built environment

memorial: tribute to or commemoration of someone who has died

reflection: pondering or musing about a particular idea

tag: stylized personal signature

story: a first-person narrative of something that happened here

expression: artistic rendering, in any medium

journal: first-person confessional or diaristic account of feelings, thoughts or behaviors

the immediate site, though they frequently made reference to sites within the neighborhood or a comparable walking distance. Here, I have catalogued them separately and counted the sites at which posters were physically present as the sites they annotated, regardless of their content, because of the perceptual weight of the physical mark. I made a similar judgment in cataloguing graffiti as attaching to storefronts rather than to stores, because the marks seemed to bear more direct relevance to the physical façade than to the interior of the place. Finally, I used this same strategy in New York, where a proliferation of stickers replaced Toronto's supply of posters and tended to attach to street furniture. While stickers are commonly considered street art, like graffiti, the fact that they are also used for advertising made them stand apart to me as a sort of hybrid between graffiti and signage. I have catalogued them separately.

Because there were so many instances of graffiti, posters, stickers and, in some cases, signs, I did not count each instance but instead kept a relative measure of density and locations of concentration. As I toured each neighborhood, I took notes on a map (for an example, see **Exhibit 7**) indicating, for example, when an area was especially dense with graffiti, if the graffiti was different from the norm in some way, and on what type of surface the graffiti was located. I photographed a typical example and any atypical examples for my reference in making estimates later. The numbers that are used to generate the meters for graffiti, posters

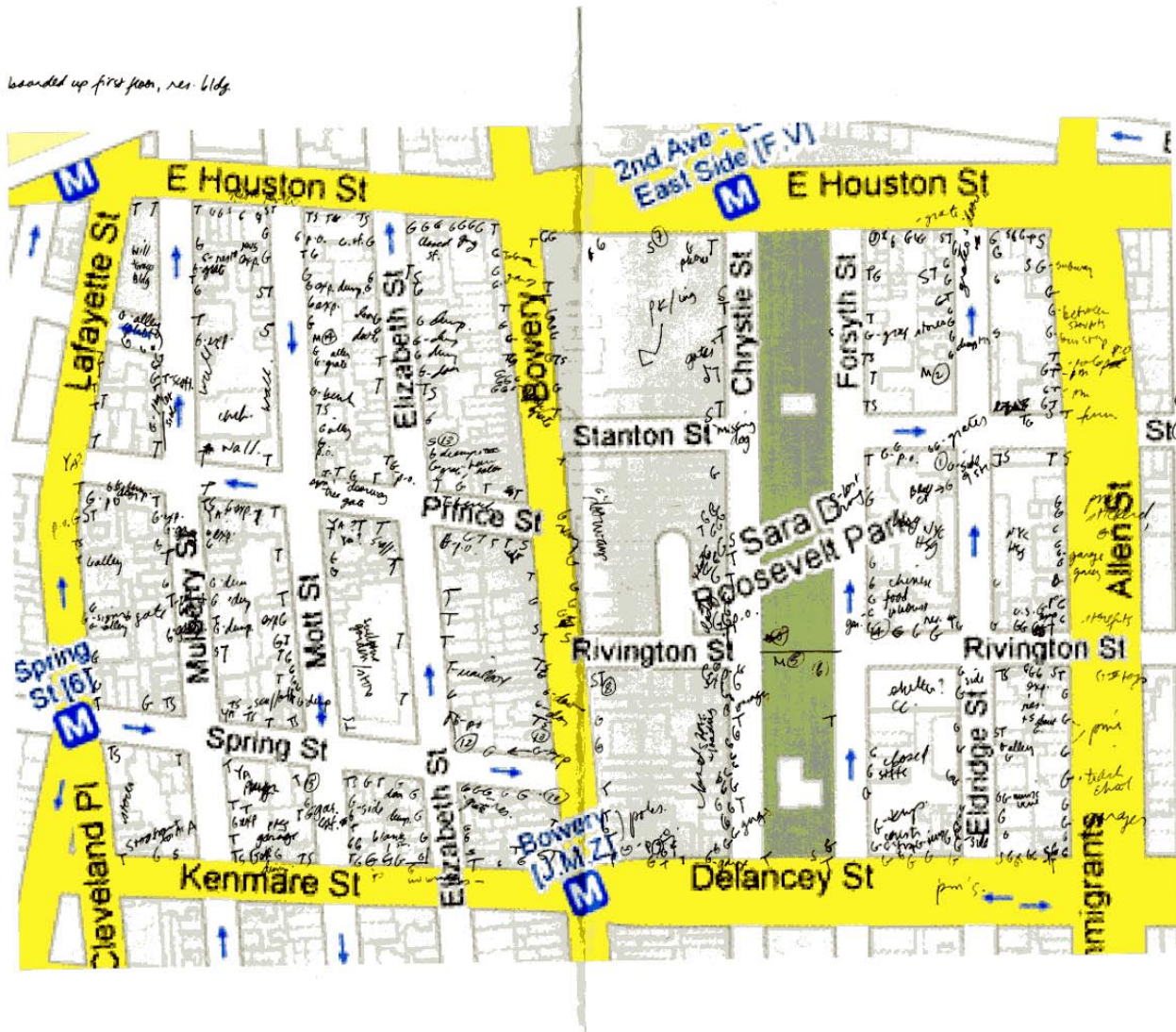
and stickers, then, are based on estimates per 1000 instances. The number of signs advertising services in the windows of markets, stores, cafés and restaurants is also approximate based on my observations of their density and concentration, as taken from photos and memory.

Other surveys of annotations are approximate as well. My survey of sites annotated by professional walking tours come from descriptions of these tours found online, not from actually taking the tours. Other sites might be annotated by those tours in process. In some cases, I drew sites from more than one walking tour, as I did with guidebooks. Since I did not do a comprehensive review of guidebooks annotating each neighborhood and since guidebooks tend to vary in the places they annotate, I collected sites from multiple sources. I did not include restaurant and hotel reviews in this survey because guidebooks tend to cover all possible bases in these categories instead of selecting only noteworthy sites.

In addition to guidebook maps, I also surveyed the dynamic collaborative maps of each neighborhood created through Flickr, the online photo-sharing web site that allows users to geo-reference their photos once uploaded. I do not consider the Flickr map to be offsite placeloggging, as neither the annotations nor their access is mobile device-enabled. It is also important to note that while Flickr is immensely popular, not all users participate in the maps, and not all the photos of those who do participate are geo-referenced. Nonetheless, what results from the process is a map of

Exhibit 7: Example annotated survey map (NoLIta/North Bowery)

- ⑩ Big G site - toy exp, boarded up first floor, res. bldg.
- ⑪ S - not only lots of S, but a history of S.
- ⑫ lots of G - M spring exp.
- ⑬ black party sign.
- ⑭ Plaque - indust. school.
- ⑮ Lombardi's pizza - M.



- ① G - M. R.I.P. G - Money
- ② Neighb. mural - M
- ③ Old reviews of Schimmel's parking
- ④ Most G in way up. tags: Channing, Indecent Comparison.
- ⑤ Rear. / ft. dedication. W. F. Under Kaluga Garden want to join.
- ⑥ NYC Nightlife banner?
- ⑦ Bowery - Sculpted in toy.
- ⑧ Name tag floor.

photographic annotations of each neighborhood. As photographs serve both an expressive function and a documentary one (especially explicit in their users having tagged photos to specific geographic locations), I have assigned each annotation both content types. Some of the photos also had captions, but I considered their content secondary to the photos themselves and did not count it.

Large clusters of photos on the Flickr maps can be deceptive; they are often collections from one or two users, sometimes from a single event. Several of the clusters on this map are series from parties, concerts and festivals. Nonetheless, I consider each photo to constitute a separate annotation. Graffitiists, sign-makers or placeloggers could similarly deluge a particular site. I have likewise listed and counted responses or additional annotations made at single sites through Yellow Arrow and [murmur] as separate annotations. In the case of [murmur], not all of the multiples annotate the same site; some annotate other nearby sites or mention a series of sites. In cases across media where annotations provide more than one type of content, either simultaneously or serially, I have counted each type.

Finally, in New York, I have included a survey of annotations made through Socialight. Socialight is a placelogging project that allows for both onsite and offsite annotation of places with text and photos called Sticky Notes. The mobile user downloads an application to her device that allows for onsite annotation and receives digital alerts when she is near a Sticky Note

placed by someone in her Socialight social network. Socialight identifies itself most strongly as a social guidebook to the city, particularly orienting around reviews of stores and restaurants. It also invites professionally authored content by publications like *Time Out* and *wcities*, which currently makes up the bulk of its annotations. In this survey, I have excluded professionally-authored content and catalogued only the annotations made by individual users. At this early stage of its development, many of the users making annotations are the project's developers and affiliates, but their annotations are still those of people familiar with the neighborhood, and I have included them here as a point of initial comparison.

For each neighborhood, I will first present a brief history and establish the context of the placelogging project's presence there. A land use map is presented for each neighborhood, then three comparisons across media of spatial annotation: of spatial distribution, of relative distribution of place types annotated and of relative distribution of annotation content. I will use maps in the spatial comparison, and the color-coded meters in the latter two comparisons. The actual data are collected in Appendices A--D, along with brief reports on notable trends in annotation of each medium.

An in-depth comparison and analysis of places logged and content annotated, both within and across the two projects, follows the four case surveys.

Kensington Market

HISTORY AND CONTEXT The land on which the Kensington Market neighborhood stands today was first settled by George Taylor Denison upon return from his service in the British militia during the War of 1812. When Denison's estate was subdivided in the late 19th century, houses were built on small plots for Irish and Scottish immigrant laborers coming to Toronto (McKenzie 2005). Thus began the neighborhood's immigrant occupation, which has carried through to the present day.

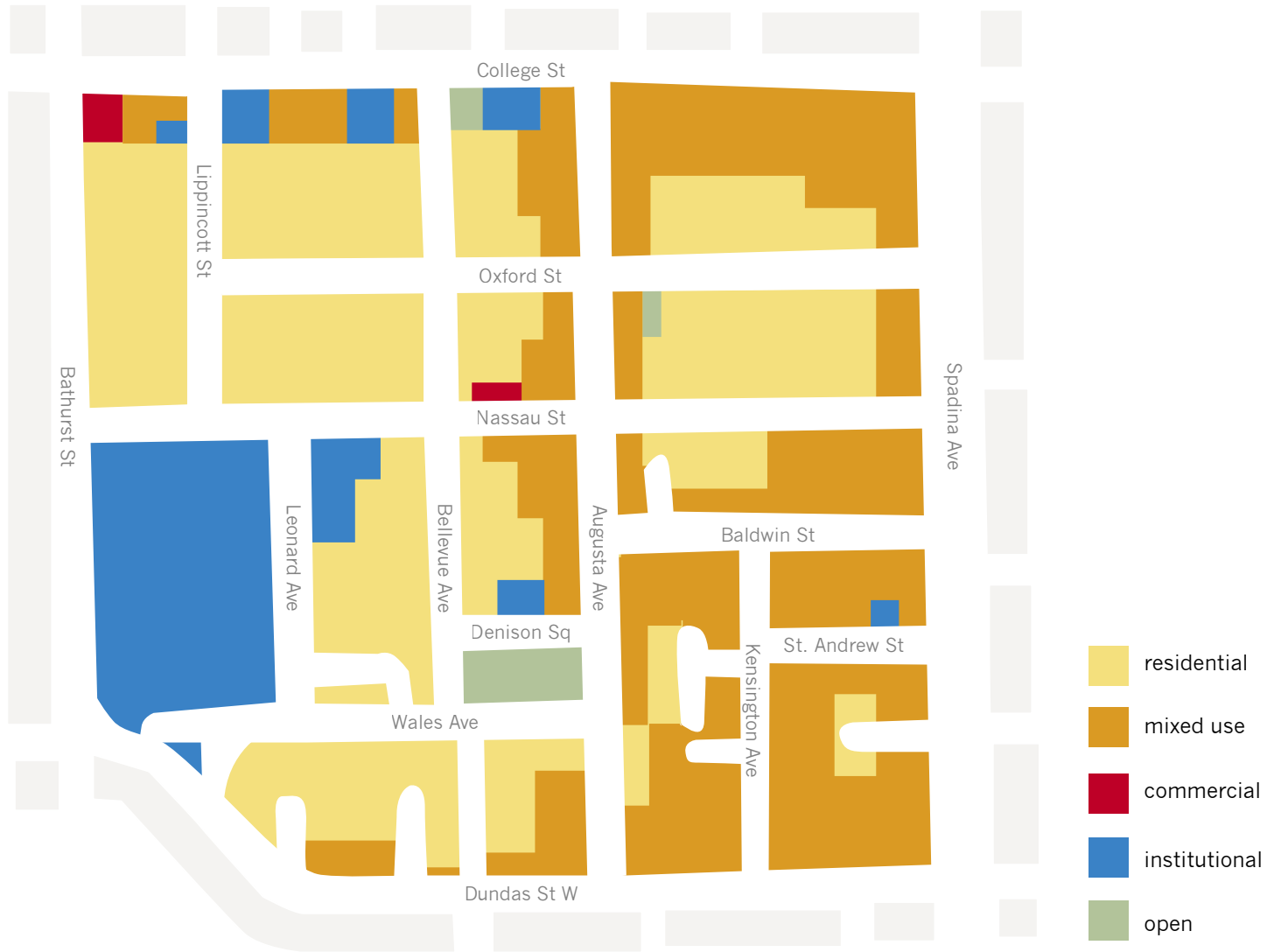
The Market, itself, was founded in the early 20th century by Eastern European Jewish immigrants and some Italians, who moved in large numbers from an overcrowded immigrant-reception neighborhood around 1910 (St. Stephens House 2007). The neighborhood became a cluster of densely packed houses, and was one of the poorer areas of the city. But it was notable for the open air market which packed its streets and offered items imported from immigrant homelands. Though 60,000 Jews lived in and around the Market in the 1920s and 1930s, most of this population moved north to more prosperous neighborhoods after World War II (St. Stephens House 2007). Subsequent waves of immigrants have come from the Azores, the Caribbean, East Asia, Somalia, Ethiopia, Sudan, Iran and Vietnam. As the neighborhood is located just east of what is now Chinatown, Chinese now make up its largest ethnic presence (Relph 1997).

The Market hosts a multitude of meat, fish, produce and cheese markets, restaurants serving a variety of cuisines and used, vintage and discount clothing stores. There are also a number of countercultural businesses, including an anarchist info-shop, a radical eco-politics community space, and two café/boutiques specifically for the open consumption of cannabis. The neighborhood plays host to a number of festivals and holds a handful of Pedestrian Sundays each year during which parts of Augusta Avenue, Baldwin and Kensington Streets are closed to motorized traffic, and live music, dancing and street theater fill the streets.

The Market really only occupies the southeastern quadrant of the neighborhood and Augusta Avenue, with some tendrils of commercial activity stretching west for about a block off of Augusta. Most of the neighborhood is purely residential, consisting of single family homes and some townhouse-style apartments, but the streets onto which the Market stretch are more dense, typically two to four stories, some with residences above the storefronts.

In 2006, the Market was designated a National Historic Site. That institutional approbation, as well as the recent emergence of upscale cafés, restaurants and clubs replacing older ethnic businesses, has suggested a gentrification process that might mean the end of Kensington's history as an immigrant working class neighborhood (Caulfield 1994, 15). For now, though, the Market

Kensington Market neighborhood land uses



Kensington Market maps of annotation

Monuments



Graffiti



Signs (excluding posters)



[murmur]



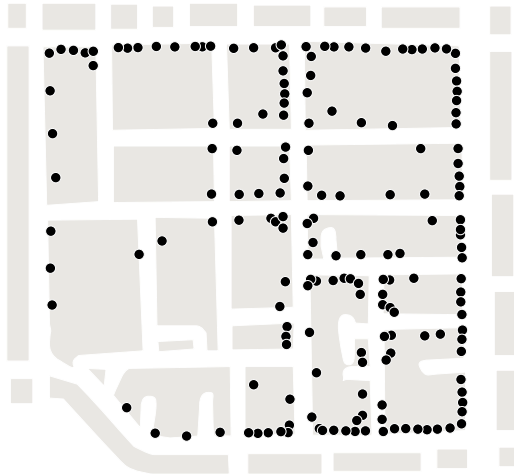
Walking tour



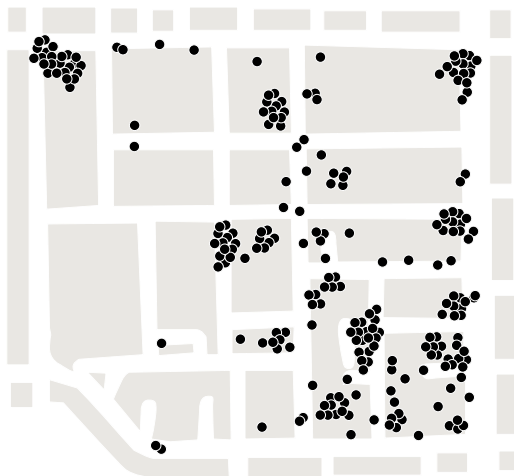
Guidebook



Posters



Flickr map



retains both its popularity among tourists and its reputation as the smart place locals, University students and foodies go to shop (Caulfield 1994).

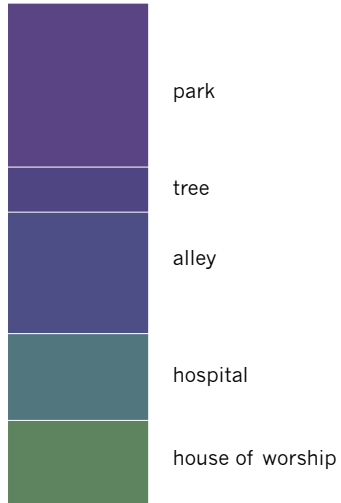
[murmur]’s presence in Kensington Market began in 2003. Creators Shawn Micallef, Gabe Sawhney and James Roussel conceived of [murmur] while in residence at the Canadian Film Centre’s Habitat New Media Lab, and the Lab provided financial assistance in setting up the project in Kensington. In an interview with the Toronto Globe & Mail, Micallef said that the team chose Kensington, specifically, because it has undergone so many cultural occupations, the layers of which are still evident. “It all just kind of mixes here...It’s chaotic and it’s not always squeaky clean, so chunks of the past hang out more with the present than they do in other parts of the city” (Underwood 2003). Storytellers were sought out through the team’s social networks and through contact with local community and cultural groups in Kensington, who recommended people who might be willing to talk or have something interesting to say (Micallef, S., personal interview, March 24, 2007).

SPATIAL DISTRIBUTION OF ANNOTATIONS [murmur]

annotations in the Kensington Market neighborhood concentrated along the dense Chinatown edge of Spadina Avenue and in the portions of the neighborhood where the Market is: Augusta Avenue and the southeastern quadrant. The distribution was most similar to that represented by guidebook annotations and the Flickr map,

Kensington Market annotations by place type

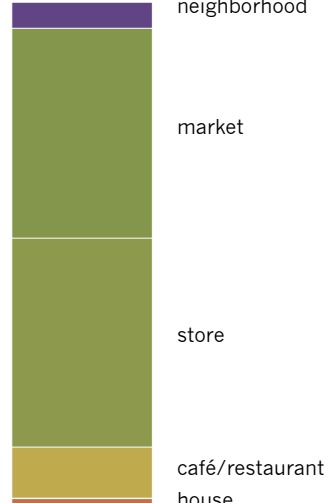
Monuments



Graffiti



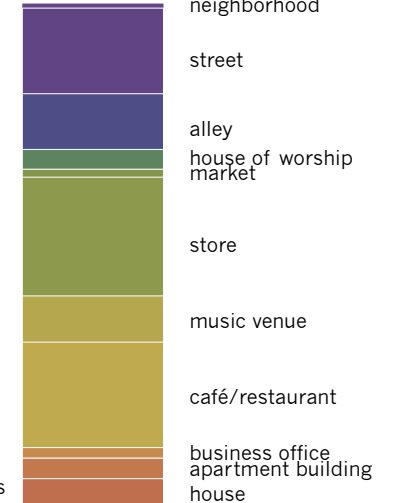
Signs



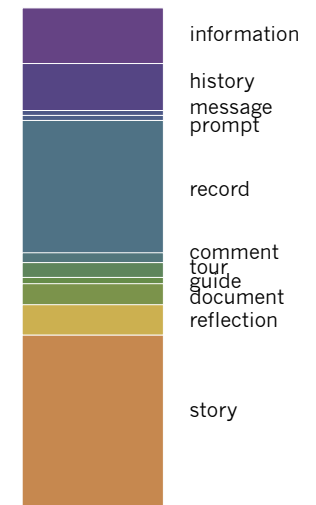
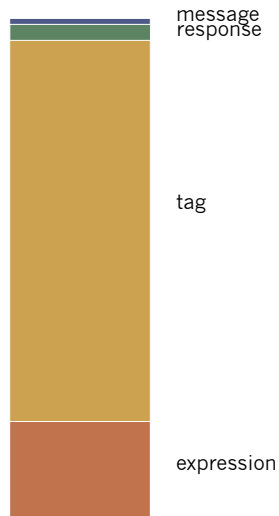
Posters



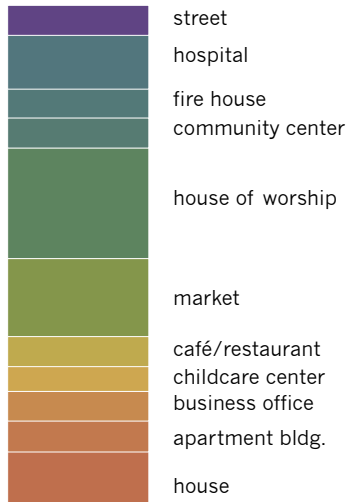
[murmur]



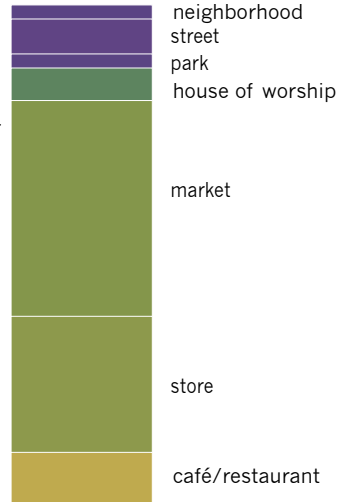
Kensington Market annotations by content type



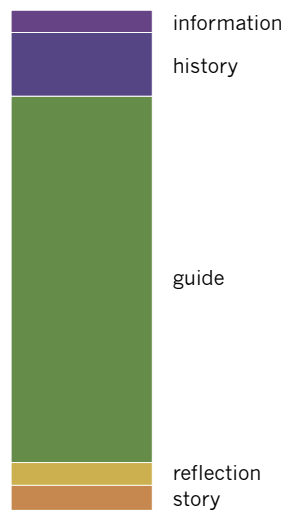
Walking tour



Guidebook



Flickr map



which corresponds with a crossover in the range of place types annotated.

PLACES ANNOTATED The types of places most annotated by [murmur] were stores and cafés and restaurants, then streets and alleys. Both signs and guidebooks annotated stores, restaurants and streets in a similarly large proportion, and the sites annotated by the guidebook and Flickr map were in close proximity to a number of the [murmur] annotations, and in some cases, annotated the same places. The walking tour covered the most similar range of place types, covering the public-to-private spectrum, though it skewed toward publicly and semi-publicly owned buildings. The walking tour also annotated a similar proportion of private homes as [murmur]. No unique place types seem to have been annotated through [murmur] that were not annotated by some other medium.

CONTENT OF ANNOTATIONS [murmur] annotations tended, in large proportion,

to be stories. Among other media, only the guidebook provided story content, though in small supply. Signs, the other medium that annotated the most similar set of places to [murmur], offered no stories—in fact signs offered none of the same content of annotation as [murmur].

[murmur] annotations also included a moderate proportion of records, equivalent to those represented by the walking tour, and a smaller proportion of histories. However, the records and histories provided by walking tours were much more distributed across a variety of place types than [murmur], and in particular, they did not annotate stores at all. Information was only represented by one [murmur] annotation—sharing knowledge about the current demographic makeup of the row of houses being annotated—but it provides a rough example of the sort of hyperlinking that digital media can enable to an existing knowledge database about specific places. Semapedia, which links Wikipedia content to sticker-based printed tags, executes this idea in full.

The Annex

HISTORY AND CONTEXT Settlement of the land that would become the Annex began in 1886, when developer Simeon Janes created a subdivision that he called the Toronto Annex just beyond the boundaries of the city of Toronto (Miller 2007). As the city's first suburb, it established itself as a residence of choice for the elite, a status it enjoyed until the 1920s, when the upper classes

began to migrate northward to newer and more fashionable suburbs. The neighborhood experienced a decline in reputation and in the wealth of its inhabitants. The next big influx occurred in the 1950s and '60s, when a large number of Hungarian immigrants moved in following the suppression of the Hungarian Revolution. Many of these families established businesses along Bloor Street, the Annex's main drag (Miller 2007).

The education boom of the 1960s led to the increasing value of all land near the University of Toronto, and the neighborhood began to reemerge as a preferred place to live. Many of the neighborhood's historic Victorian, Queen Anne and Romanesque homes were converted into multi-tenant apartments, though some of these have lately been re-converted into single-family homes as wealthier residents have reoccupied the area (Kinnear 2007). It is quickly becoming one of the most expensive neighborhoods in the city in which to rent or own a home. Because of its proximity to the university, its residents include university students and faculty, urban professionals and artists, as well as some holdovers from the wealthy families who first settled it (Miller 2007).

Though most of the neighborhood is residential, there are a number of businesses along Spadina Avenue, and Bloor remains the main street, offering a variety of stores, cafés and restaurants and cultural amenities like theaters and the Jewish Community Center. Many of those buildings are still owned by the Hungarian-Canadian

Annex neighborhood land uses



Annex maps of annotation

Monuments



Graffiti



Signs (excluding posters)



[murmur]



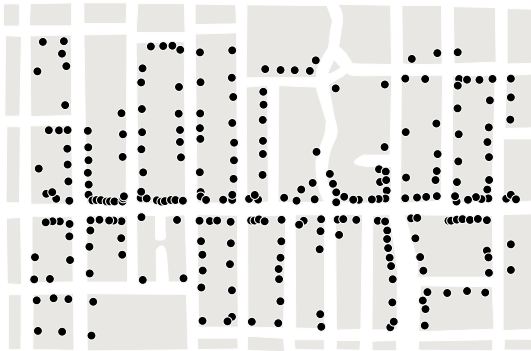
Guidebook



Flickr map



Posters



families who built them. As a district of choice for University affiliates and writers, the neighborhood is also Toronto's most literary (Toronto Life 2007).

The Annex is generally considered to be bounded by Bathurst Street to the west, Avenue Road to the east, Dupont Street to the north, and Bloor Street to the south. The appeal of living there sometimes results in the stretching of its borders by realtors and nearby residents: Seaton Village, the architecturally-similar area to the west (between Bathurst and Christie Street), is considered by some to be the "West Annex;" the area between Bloor and College Street is sometimes referred to as the "South Annex." My

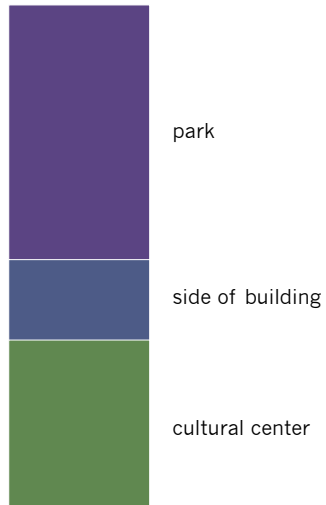
survey area, based on the locations of [murmur] annotations, does not survey the entire Annex, but takes Bloor as its main street and crosses one block into the West Annex and two blocks into the South Annex.

[murmur]'s presence in The Annex was not as strategic as its infiltration in Kensington market. Co-director Shawn Micallef lived in the neighborhood and had enough familiarity with it and enough social contacts with community organizations to collect a sizable body of stories, and the academically and artistically inclined local population could be expected to respond appreciatively to the annotations (Micallef, personal interview, 2007). The success of the project in Kensington Market led to a Toronto Arts Council grant for an expansion into the Annex, but the funds were only sufficient for a limited effort. [murmur]'s directors decided to concentrate their signs mostly along Bloor Street to make the biggest impression, though some signs delve into more residential-only sections of the neighborhood.

SPATIAL DISTRIBUTION OF ANNOTATIONS As in Kensington Market, the distribution of [murmur] annotations in the Annex bore most similarity to that of the guidebook and part of the Flickr map—and also, to some degree, to that of graffiti. Again, the crossover seems correlated with the place types annotated, as the stretch of Bloor roughly between Bathurst and Brunswick Avenue is particularly dense with cafés, restaurants, bars, music and arts

Annex annotations by place type

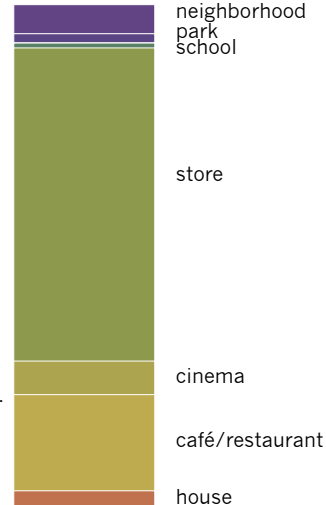
Monuments



Graffiti



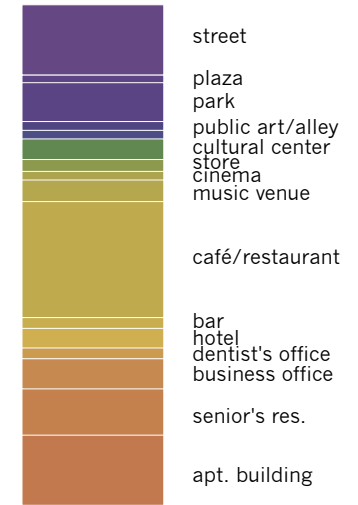
Signs



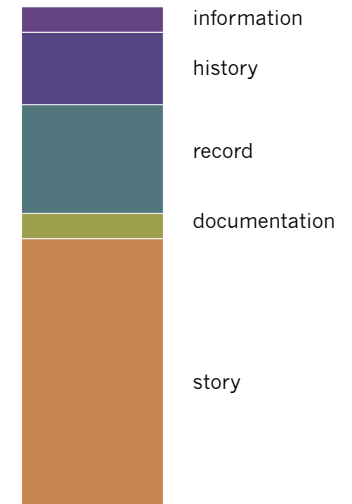
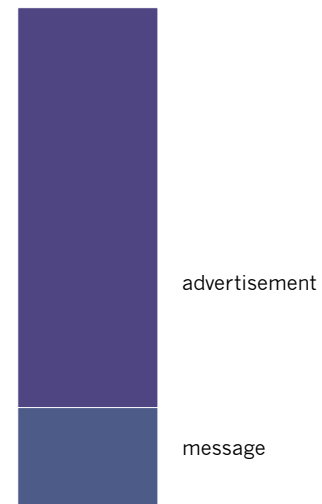
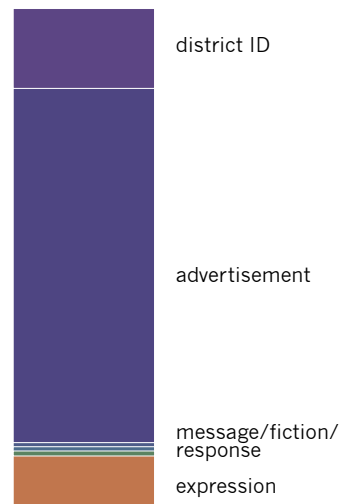
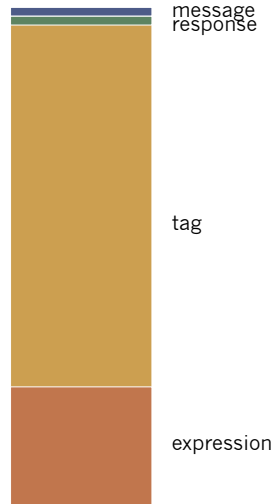
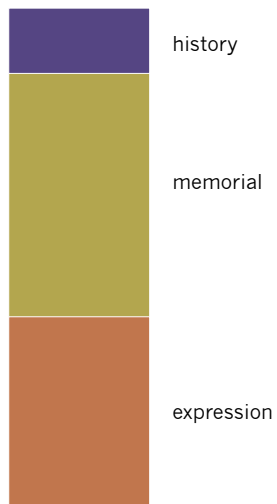
Posters



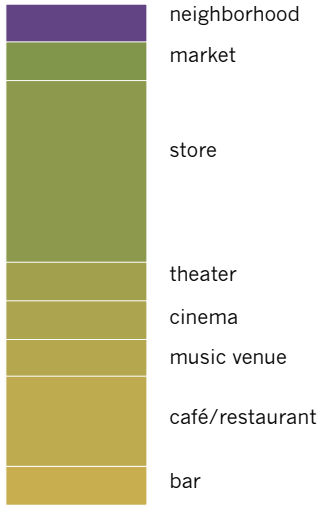
[murmur]



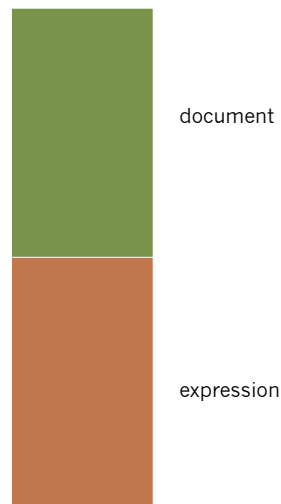
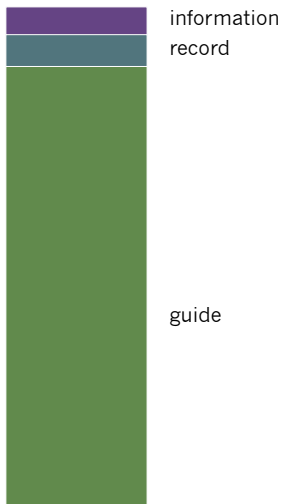
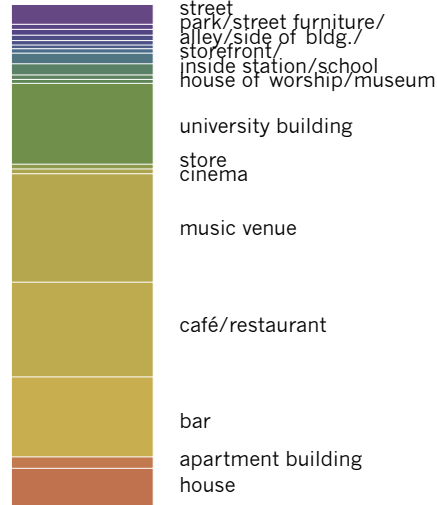
Annex annotations by content type



Guidebook



Flickr map



venues, and much of the area bracketing Bloor is private residential property, which isn't annotated as often.

PLACES ANNOTATED The types of places most annotated by [murmur] were cafés and restaurants, followed by streets and apartment buildings. Signs, guidebooks and the Flickr map all annotated cafés and restaurants in similar proportion, and as in Kensington Market, the guidebook sometimes annotated the places. The Flickr map also seemed to include some of the same cafés and restaurants. Though the Flickr map also annotated apartment buildings and homes, their representation was not nearly as strong as it was among [murmur] annotations.

CONTENT OF ANNOTATIONS It is worth noting that while a couple of the [murmur] annotations made about residences in the Annex were domestic stories, most were not. Instead, the annotations either intertwined the speakers' lives while living in the buildings with the culture of the area, or, in the case of the seniors' residence, were reflections on the history and value of the building's former use as the center of a somewhat radical college campus.

Again, the [murmur] annotations tended mostly to be stories. No other media provided story content, though it is worth noting that I was not able to find a walking tour of the Annex, which might have included stories. One set of signs, part of a memorial to writer Matt Cohen, included a series of excerpts from

Cohen's work that offered fictional stories set in the area—the only other type of annotation in the neighborhood bearing similarity to [murmur]'s stories. The Flickr map offered no content crossover with [murmur], while the guidebook did offer a small amount of similar content in terms of records and information.

The Lower East Side

HISTORY AND CONTEXT The Lower East Side of Manhattan was first settled by Dutch colonizers in the mid-17th century, and, like the rest of Manhattan, the area has had a lively, storied life since then. The Lower East Side is one of the oldest neighborhoods in New York City. It was long known as a lower-income neighborhood, and often as a slum. It first developed as a working class immigrant ghetto in the 19th century as commerce and industry expanded and Manhattan's middle and upper classes moved northward. Speculators and developers turned these formerly wealthy neighborhoods into an enormous working-class manufacturing and residential district dominated by tenement buildings.

The area reached its peak population around 1910, when a vast majority of its residents were Eastern European Jews (Mendelsohn 1999). The city's garment industry began in the Lower East Side during this period, and Orchard Street, in particular, was established as a place where shoppers could find serious bargains. Immigrant-owned businesses, markets, shops and places

of worship lined many of the neighborhood streets. The strong Jewish occupation of the neighborhood is still tangible through the lingering presence of a number of these establishments.

The Lower East Side's population steadily declined after 1910 as immigrant groups began moving out faster than they were arriving—new immigration laws passed in 1924 dramatically lowered the number of immigrants entering the US. Several low-income housing projects were built in the area in the 1950s and city planners pushed for urban renewal through middle class redevelopment (Mele 2000). Ultimately, though, the neighborhood retained much of its physical structure and character in the following decades. The 1960s saw the secession of the East Village from the Lower East Side as the demographics of the area above Houston Street began to change with the influx of hippies, musicians and artists (Mele 2000). But the area below Houston remained the cultural urban center for numerous ethnicities and religions, and it continued to be an immigrant enclave through to the late 20th century, with waves of African-American, Puerto Rican and Asian immigrants following the earlier patterns of Eastern European Jews, Germans and Italians.

The persistence of lower-income and ethnic minority resident population, along with the relatively high incidence of theft and violent crime in the area allowed the Lower East Side to cultivate a reputation as an unsafe and undesirable place to live, well into the 1980s (Mele 2000). At that point, an upswing in the

Lower East Side neighborhood land uses



US economy and a boost in New York City's financial role in that economy caused a real estate boom in the city, the impact of which began to be felt by Lower East Side residents. Escalating rents started to force them to relocate to less desirable areas of the city (Mele 2000).

As with The Annex, the boundaries of the Lower East Side have been shifting, but in this case, the area has been shrinking as real estate developers, city officials and residents try to distance their properties from lingering connotations of poverty and social underclass. Originally, "Lower East Side" referred to the area alongside the East River from about the Manhattan Bridge and Canal Street up to 14th Street, and roughly bounded to the west by Broadway. It included areas known today as the East Village, Alphabet City, Chinatown, the Bowery, Little Italy and NoLIta. Today, "Lower East Side" refers to the area of Manhattan south of East Houston Street and west of the East River, with debatable boundaries to the south and west. My survey area, defined in order to be walkable and comparable to the other neighborhoods surveyed, was delimited by Houston to the north, Allen Street to the west, Delancey Street to the south, and Pitt Street to the east.

Like Kensington Market, part of the Lower East Side was designated a state and national historic district in 2001. Around the same time, the gentrification that had fully swept the East Village began to spread south of Houston Street in force, turning the Lower East Side, for the first time, into a trendy place to

live (Mele 2000). Clinton and Orchard Streets, once dubbed "Bargain Districts," are now peppered with upscale restaurants and boutiques. The neighborhood is increasingly populated by young professionals, artists and students, though public housing complexes and some remaining residential areas have retained the presence of low-income and immigrant groups (Quart 2000). The mix of hipsterdom and old school ethnic culture is part of the neighborhood's current appeal—it offers both comfort and authenticity. Though it remains to be seen how long the old school can hold out, there are a large and growing number of walking tours of the area highlighting Jewish and other immigrant heritage, and the Lower East Side Tenement Museum¹, which highlights the history of the neighborhood, continues to grow in its scope and attendance.

Yellow Arrow launched in May 2004 through an exhibit at Lower East Side gallery Participant, Inc. The exhibit was part of Psy.Geo.Conflux, an annual event held by Brooklyn art and research collective Glowlab and focused on artistic and social investigations in psychogeography.² Former project co-director Jesse Shapins placed many of the first arrows himself for the purpose of that exhibit, with a particular concentration in the Lower East Side for exhibit-goers to discover. Another gallery show mounted later that year in the same neighborhood was similarly seeded with content by Yellow Arrow staff (Shapins, J., personal interview, May 9, 2007). The area has seen perhaps the highest concentration of Yellow

Arrow annotations of any neighborhood, but Shapins suggests that this density was not just due to staff annotations:

That area...has so many bars, so many design studios, so many people working in the creative professions, and this kind of nightlife, and that was a lot of people, I think, who eventually got involved in the project. So a lot of the first arrows that were placed in New York that were not placed by us were mostly in that area (Shapins 2007).

An article about Yellow Arrow published in *Wired* magazine in October 2004 (Howe 2004) prompted a large surge in participation, and, Shapins says, a large number of those early adopters drew from Greenwich Village and its surrounds, including the Lower East Side.

SPATIAL DISTRIBUTION OF ANNOTATIONS The distribution of Yellow Arrows in the Lower East side bears most similarity to that of Sociallight, walking tours, guidebooks and the Flickr map. All of these annotations weigh heavily to the western side of the neighborhood, which hosts many of the neighborhood's more notable sites of Jewish history (relating to the walking tours and guidebooks) as well as much of the first phase of gentrification (relating to the technologically enabled annotations of the other media).

Even the density of stickers and non-poster signs declined steadily in the eastern half of the neighborhood. The presence of

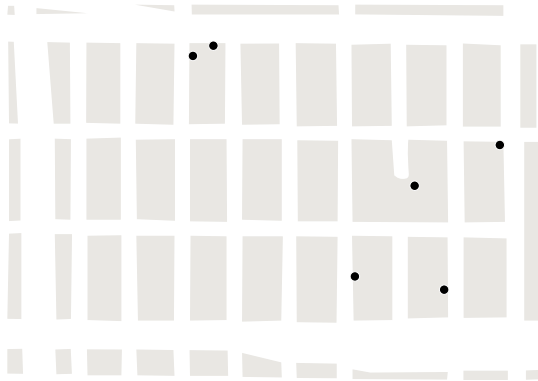
a series of large and very minimally annotated schools in succession from the middle of Houston Street southeastward might act as a buffer that curbs the flow of annotations across the neighborhood. A shift in demographics might also contribute to the difference: the western side of the neighborhood hosts both a lingering low-income minority population—the shift in language from English to Spanish was audible walking through the neighborhood—and new or in-progress condo developments whose target residents are less likely to be among Yellow Arrow's (largely hipster) contingent.

Notably, while signs and stickers declined in presence on the eastern side of the neighborhood, the presence of posters increased.

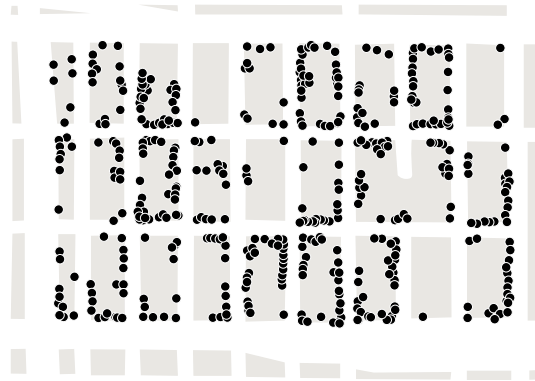
PLACES ANNOTATED Though Yellow Arrow annotated a wide variety of place types in the Lower East Side, more than half of those types settled along the more public end of the spectrum. Streets, street furniture and the public faces of buildings were common sites for annotation, perhaps because of the use of the Yellow Arrow sticker, which draws from a similar ethos to stickering, itself. Of the other forms of annotation, only graffiti, posters and stickers annotated so much of the street landscape. While all of the remaining forms (except monuments) annotated publicly accessible/privately owned places like cafés, restaurants, stores, bars and music venues, only the digital forms—Yellow Arrow, Sociallight and the Flickr map—annotated residences.

Lower East Side annotation maps

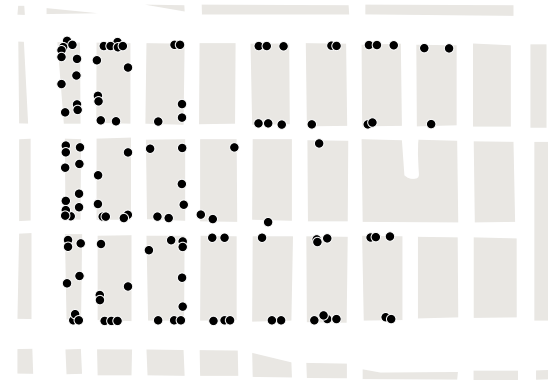
Monuments



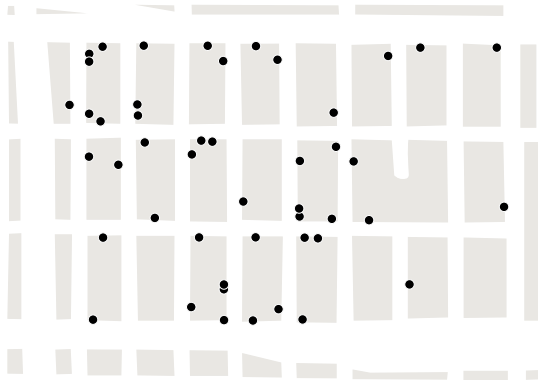
Graffiti



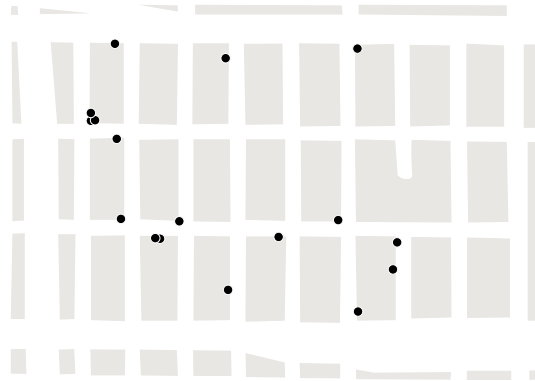
Signs (excluding posters)



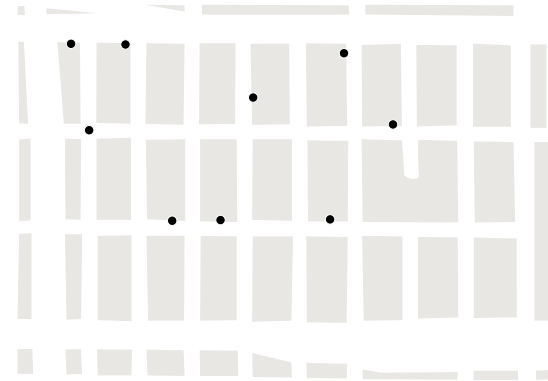
Yellow Arrow



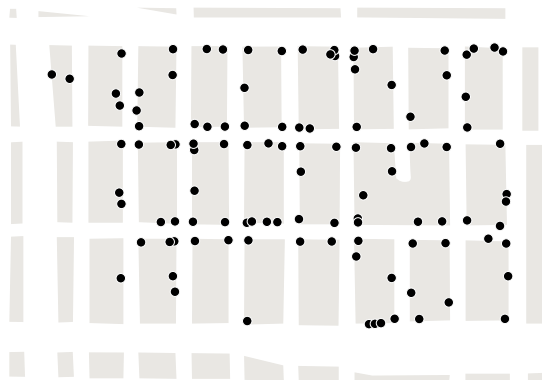
Sociallight



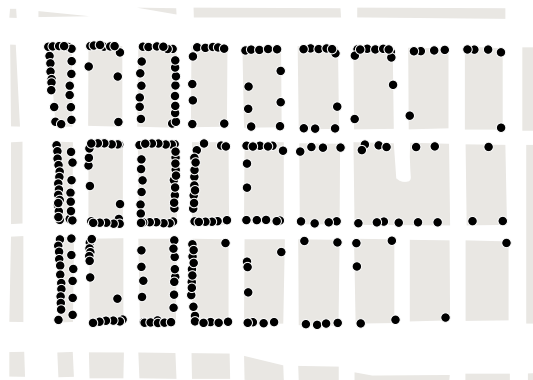
Walking tour



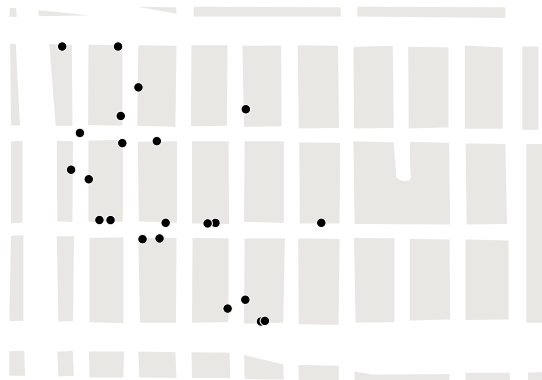
Posters



Stickers



Guidebook



Flickr map

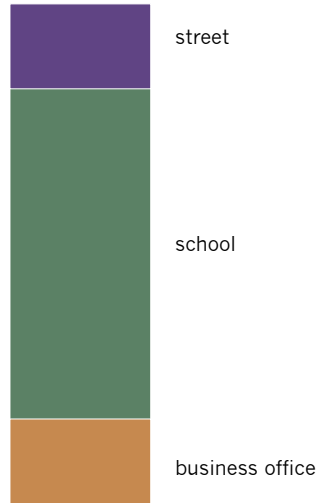


That these digital media also evidenced geographical and even site-specific crossover with the largely historical and Jewish walking tours provides evidence of the physical intermingling of old and new cultures in the neighborhood. Some sites were covered by almost all of these forms of annotation—Katz’s Delicatessen stands out.

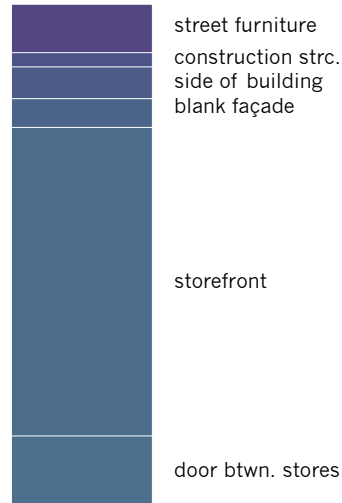
CONTENT OF ANNOTATIONS In content, as in place types, Yellow Arrow ranged the gamut, which only Socialight and, in a more discrete way, graffiti did as well. About half of the Yellow Arrow annotations were comments, responses and reflections, the former two of which were, again, only really represented via Socialight and graffiti. Though Socialight did not run as full a range of content types as Yellow Arrow and provided more guide content by focusing more on restaurant reviews, its content representation is quite similar. Of the other media that annotated similar places, guidebooks came closest to providing

Lower East Side annotations by place type

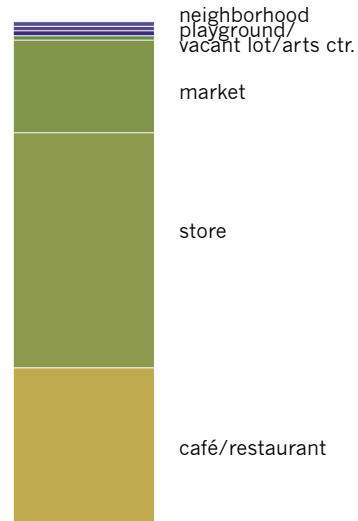
Monuments



Graffiti



Signs



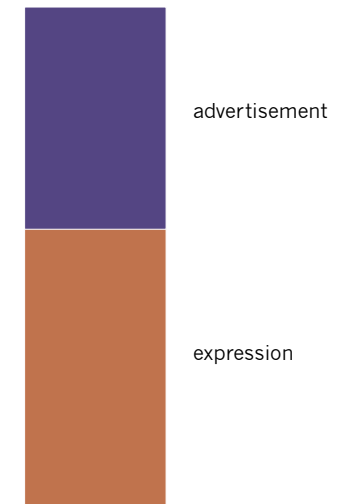
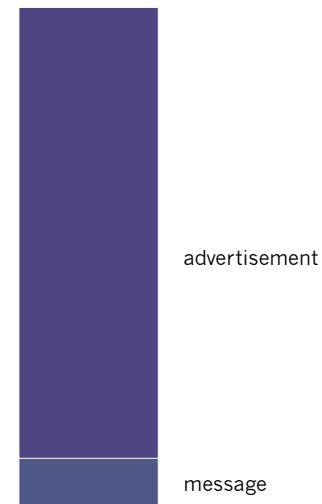
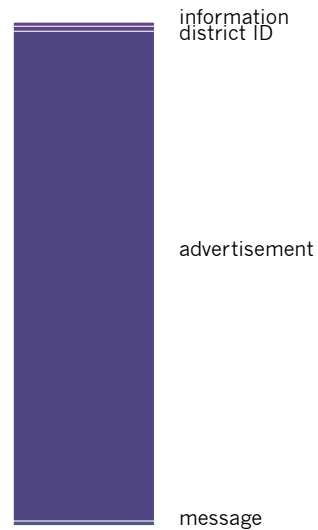
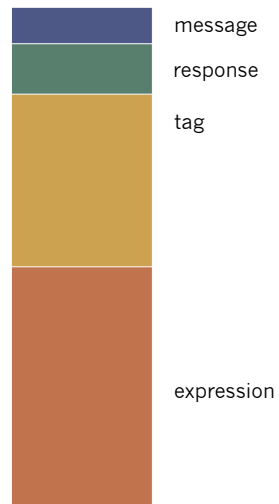
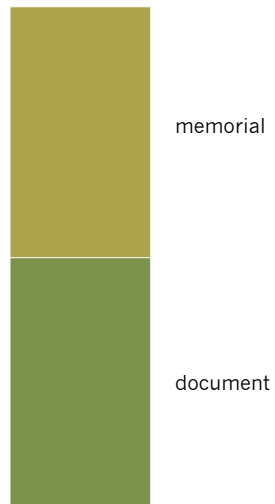
Posters



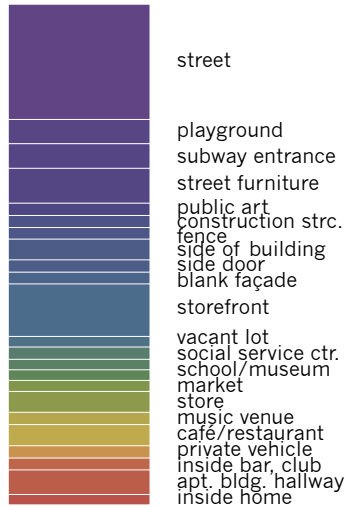
Stickers



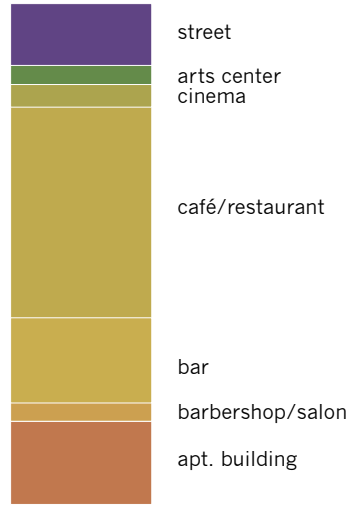
Lower East Side annotations by content type



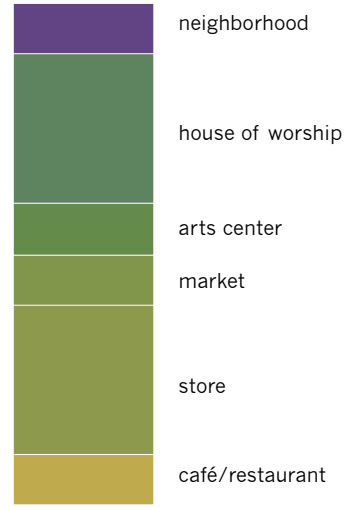
Yellow Arrow



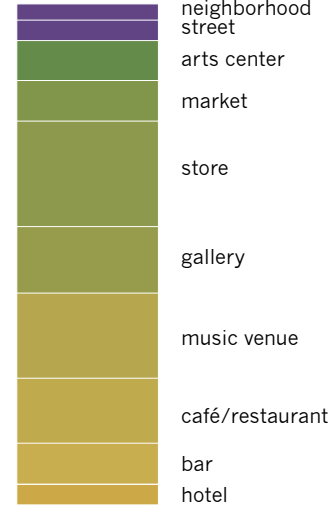
Socialight



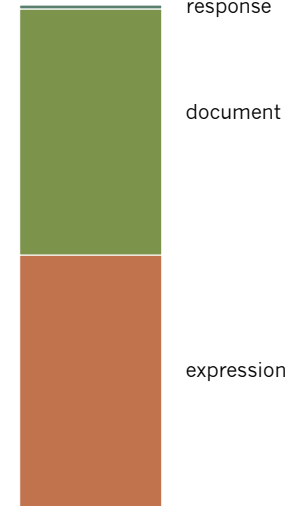
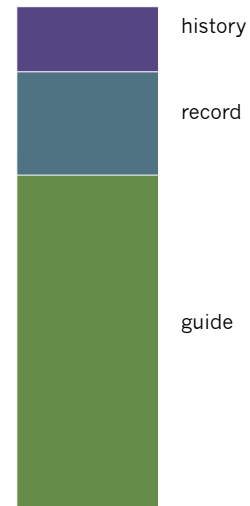
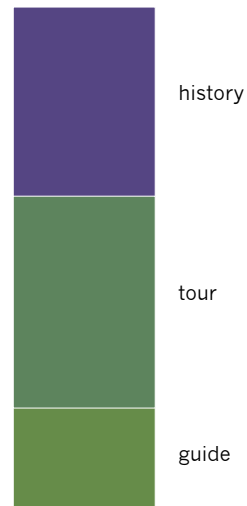
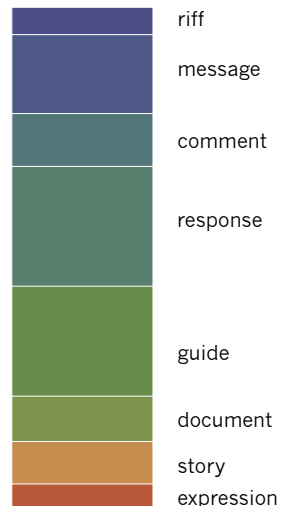
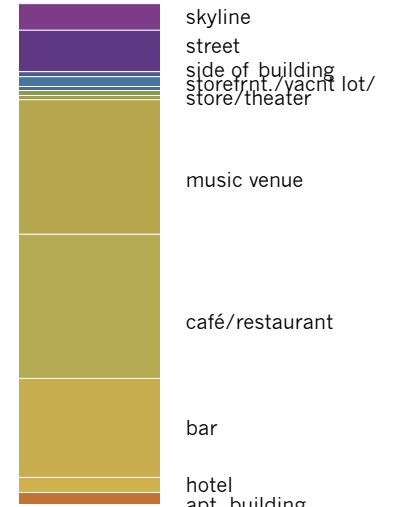
Walking tour



Guidebook



Flickr map



similar content to the placelogs, but didn't venture into the more intimate end of the content spectrum.

NoLiTa and The North Bowery

HISTORY AND CONTEXT Both NoLiTa and the Bowery have been considered parts of the Lower East Side at some point of their history. NoLiTa is bounded on the north by Houston Street, on the east by the Bowery, on the south by Kenmare Street, and on the west by Lafayette Street. It was long regarded as part of Little Italy (NoLiTa is an acronym for North of Little Italy), and it was settled by working class Italian immigrants in the late 19th century (Citi Habitats: New York 2007). Irish immigrants also had an early hold on parts of NoLiTa: St. Patrick's Old Cathedral, the first Roman Catholic cathedral in the City, features at its center.

The neighborhood was not only a home for thousands of Italian immigrants, but also a center for the celebration and commerce of Italian culture, hosting a number of restaurants, pizzerias and shops. This cultural presence persisted until the latter half of the 20th century, when Italian-Americans began to migrate out of Manhattan to other boroughs. Nonetheless, the area continued to retain an Italian cultural presence through its commercial and cultural establishments. Certain buildings were Mafia hangouts until the 1990s, and drive-by shootings were not an uncommon event (Acitelli 2004).

In the late 1990s, the neighborhood saw an influx of young urban professionals and the in-migration of numerous retail boutiques, trendy restaurants and bars fleeing exorbitant rents in SoHo (which stands for South of Houston Street) (Citi Habitats: New York 2007). Real estate professionals and others had previously and unsuccessfully tried to pitch the neighborhood as part of SoHo, but NoLiTa—which followed the naming tradition of SoHo, itself, as well as TriBeCa (Triangle Below Canal Street)—was the name that stuck. NoLiTa has become a trendy area for artists and designers, in particular, to exhibit work. Though many of the existing brownstones and other mixed-use structures have simply become higher-end residences, some new apartment buildings have also cropped up, as well as bigger ticket buildings like the forthcoming New Museum of Contemporary Art, sited right on the Bowery.

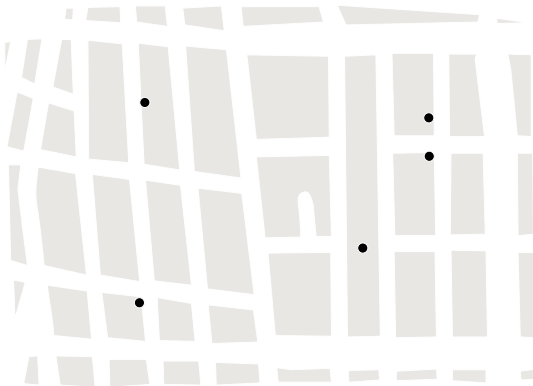
The neighborhood's transformation and re-branding has raised some protest, notably by the Medici Foundation, described by its website as “a not-for-profit organization that preserves and promotes Italian and Italian-American culture, heritage and business.” The Foundation is petitioning for a cease and desist order on the use of the NoLiTa name, claiming that it “has been and continue[s] to jeopardize Little Italy's boundaries and identity” (Medici Foundation 2007), and that it violates a City Zoning Resolution on Special Purpose Districts, of which Little Italy is one.

NoLIta and North Bowery land uses



NoLIta/North Bowery annotation maps

Monuments



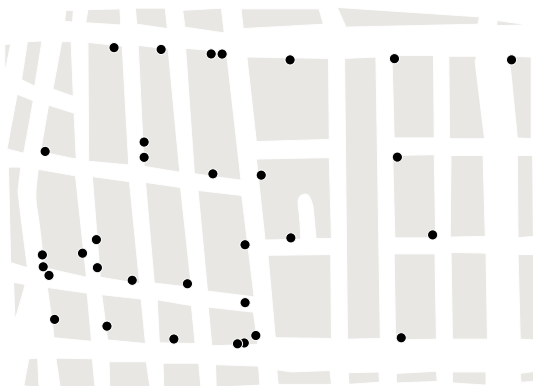
Graffiti



Signs (excluding posters)



Yellow Arrow



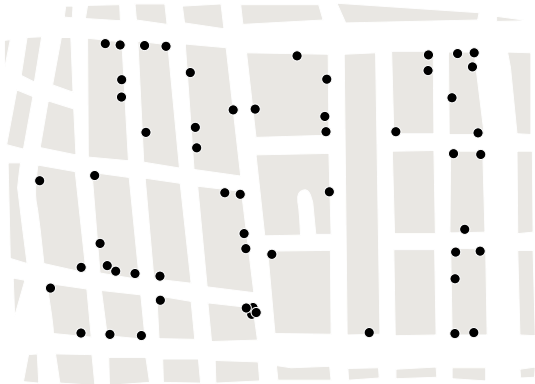
Sociallight



Walking tour



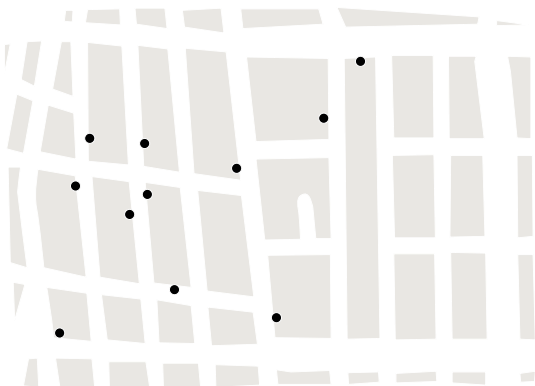
Posters



Stickers



Guidebook



Flickr map



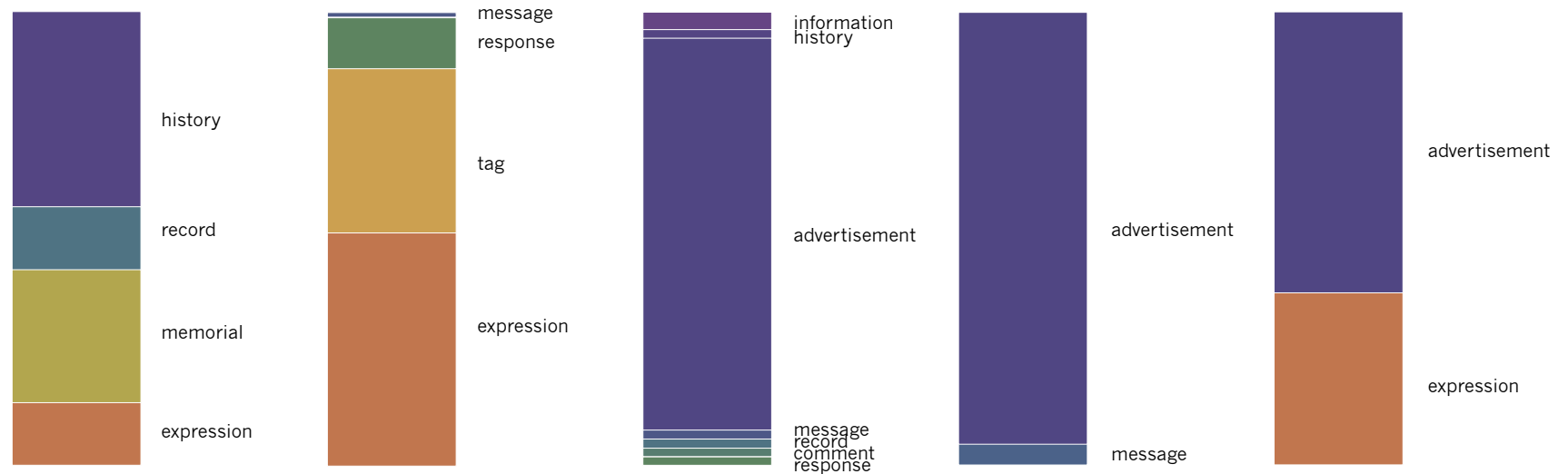
The area that constitutes the Bowery is often still considered a part of the Lower East Side, though it also has an identity of its own. Its original boundaries were East 4th Street and the East Village to the north, Canal Street to the South, Allen Street to the east and Bowery (the street) to the west. My survey area covers the area between Bowery and Allen Street, bounded by Houston Street to the north and Delancey Street to the south.

Bouwerij was the old Dutch word for farm, and the street was so named in the late 17th century for leading up to the farms of Dutch settlers (Forgotten New York 2007). By the end of the next century, it had become one of the city's most elegant streets, lined with fashionable shops, music halls and mansions of prosperous residents. But by the time of the Civil War, higher uses had given way to brothels, beer gardens and flophouses. The area became the turf of one of America's earliest street gangs, the Bowery Boys, and in the 1920s and 1930s, it was occupied by as many as 25,000

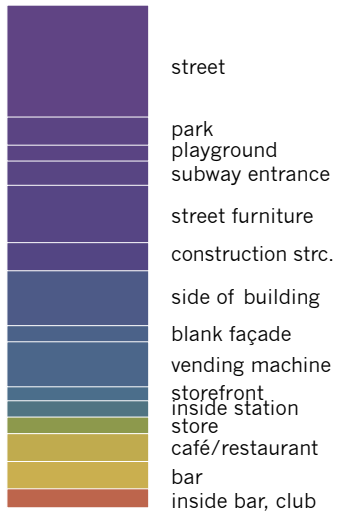
NoLIta and North Bowery annotations by place type



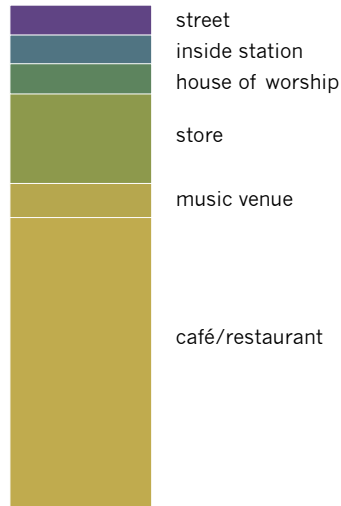
NoLIta and North Bowery annotations by content type



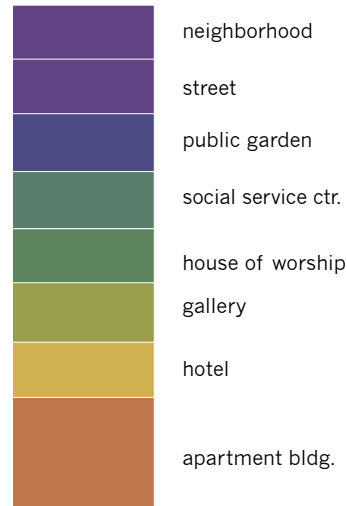
Yellow Arrow



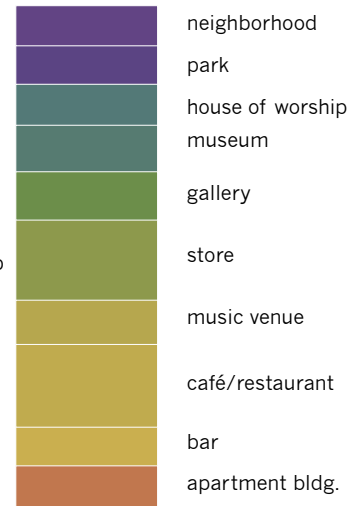
Sociallight



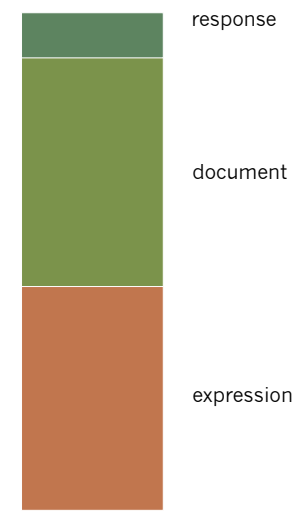
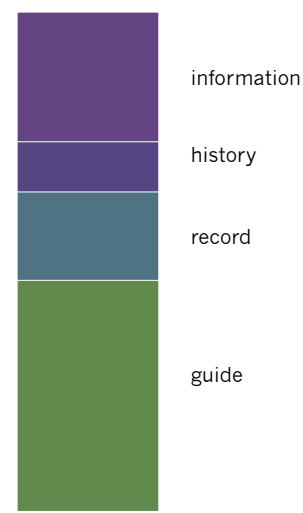
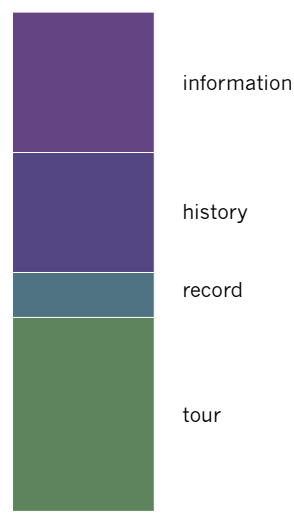
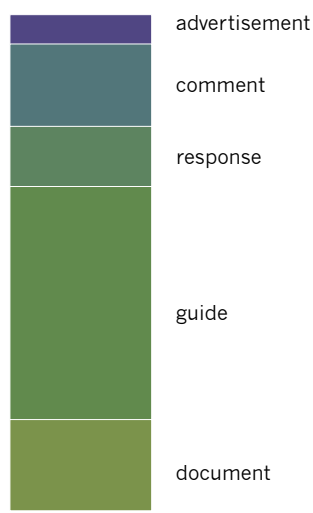
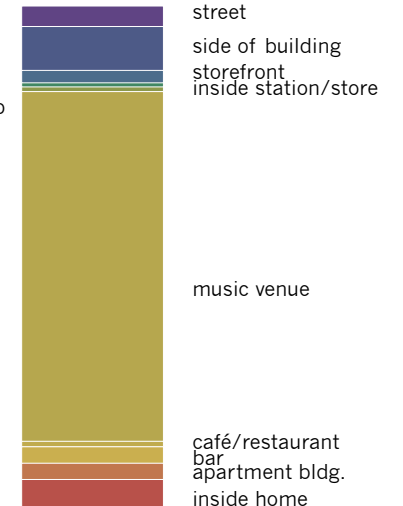
Walking tour



Guidebook



Flickr map



“Bowery Bums,” alcoholics and homeless people who occupied the neighborhood’s buildings and streets (Forgotten New York 2007). Until the 1970s, the area was known as New York City’s Skid Row, marked by high crime and unsavory behaviors. In the last quarter of the 20th century, the Bowery became the home of various countercultural writers and artists and offered venues that nurtured the emergence of punk rock and slam poetry. The part of Bowery (the street) that lies in my survey area remained, and continues to remain, a center for kitchen supply and lighting fixture wholesalers, an identity it has held since the 1920s.

There are still a few flophouses and seedy music venues left in the Bowery, but like the rest of once-undesirable Lower East Side, it began to gentrify in the late 1990s. Artists and academics have been busy cataloguing and showcasing its history for the last several years, and some public historians have advocated for retaining as much of the neighborhood’s physical structure as possible to retain the culture and history of the place (Press 2005). At the same time, while this contingent might find romantic nostalgia in the decrepitude and squalor of the former Bowery, some critics write that the ultimate contribution of their affection is to increase housing demand in the area, and to accelerate re-development (McCrorry 2004).

SPATIAL DISTRIBUTION OF ANNOTATIONS Yellow Arrows, like Sociallight and Flickr annotations, were more present in NoLIIta

than in the North Bowery, which likely corresponds with the demographic differential between these two areas. While NoLIIta is fast becoming a high-rent district, there are three public housing complexes in the North Bowery along Eldridge Street north of Rivington Street, and a community center serving that population on Rivington at Forsyth. Residents might be less likely to own a cell phone or to use one for digital annotation than the residents of NoLIIta.

That the walking tours and guidebook annotations also mostly annotated sites in NoLIIta only confirms the existence of more cultural amenities in that part of the survey area.

PLACES ANNOTATED Yellow Arrow was not the only medium to annotate a full spectrum of place types in this area: walking tours, guidebooks and the Flickr map did as well; signs and Sociallight came close. But unlike the rest of these, Yellow Arrow skewed again toward the more public landscape of the street, even while allowing for the annotation of more private and intimate spaces. Streets, street furniture and sides of buildings were well represented in the survey, again most similar to the physical marking of graffiti, posters and stickers.

The only place types uniquely annotated by Yellow Arrow in this neighborhood were playgrounds and vending machines, though neither of these constituted a huge proportion of the annotations.

CONTENT OF ANNOTATIONS Yellow Arrow did, however, seem to stand out from other media in terms of content. Of the other media, not even Socialight presented as wide a spectrum of content types as Yellow Arrow, though graffiti, again, did present a more fragmentary and discrete version of the spectrum. Graffiti, however, did not venture into semi-public places like bars and stores as Yellow Arrow did. As in the Lower East Side, about half of Yellow Arrow annotations were comments, responses and reflections, of which comments and responses were also provided through Socialight, and responses, at least, through graffiti and Flickr. Socialight, again, tended toward guide content, though the range of place types it annotated was more limited than that presented by guidebooks.

Places logged across neighborhoods

DIFFERENCES BETWEEN PLACELOGS The types of places annotated by [murmur] and Yellow Arrow were reasonably consistent within each project across neighborhoods (see **Exhibit 8**). But there were differences in the types of places annotated by the two projects. [murmur]’s distribution tended to favor the more private end of the spectrum, annotating publicly accessible/privately owned places like stores, cafés and restaurants in particular. Yellow Arrow tended toward the more public end of the spectrum, favoring the landscape of the street and sides and facades of buildings.

A number of possible factors could contribute to these differences. The physical qualities of the two sets of neighborhoods, and of the two cities themselves, might be different enough to cause different patterns of annotation. The Toronto neighborhoods are less dense, lower-rise and have more concentrated areas of particular land uses. The more semi-public uses of the neighborhood were separated out and perhaps more readily accessible. The New York neighborhoods, meanwhile, are dense; their land uses more jumbled and their indoor space comes at more of a premium. The street landscape might consequently take on a different value and function.

Another key difference between the projects is their respective identities and curation. [murmur] calls itself a storytelling project and makes use of official signage. So its participants might feel more inclined to relay directed, narrative stories about particular locations with which they have more familiarity than other people might yet have. The project’s directors seek out storytellers and stories through various social and community networks, and though they are open to a variety of types of stories, their authorship undoubtedly inflects the output. Yellow Arrow, meanwhile, draws from a tradition of stickering and identifies itself more as a countercultural public art project. Participants, then, likely feel encouraged to annotate places as one might do with countercultural media like stickers and graffiti, which tend heavily toward street furniture and building surfaces. Meanwhile, even this distributed

placement strategy is, in some way, authored by the organizers of Yellow Arrow. Since the first arrows were ‘seeded’ by project directors and their associates, they set the standards for the types of annotation that was expected and encouraged.

Finally, it’s also possible that differences in the tendencies of place types between the two projects are circumstantial, and that they wouldn’t exist or would be less distinct if I had chosen other neighborhoods. Though the neighborhoods I selected provide particularly large samples of placelog annotations left by a varied group of participants, neighborhoods vary in enough ways that these four cannot constitute a statistically significant sample. They simply offer a place to start in understanding placelog annotations.

DEFINING COMMON PLACELOG PLACE TYPES Despite the differences in distribution of place types between [murmur] and Yellow Arrow, they both offered a full range of place types, from the very public to the very private, which no other media did except the Flickr map, which draws from a similar digital and collaborative framework. Streets and residences, at the two ends of the spectrum, were annotated by other media, but not as reliably and robustly. And some place types were annotated only by placelogs: a senior’s residence, a dentist’s office, a subway entrance, apartment building hallways. None of these place types are traditionally conceived of as landmarks or places of public meaning, but the annotations indicate a desire by participants to engage in public

exchange or communication about them. And through that communication and exchange, these places are identified as sites of meaning.

Urban designer and scholar Margaret Crawford writes about ‘everyday space’, “the physical domain of everyday public activity that exists between the defined and identifiable realms of the home, the institution and the workplace...the connective tissue that binds daily lives together” (Mehrotra 2005, 18). “That makes it a kind of public space,” Crawford concludes. Describing [murmur]’s place type tendency as semi-public and Yellow Arrow’s as street landscape does not provide a complete vision of the functions these places perform. Perhaps ‘everyday space’ is a better description for both sets of place types: places that constitute the lived-in space of residents going about their daily lives. This description resonates with the stated ambitions of [murmur] and Yellow arrow, respectively, to tell the stories of “the smallest, greyest or most nondescript building” and to identify “What Counts” and is not otherwise being celebrated.

Content of placelog annotations across neighborhoods

DIFFERENCES BETWEEN PLACELOGS The types of content provided by [murmur] and Yellow Arrow annotations were reasonably consistent across neighborhoods within each city as well (again, see **Exhibit 8**). Their range was more similar across

projects than that of place types, though [murmur] produced particularly large proportions of stories and records, while Yellow Arrow produced a noteworthy share of comments, responses and reflections.

Differences in content between the two projects can be attributed to many of the same factors described as impacting the selection of places, as well as to the differences in place types, themselves. The functions of the places annotated by the two projects are different, and may even vary within a given place type between the two cities: a vacant lot might be just be a gap tooth in the fabric of spacious Toronto, while it might be an opportunity for an ad hoc playground in crowded New York (as is the case in the Lower East Side's 'Children's Magical Garden'). Project identities and respective curation also have an impact: if [murmur] identifies as a storytelling project and seeks out stories, then it makes sense that stories, and even records (imagistic accounts that simply lack the elements of narrative) are strongly represented. And if Yellow Arrow positions itself as a way to engage and challenge other people in the city to look at places in a different way, the dialogic elements of comment, response and reflection serve that aim.

Finally, the media used to annotate places through each project also shapes the content of the annotations. It's easy, through [murmur], to tell a complete story or give a full record of what a place was like when given the chance to speak at length and have someone else edit down your words into a golden nugget.

The constraints of 160-character-maximum text messages limit that same ability via Yellow Arrow and encourage pithier, more provocative or enigmatic communications.

DEFINING COMMON PLACELOG CONTENT Again, despite the differences in content between the two projects, their distributions are more similar to each other than to any other media. Nothing else exhibited the same range of content types, from third-person information to journaling and poetic expression. Even graffiti, which did offer a range of content types, was not as subtly varied. A number of content types were unique (or nearly unique) to placelogs: prompts, reflection, documentation, fiction, journals and especially stories, which were key offerings of the [murmur] annotations.

In her discussion of everyday space, Margaret Crawford advocates for an approach to urban design called 'everyday urbanism', which she describes as honoring and cultivating the value of everyday space. She identifies the ambition of everyday urbanism as re-familiarizing the urban environment and domesticating urban space (Mehrotra 2005, 22). Her discussion is specifically about approaches to urban design, to which I will return in Chapter 4, but the aim of re-familiarization seems pertinent to placeloggging. The content of annotations made through [murmur] and Yellow Arrow—and Sociallight—was highly subjective, first-person and in some cases quite intimate. And the unique forms

of content these placelogs provided evince an informal, playful or confessional nature. Their annotations might rightly be described as marking ‘everyday time’—cataloguing the stories, thoughts and histories of those who occupy the city in the continual present. Monumental history, after all, is not always being made, and most citizens relate to a city through its existing state. As Kevin Lynch writes in *What Time is This Place?*, “a desirable image is one that celebrates and enlarges the present while making connections with past and future” (1978, 1). In this sense, we might understand placelog annotations as a participant base's means of seeking that desirable image.

Meanwhile, while it might be apt to describe the effect of placelog content as 're-familiarizing urban space through annotating everyday time,' there seem to be less ambitious functions served by its annotations as well. Yellow Arrow's prevalence of comments, responses and reflections on places—and on earlier annotations, as well—seem not only to facilitate public exchange, but also to support social relationships among participants. With graffiti, response was either expressively made through images and tagging or dismissively made through defacement. But Yellow Arrow responses seemed specifically aimed at engaging or being engaged in relationships. This was also true with Socialight responses (as it tends to be with Flickr responses, though I didn't catalogue these). Responders to earlier annotations expressed agreement, posed and answered questions, voiced alternate points of view and used

original annotation as a platform for further reflection. Participants responded mutually to each other and expressed familiarity with one another's annotations and activities. The fact that Yellow Arrow also offers a journal page to each user on its website and actively cultivates a social networking agenda only supports the personal nature of the annotations and their use in strengthening ties between people. And these are not necessarily just online relationships—the Annex Flickr map provided evidence of at least three organized physical gatherings of Flickr and Blogger users who had similarly met through commenting on each other's posts and sharing a geography. This is to say nothing of informal gatherings and friendships, even those that prefigured placelog participation.

Some placelog annotations seemed not to be about social relationships at all, but simply about sharing and being received by a public. Certainly, comments like “the city needs more public drinking fountains” are easy to classify in this way as opinions registered for the consideration of others. And a request to “hey, check out my [apartment]” made through Socialight seems to be about identifying not only “What Counts” but also “Who Counts”—the annotation becoming a way of being counted and acknowledged. But there were also a number of what one might call ‘messages in digital bottles’: missives of personal stories and reflections that contribute no functional knowledge. A woman in Kensington Market talks about how she felt like an African goddess wearing a dress bought at Courage My Love; someone documents

“A harsh winter’s night. Jumping beans and pleasant bums. gather round the fire” in the middle of a street. These types of poetic and journal-like annotations resemble nothing so much as blog entries, electronic thoughts shared with the anonymous and free-floating masses. Only, in this case, those masses are not necessarily in the remote stretches of the world, but passing through the same familiar space of one’s own neighborhood. This sort of public self-publishing might lead to person-to person interaction, but otherwise, it allows participants to register presence and to leave traces in the physical world they and others inhabit.

Finally, other placelog annotations did have a specific, functional purpose: to amend the public record. While the histories provided through Yellow Arrow annotations were sometimes dubious (“This spot was the first to be leveled by explosives in this whole country”), a number of historical annotations made through [murmur] were offered by people with a particular interest in having their version of the history known. One woman talks about how a nearby building is often believed to be where activist Emma Goldman died, but after doing some research, she realized that it wasn’t true. Nonetheless, she goes on to talk about why Goldman was important to Toronto and why she should be memorialized in its streets. Another woman recounts her move into the neighborhood and her puzzlement at the small size of its front lawns as a foreword to explaining an aborted proposal to build an expressway through the area. Others seem to seek greater

recognition for the places they find value in: a yoga studio that first introduced Eastern philosophy to Toronto, a club that was once the vital center of the city’s rock scene. Particularly in areas where re-development tends to swallow such everyday spaces without seeming to pay homage to their contributions, placelog annotation can be considered an activist behavior, trying to cultivate public awareness of the significance of particular places.

A few [murmur] annotations were even made by people who had a hand in shaping the places they annotated—artists and community leaders, particularly. Documenting how they made and participated in decisions to build parks or to oppose power stations not only makes those decision-making processes more transparent, it cultivates empathy for the decision-makers by making clearer their good intentions and the way in which they weighed options. Ultimately, documentation of public construction projects builds appreciation for what is and what is not present in the landscape and gives other citizens a better sense of what is required of the people who shape it.

By affording opportunities to annotate everyday space with strongly first-person, subjective and narrative content, placelogging does seem to provide a channel of expression not offered by other media. And the *media* of placelogs, specifically, is what permits this channel. While social networks, blog entries and first-person accounts have homes beyond placelogs, they do not otherwise

have the opportunity to occupy, as Crawford calls it, “the physical domain of everyday public activity.” This is both because it is a practical impossibility to stuff all of that content into an onsite, physical marker and because that content is often elusive and difficult to communicate. Dolores Hayden writes, “The places of everyday urban life are, by their nature, mundane, ordinary, and constantly reused, and their social and political meanings are often not obvious. It takes a great deal of research, community involvement, and inventive signing and mapping to bring these meanings out” (1995, 228). By creating the opportunity to annotate everyday space firsthand as meaning emerges, placeloggging seems to diminish the barriers of traditional media. Its combination of place and content does seem to be a unique contribution.

Notes

¹ <http://www.tenement.org/>

² Psychogeography is a term coined by radical art and theory collective Lettrist International in the 1950s. It is “the study of the precise laws and specific effects of the geographical environment, consciously organized or not, on the emotions and behavior of individuals” (Debord 1955).

CHAPTER 3

The value(s) of placeloggging

Placeloggging seems to offer a unique brand of communication, but of what significance is that communication? What value does it contribute, both to an understanding of the city and to the people who participate?

As Chapter 2 established, placelogggers appear to annotate everyday space with personal, 'familiarizing' content, often to support social relationships, to share themselves with the masses, or to amend a public record. The outcomes of these pursuits are personal satisfactions: comforting and familiar public spaces, affirmations of self and community. But these are just the short-term benefits of participation.

There are possible long-term benefits as well, and this is where the integration of place is really relevant. The personally oriented benefits of participation don't just remain with the individual. They are embedded—along with the meanings that both prefigure and result from annotation—in the built, physical landscape of the city. To me, this embeddedness suggests two longer-term contributions in particular: the use of placelogs as indicators of shared meaning and significance, and the cultivation of self and community that explicitly centers on the physical

experience of place. This latter contribution also coincides with the benefits of place attachment, claim to space and social connections suggested by project developers.

This is still an early moment in the development of placelogs and of the methodology for analyzing them, so it's premature to make any definitive statements about their long-term value. But I will offer some preliminary investigation, from my research and that of others, into these two possible contributions.

Placelogs as indicators of shared meaning

I use the terms 'shared' and 'collective' rather than 'public' to imply a group smaller than the entire populace. What Lynch proposed in *The Image of the City* was an analytical tool in deriving a 'public' image at the scale of the city, and at this scale it seemed impossible to pursue a notion of group meaning for all the people impacted. He wrote:

[T]he question of meaning in the city is a complicated one. Group images of meaning are less likely to be consistent at this level than are the perceptions of entity and relationships.... [W]e may

even be wise to concentrate on the physical clarity of the image and to allow meaning to develop without our direct guidance (Lynch 1960, 7).

Composing a group image of meaning for the whole city is no more possible today than it was in 1960. The most placelogs can aspire to is representing the interests of a subset of the citizenry; even if their participant base were to grow to the staggering size of the current blogger population, it would still constitute a niche. There can be no assumption of ‘public’ representation through placelogs, but there can be ‘shared’ and ‘collective’ representation of the interests and tendencies of particular groups.

And yet, based on Chapter 2's survey alone, it isn't yet possible to state authoritatively that placelog annotations even indicate sites of collective meaning and significance—in some cases, it's not clear that they indicate *personal* meaning and significance. But volume of annotations does begin to hint in this direction. Four people recorded highly reverential [murmur] annotations for the El Mocambo club in Kensington Market, which suggests that a larger support base for the site exists, undocumented through [murmur]. On the flipside, had four people recorded annotations describing what an unsafe and undesirable place the El Mocambo had become in its twilight years, we might have likewise been able to imagine a larger population sharing those sentiments.

In a similar vein, we can consider the download count of annotations as preliminary indicators of shared significance. Drawing from call logs passed on by [murmur], **Exhibit 9** indicates the number of calls made to access annotations at each [murmur] sign in Kensington Market and The Annex as of April 8, 2007. As with my surveys of Flickr annotations, these numbers do not discount repeated callers, nor am I sure that they should; a small but devoted group of repeat callers could be at least as noteworthy as a large, casually interested group of one-timers.

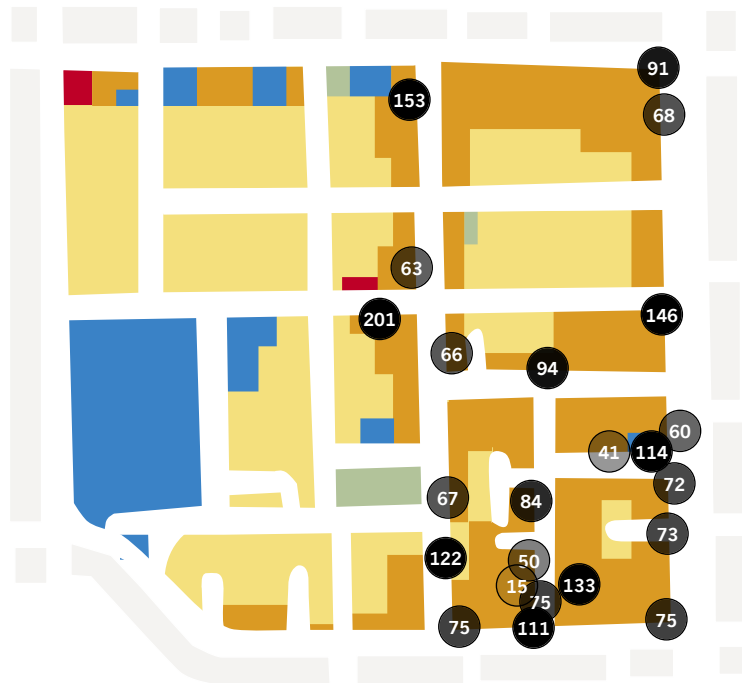
The download counts are significantly larger than the number of annotations, and they serve as interesting gauges of project performance, at least. But they are also more ambiguous than the annotations themselves. While it's tempting to read inbound calls as indicators of interest, there are contextual variables at play in determining these counts as well: foot traffic at a given site; recency of the sign's placement; its visibility; whether or not it's even there anymore.

These factors and others can be taken into consideration, of course, but the numbers still require qualification. The decision to receive publicly available annotations is much less discriminatory than the decision to author them. In the Annex, for instance, the small and serene Joseph Burr Tyrrell Park, pocketed between two houses on a residential street, shows 82 inbound calls to listen to annotations. But is this because the callers were highly interested in the park, or because they were bored while watching their kids

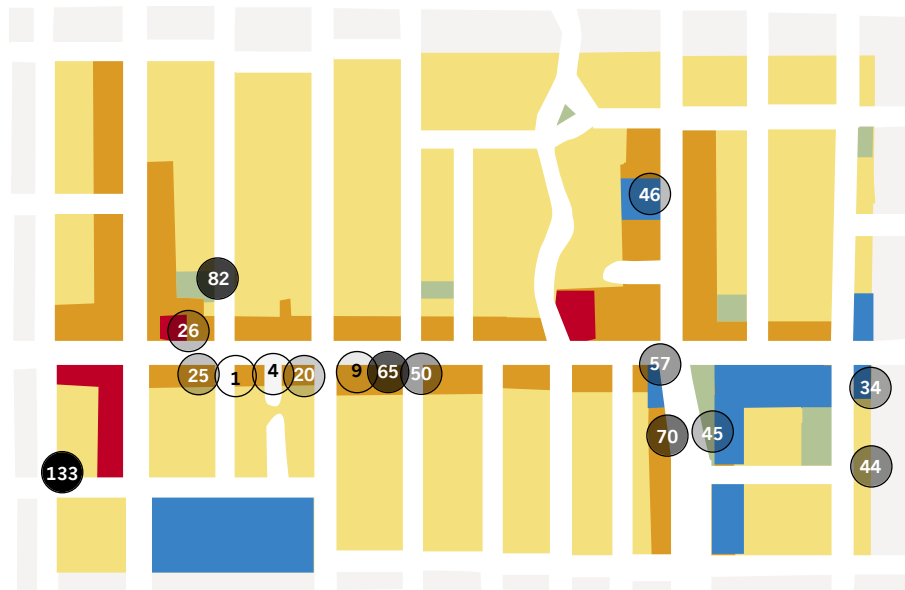
Exhibit 9: Number of calls made to each [murmur] sign as of April 8, 2007

As derived from call logs provided by [murmur]. Numbers include all calls made, including repeats and mid-message hang-ups. Darker circles correlate with higher call volumes.

Kensington Market



The Annex

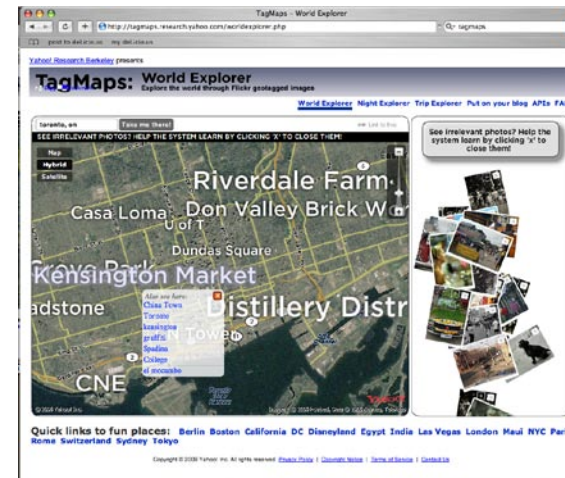


play on the jungle gym? Determining motivation, investment and the nature of contextual encouragement with any certainty requires more information and study. Nonetheless, there is potential here. Like the annotations themselves, the number of inbound calls presents information which, handled sensitively, could provide insight into the significance of annotated places.

Other researchers are already at work in developing similar strategies. The Yahoo! research project TagMaps¹ presents global maps overlaid with keyword tags attached by Flickr users to their mapped photos (see **Exhibit 10** for examples). The more a particular tag is concentrated in an area, the bigger its representation is on the map. In the Annex, for instance, the four most popular tags, in order, were graffiti, Lee's Palace (a music venue), Spadina (the north-south commercial and residential avenue) and Honest Ed's (a discount store with an elaborate storefront and a longtime neighborhood presence). Even without looking at the photos, it's easy to tell that the TagMap does not represent the interests of an entire populace, but skews toward those of a young, artistically and technologically inclined subculture. Nonetheless, it aggregates hundreds of photos in making its representation, and it does seem likely that graffiti, Lee's Palace, Spadina and Honest Ed's are important to that subculture.

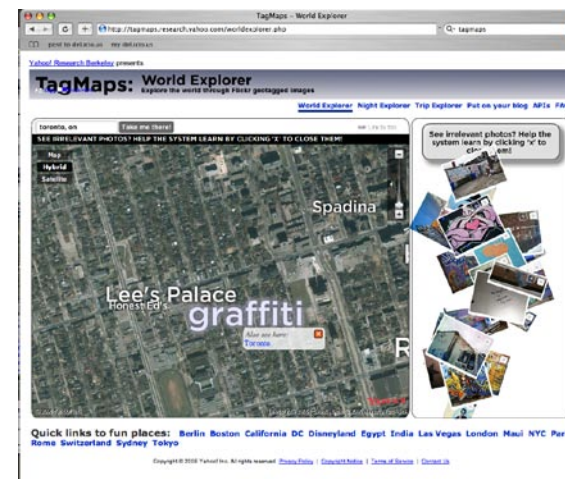
TagMaps already offers a powerful tool in identifying places of shared significance, though, like the Flickr maps it is based on, its numbers can be skewed by a glut of photos tagged by one or

Exhibit 10: Yahoo! Research's 'TagMaps'



Right: A TagMap of the Flickr keywords most tagged to photos mapped to Toronto.

Below: A TagMap of the Flickr keywords most tagged to photos mapped in the Annex. (screen captures from research.yahoo.com/tagmaps)



two individuals. Perhaps some adjustment is required to account for representativeness, but it's not so hard to imagine an analytical process similar to TagMaps that takes placelog sites, content and perhaps even download counts into consideration.

INDICATORS VIA OTHER MEDIA As my mapped survey of annotations showed, and as TagMaps confirms, placelogs are not the only medium of spatial annotation whose content can be used to identify sites of meaning and significance. Signs, graffiti and stickers are harder to read meaning into because their content tends to be neither as personal nor as site-relevant as placelogs (though large aggregations of expression, like the graffiti-soaked apartment building at 11 Spring Street in NoLiTa, bear more obvious significance for a particular group of people). Meanwhile, walking tours and guidebooks tend to annotate sites that already have strong constituencies supporting them.

By contrast, user-authored digital maps might turn up aggregate first-person endorsements or criticisms of particular places in a similar vein as placelogging. So might a comprehensive sweep of blog entries or other narrative media about a neighborhood. But again, these are projects that are created and typically accessed offsite. What continues to distinguish placelogging among digital media of annotation is the ability to intervene with immediate knowledge about places in much the same way that Lynch's formal elements were suggested to orient

pedestrians, and to alter or reinforce that knowledge by influencing behavior.

Impact on participants

Whatever their motivation for participating, it remains to be seen what value participants glean from their engagement with placelogs, and whether it has contributed to their feelings of place attachment, claim to space or social connections. I conducted a handful of interviews with [murmur] and Yellow Arrow participants to get a better sense of their experiences; London-based research group Proboscis, which operates Urban Tapestries, has conducted considerably more research with its own trial subjects. I will draw from both, as well as from Chapter 2's survey and other sources on digital communities, in exploring the impacts of participation.

In large part, of course, those impacts depend upon who the participants are and how well the project suits their interests. [murmur]'s directors make a point of seeking out contributors from a diverse group of people with a variety of interests and histories in the city. Being sought out implicitly suggests that contributors' stories are valuable and primes them to invest in the project. Further, a number of people who contribute are active community members who are likely to find value in storytelling, anyway. Two contributors I spoke to were in publishing and involved in historic preservation within Toronto. Others included artists, architects, community advocates and longtime residents.

By contrast, Yellow Arrow does not seek out particular participants. Its contributors tend to be more self-selected—which, actually, also suggests an implicit recognition of the project's value. The contributors whose annotations I surveyed in New York seemed to be more uniform as a group, skewing toward their 20s. They seemed to share a particular combination of tech-savviness and reflectiveness, which might have also played a part in attracting them to the project. But due both to Yellow Arrow's experimental nature and to its informality, all but the most fervent of its participants to whom I spoke seemed to have very little agenda or expectation to fulfill through participating. They were simply interested in the ability to share messages through the space of the city. While that casualness does not mean that participation was of minimal significance to them, it seemed harder for them to identify that significance than for [murmur] storytellers, who were operating in a familiar mode and often with a clearer 'contribution' to make.

What I gathered about both projects from participants was limited and anecdotal: general enthusiasm for the idea of personal exchange; some technical frustration (with standing and listening to a phone message on a noisy street, in [murmur]'s case, and with having a 160-character limit, in Yellow Arrow's); evidence of participation in other forums of interpersonal exchange, through writing, online communities, poetry readings and art-making. But these were only a few interviews, and they don't constitute a statistically significant sample.

Proboscis, by comparison, has gathered a large volume of participant feedback about Urban Tapestries. As a research organization, Proboscis is as much interested in technology development as it is in understanding the emerging sociology of digital spatial annotation. They have performed and hosted a number of studies on the use and contribution of Urban Tapestries, as well as various other 'public authoring' tools they are developing.

In one of these studies, Silverstone and Sujon (2005) conducted a series of lengthy surveys and interviews with a group of Urban Tapestries trial users. Subjects expressed a mix of positive and negative responses to the project, the most negative being that it seemed "non-essential" and that they couldn't imagine themselves or their friends being interested in participating or



Much of Proboscis' research through Urban Tapestries has permitted participation through PDAs, though newer incarnations of the project have allowed for cell phone participation. (photo courtesy of Proboscis)

knowing what other people thought about places in the city. Meanwhile, a number of subjects, in Silverstone and Sujon's study and others conducted by Proboscis, did express excitement about the technology and its possibilities (Lane 2004a; Silverstone & Sujon 2005; Lane & Thelwall 2006). In this research, as in Chapter 2's survey, place attachment, claim to space and social connections seemed to be among the key results of participation.

PLACE ATTACHMENT Altman and Low (1992) identify the practice of sharing stories about the history and significance of particular places as a strong avenue to place attachment. Placelogging seems to provide that avenue both through the opportunity to communicate about places and through the prompt to reflect on what might make them special, after all.

Consider the Socialight annotation of Katz's Delicatessen in the Lower East Side. The original contributor talks about the remarkable quality and size of the pastrami sandwiches. The responses to his rave review include "Place is like no other" and "last of a breed." Each poster is able to articulate his fondness for the place and to have that fondness validated and echoed by the others. It's possible that the responders have been spreading the word about Katz's for years, but it's equally possible that they only recognized their affection for it at the moment of response.

Along the latter line of possibility, several Urban Tapestries trial subjects described how participation reinforced their memories

of small but important moments and encouraged them to be more observant of the details of their surroundings (Lane 2004, Silverstone & Sujon 2005). One of Silverstone and Sujon's subjects explained how that enhanced attention led to affection for the place: "it did remind me of how much Bloomsbury means to me, and picking up the few little things that I did brings out what makes it so special" (Silverstone & Sujon, 47). Annotation, itself, provided the occasion to build place attachment.

It's also easy to imagine non-responders downloading annotations, seeking out their own experience of the places identified and generating their own attachment. This is not, however, always the case: one [murmur] listener reported that he had no clear memory of what he had listened to or what specific places had been annotated, other than that they were street corners (personal interview, May 4, 2007). Again, the value generated by exchange through placelogging seems to depend upon how much the annotation appeals to the downloader and how much it resonates with his or her own experience.

A fair number of participants clearly did appreciate the opportunity to be 'clued in' to places they hadn't yet visited: one Yellow Arrow participant I spoke with said that reading other people's annotations "made me wish I had looked a bit closer at some places I had been to—made it something I want to go back and have another look at" (Yellow Arrow contributor, personal interview, May 22, 2007). A Lower East Side Socialight participant

responded to a restaurant recommendation: “have to check this—it is now on my list.”

This recommendation-and-response system is familiar: user reviews and comments have been well integrated with consumer-oriented web content for years. Through services like eBay, Amazon.com and Yelp, users have come to base their decisions upon considered review of peer recommendations—and in some cases, to defer to peer recommendations more than to the those of 'experts' (Dellarocas 2003). While not all placelog content bears resemblance to a review, the distribution of authority through electronic services is so common at this point that the marking of a place with positive content of any kind can constitute an invitation to experiencing it, with the expectation of building attachment.

CLAIM TO SPACE Claim is only one step beyond attachment. Yellow Arrow annotations such as “this was just junk--now its my favorite playground. That is my red swing” and “My girlfriend and I had our first date here 2 and a half years ago. It’s Café Habana and it’s still one of our favorite places” show how participants move from extolling the virtues of a particular place to expressing a sense of belonging to or pseudo-ownership of it. Similarly, one of Silverstone and Sujon’s subjects voiced an interest in using Urban Tapestries to create highly personal content and play the role of tour guide to 'her version' of the city (Silverstone & Sujon 2005, 46). The authors write:

For respondents, [annotation] was about carving out the spaces that held some kind of personal relevance or had some individualized meaning. In this sense, public authoring promotes a sense of control not only over users’ territories, but also over their boundaries and their own role in those territories (Silverstone & Sujon, 34).

Once reflecting on the personal significance of places, participants' attachment and territoriality could actually be so intense that the decision *not* to annotate is, itself, a claim to space. As one Yellow Arrow participant said, "The irony is, sometimes you just want keep the place for yourself, or I did. Some locations I did actually bypass" (Yellow Arrow contributor, personal interview, 2007). While this sort of territoriality in public space might seem overly possessive, it's important to recognize that it is generated in the context of a collaborative and social framework that implicitly recognizes the equal claim of multiple authors. Any person's own one claim is thus understood as one of many possible.

Further, the way this sort of claim leads people to personally identify with places could also translate into increased stewardship and more of what Jane Jacobs (1961) called “eyes on the street”—a stronger constituency looking out for the welfare of particular places that might not otherwise be well tended. One of Proboscis’ trial subjects suggested that Urban Tapestries could be used to track and report neighborhood crimes: “Many people feel powerless—by allowing them to express their opinions on

Urban Tapestries, it may reduce this sense of uselessness” (Lane & Thelwall 2006, 73). Understood this way, placeloggging might act as a gateway, not only to a greater sense of authority over a particular place, but also to a greater sense of belonging to that place.

These dual senses of citizenship are familiar, too: they are key to the success of online knowledge-building databases. Contributions and edits to sites like Wikipedia are made partly out of a sense of duty to the goals of the project and partly out of a desire for peer recognition through the territory of entry page metadata (Forte & Bruckman 2005).

SOCIAL CONNECTIONS With the understanding that claim can be based in the pursuit of peer recognition, belonging and affirmation, it’s easy to see how placeloggging can be considered to cultivate social connections. The shared pursuit of project goals, whether simply telling the city’s story, as [murmur] proposes, or a more specialized task like one of Yellow Arrows ‘projects’, has shown to be instrumental in building relationships through other digital knowledge-gathering communities as well (Forte & Bruckman 2005).

As with Wikipedia and social networking sites, placelogg participants make connections through the content they provide. One of Proboscis’ trail subjects wrote in her blog that, of the sites she had visited through Urban Tapestries,

"My favourites were places that revealed little moments in other people’s lives. It made you look at the people around you and feel like you were only one or two links away.... Following a single thread means often following a single personality" (Lane 2004a, 9).

In this case, place became the shared territory through which to understand other people. Similarly, one [murmur] participant I spoke to talked about listening to the experiences of a younger generation on the Annex’s Bloor Street, which was once lined with Hungarian restaurants but has since been, to use her term, ‘sushi-fied’. That generation has a different experience of the city, of “Lee’s Palace, and the coffee shops and the Internet cafés, and my world in the Annex is some of the more establishment places.” But the character of the restaurants on Bloor, she said, is a topic that bridges that gap. “That’s a theme that, I could talk about with someone thirty years older than me or thirty years younger than me, and it would hit home.... I think what you find is this common thread that you connect with” ([murmur] contributor, personal interview, May 14, 2007).

The value of digital connections like these has been contested. Some researchers have argued that they offer weak social ties, especially as compared with face-to-face interaction (Cummings et al 2000). Others, like Castells (2001), claim that cyberspace simply offers different kinds of relationships than

those made through analog modes of interaction. Complementing these arguments, a fair amount of research details the frequency of interactions among population groups that migrate between virtual and physical worlds; Ito (2005), for example, describes how *keitai* text messaging in Tokyo has engendered greater civility on trains and tightened social groups that combine online and face-to-face activities. Evidence of at least three Flickr or Blogger meetups in the Annex provides anecdotal confirmation that this crossover interaction happens locally as well.

But by focusing on the mobile user, placeloggging seems poised to sidestep this theoretical dispute altogether by situating physical and virtual interaction in the same space: the everyday space of the city. Projects like Plazes exemplify that confluence by allowing users not only to make and respond to place annotations, but also to see where the members of their social network are in real-time. In this way, neither form of interaction is privileged over the other. Garton (1997) writes that strong social ties of any kind include combinations of intimacy, self-disclosure, provision of reciprocal services, frequent contact and kinship. With placeloggging, what might lack in the digital experience could be complemented by the physical experience, and vice versa.

Of course, the success of this kind of hybridized social experience requires a sturdy participant base. A Yellow Arrow contributor in Australia reported that while he was able to make

international friends through the project, he had been totally unable to engage members of his local community—friends and strangers alike—in participation (Yellow Arrow contributor, personal interview, 2007). As a result, he was not able to reap the full social benefits of the project.

Like all of the potential contributions I have identified, the development of social connections through placeloggging is, at least in part, theoretical. There simply haven't been enough users yet to understand its impacts with much certainty. Proboscis and its affiliates have laid a foundation for the investigation, but as the placeloggging public grows, further study of participant response is in order.

Assuming that participation does grow, it is the hybridity of physical and virtual space that seems likeliest to distinguish potential contributions of placeloggging to its participants. As discussed in Chapter 1, a variety of other media can contribute to place attachment, claim to space and social connections; graffiti, for example, can do all three. But no others I surveyed can merge the immediacy of onsite spatial annotation with the depth and intimacy of offsite annotation. There seems to be strong potential in its use.

Notes

¹ <http://tagmaps.research.yahoo.com/>

CHAPTER 4

Implications for planners and designers

The potential contributions of placeloggging and the annotations it generates particularly suggest two types of uses by urban planners and designers: as tools of community development through citizen engagement and as guides in meaning-centered design and development of built space. I will consider the possibilities and limitations of each use, then weigh the political concerns of using placelogs in an official public context, before offering final thoughts on the changing nature of cities.

Placeloggging as community development tool

Chapter 1 touched upon some ways in which other media of spatial annotation have been adopted by community development and advocacy organizations. Many annotation projects, from The Power of Place's monuments to the Up My Street Project to mytown's walking tours, use onsite annotation as a way to foster place attachment and claim to space in the

interest of building constituency and feelings of citizenship. Other projects, including public participation GIS and some low power radio stations, use offsite or non-physical media to mobilize citizen attachment and claim in identifying neighborhood concerns, sharing local knowledge and providing platforms to address decision-makers. Indications from my survey of annotations suggest that placelogs, as both onsite and media-rich forums, can potentially be used in all of these ways—as facilitators of personal engagement as well as social dialogue.

Some development professionals and public decision-makers have already begun to use placelogs toward these ends, with varying degrees of success. I will review three such cases of implementation: [murmur] along Toronto's Spadina Avenue, Yellow Arrow in Copenhagen's South Harbor, and Urban Tapestries in west London's Havelock estate. I have included Urban Tapestries in addition to the other two projects both because Proboscis has been the organization most committed to and most innovative in

exploring the role of placemaking in community development, and because the Havelock case offers some valuable insights into the limits and conditions of that role.

[murmur] ON TORONTO'S SPADINA AVENUE In mid-2005, [murmur]'s directors were approached by the City of Toronto Culture Division to extend their storytelling project to Spadina Avenue, one of the city's key north-south axes. [murmur]'s presence was to comprise one element of a much larger program called "Live with Culture," a 16-month celebration of Toronto's arts and cultural communities. This program, in turn, represented part of the 2003 Culture Plan for the Creative City, a 10-year plan to position Toronto as "an international cultural capital and to define culture's role at the center of the economic and social development of the city" (City of Toronto 2007). The Plan's directives include ensuring that the city's cultural programs "will promote inclusivity and celebrate cultural diversity" and that "Toronto residents and visitors should have affordable and convenient opportunities to participate in the cultural life of the city" (City of Toronto 2003, 6).

Senior Cultural Affairs Officer Andrew Lee knew of [murmur]'s success in Kensington Market and invited its organizers to join the Live with Culture program. According to Lee, [murmur]'s goals coincided with the Culture Division's own desire to capture and celebrate the cultural and creative life of Spadina Avenue.

"Spadina Avenue has a long, evolved history from a variety of... artistic communities and from various activities.... What I saw in [murmur] was a way to relate those stories...and the way that they present information...get people involved, the interactive aspect, was what I was very much interested in" (Lee, A., personal interview, May 13, 2007).

Spadina has been a site of considerable development and change over the last 100 years. It has hosted a streetcar line since 1994 and was once the planned site of a major expressway that was halted by strong local protest (Relph 1997). It has progressed through phases as a cultural nexus for Torontonians, a breeding ground for experimental art and music, a home for the city's fashion industry and a center to its Chinatown. The implementation of [murmur] aimed to bring the Avenue's stories to the fore. Lee organized a meeting between [murmur]'s directors, the heads of various community organizations and local leaders to establish contacts with potential storytellers (Lee, personal interview, 2007). A key partnership developed with the Chinese Canadian National Council of Toronto, which helped to gather stories from the local Chinese community.

As part of the Culture Plan, the expression of Spadina's rich and diverse cultural life serves underlying development goals. The Plan specifically emphasizes the role of arts and culture in attracting to Toronto people who "work with ideas, are intensely mobile and insist on a high quality of life wherever they choose to

live” (City of Toronto 2003)—a group often known by Richard Florida’s term “the creative class” (Florida 2002). Toronto’s 2005/2006 identification and financing as a “Culture Capital” by the Canadian Heritage Board aimed similarly to provide a springboard for attracting that particular sector of the population to Toronto. Within the context of this agenda, Spadina’s variegated character was used as one of many emblems for the city as a whole; as Live with Culture’s website insists, “The history of Spadina is the history of Toronto” (City of Toronto 2007).

[murmur]’s presence along the Avenue, then, served dual aims of supporting the claim of existing cultures to the Avenue’s history and of endearing new residents to its charms. This much is again confirmed by Live With Culture’s website, which touts [murmur]’s creation of “large scale public interaction” and essentially paraphrases Altman & Low in asserting that “Stories are what establish an intimacy with, and a sense of belonging to, a place” (City of Toronto 2007).

The project of collecting and sharing Spadina’s stories was [murmur]’s biggest to date. 136 stories were recorded, and the call logs from April 8, 2007 indicate that they had been accessed by phone 2,445 times in total since the launch in October 2005. Meanwhile, [murmur] co-director Gabe Sawhney reports that website listeners comprise a much larger number than telephone listeners (Sawhney, G., personal interview, March 25, 2007).

YELLOW ARROW IN COPENHAGEN’S SOUTH HARBOR At the same time that the Spadina project launched in Toronto, Danish non-governmental organization Urban Task Force (UTF) organized the placement of about 100 Yellow Arrows in Copenhagen’s South Harbor district as part of its South Harbor Voices project. Urban Task Force focuses on urban development and community revitalization, and as a four-week lead-up to City Council elections in November, the organization partnered with the South Harbor Council, the City of Copenhagen and the Politiken newspaper to invite citizens and political candidates to point out important sites and aspects of the area contributing to its quality of life.

According to UTF’s website, South Harbor “consists of a motley collection of relatively poor working-class neighborhoods, sites with state-of the-art modern architecture, corporate headquarters, uninhabited green and grey spaces, a number of communities with self-built houses and massive highways cutting through the whole thing with heavy traffic” (Urban Task Force 2007). UTF Co-Manager Martin Frandsen reports that South Harbor Voices grew out of local frustration with the course of recent development in the area—development that has favored the construction of office buildings and luxury apartments while razing structures informally used as community or living spaces (Frandsen, M., personal interview, May 16, 2007). In particular, Frandsen says, a host of cultural entrepreneurs and community activists had made vibrant and creative use of abandoned sites in the harbor, “But

these activities were more or less invisible to the people governing the planning and development process, and as a consequence they were more or less all bulldozed away when the more formal development started."

UTF believed that local residents—many of them long-term squatters who had converted vacant lots and ship sheds into community gardens and residences—could provide valuable suggestions in the redevelopment of the area, but Frandsen says there were few opportunities for citizen input. The organization identified Yellow Arrow as a grassroots alternative in pointing out what might otherwise be invisible: the everyday experiences of South Harbor residents and the small projects and ideas that supported them. Capitalizing on the widespread use of text messaging in Denmark, Yellow Arrow had already established a strong presence in Copenhagen, and local support for UTF's project was based, in part, on an interest in experimenting with technology as a means of engagement, particularly through its relation to youth and street culture (Frandsen, personal interview, 2007).

Along with citizens, city council candidates were asked to place two Arrows pointing out "What Counts" in South Harbor. While it was easy to engage the politicians, Frandsen admits that it was harder to get citizens involved in the process than UTF had expected. Despite being relatively popular in some parts of Copenhagen, Yellow Arrow's process was unfamiliar and complex

enough for many local citizens as to discourage them from participating directly. To compensate, UTF went door-to-door conducting interviews with residents about the area and then served as proxy in posting related Arrows (Frandsen, personal interview, 2007).

While not fully realizing the process they had envisioned, UTF did succeed in a number of its goals, particularly in drawing attention to the lack of suitable forums for public input. As part of their participation, politicians met and talked with people on the street about South Harbor Voices, their annotations and the area, itself (Urban Task Force 2007). And two weeks before the election, UTF organized a public meeting at which citizens and politicians first made a tour of the Yellow Arrows in the Harbor and then used them as a launching point for discussing local development. The meeting, attended by about 60 local and citywide residents, concluded with politicians' commitment to fund three local social projects whose support had been on UTF's primary agenda: a welcome party for new neighborhood residents that would allow interaction with existing residents, an after-school club for underprivileged girls and a skills development course for the unemployed (Frandsen, personal interview, 2007).

Despite having to supplement the unfamiliar participatory process with their own technological facility, UTF continues to see potential in placeloggging as a means of exchange among citizens and between them and public officials. Citizens' claim to various

parts of the harbor were reinforced by the stickers and placelogs, and used to further mutually beneficial discussion. Citizens were able to connect candidates' stances on development with the physical landscape itself, bringing tangibility to the issues and also establishing more immediate accountability—the candidates' words and opinions were now tied to the landscape, itself. As candidate Mai Christiansen said in an interview with *The New York Times*, “The stickers and the messages are permanent. It’s words politicians can’t run away from” (Todras-Whitehill 2006).

URBAN TAPESTRIES IN HAVELOCK, LONDON In late 2005, Proboscis was awarded a grant from the United Kingdom’s Department of Constitutional Affairs Innovations Fund to implement various tools, including Urban Tapestries, in enhancing democratic engagement among residents of Havelock estate, a 40-acre area of west London’s Southall district. The project extended an existing collaboration with the Havelock Independent Residents Organization (HIRO) as well as community development consultancies Partners in Change and Local Level.

Havelock estate is mostly populated by low-income, immigrant and ethnic minority families who draw especially from India and the Caribbean, but also increasingly from Somalia, Bosnia, Kosovo and Afghanistan (Wariabharaj 2001). Its landscape is a mix of post-war two- and three-story houses and apartments, though much of the built space is poorly maintained (Harris 2006).

Local Level’s Kevin Harris writes that there are few benches and streetlights, and very little playground space; streets and open public space are unsafe, and not places to linger. Everyday space also seems to be in short supply: “There’s no café society here, no bustling markets or pub life, no traders stimulating interactions on the pavements.” Instead of the activity of street life, there is what Harris describes as “the eerie built-up quiet, the civic absence” (2006, 2), punctuated by drug dealing and frequent muggings. He describes this scenario as “a crisis of community presence”:

Failure to be visible as residents, as occupiers of this territory, favours those who thrive on disorder, and it could be disastrous. Presence means that a neighbourhood is inhabited and occupied, its places and spaces are used and valued, and local people expect visitors to respect them” (Harris 2006, 6).

The lack of opportunities to meet and interact with neighbors has led many Havelock residents to feeling disconnected from one another and failing to recognize their shared concerns (Harris 2006, 2). Though some residents, particularly those on HIRO's residents' committee, do try to assert their right to decent living conditions, they are limited in number and are deterred by, among other issues, language barriers and distance from their landlords and public representatives. A community development worker is reported to be assigned to the estate, but is seldom seen. Police presence is low, and residents evidence “a sense of retreat

and resignation” (Harris 2006, 2). Absent the social connections that allow the residents to speak with a collective and authoritative voice, their concerns are both ignored and withdrawn.

Among other tools, Proboscis hoped to use Urban Tapestries and its onsite, first-person narrative media to help residents recognize their common experiences and to build up a knowledge base of shared issues and concerns. The project proposal explained that “This will encourage the conversations and connections that will engage residents to participate more fully in the democratic processes of managing their estate [and] relationships with the local authority” (Proboscis 2006a). But Urban Tapestries had its own limitations, most importantly that many residents of Havelock did not own mobile devices or else did not have the technological facility to use them for annotation. Proboscis tried hybridizing the project’s functions with other media: they produced a DVD of resident interviews and stories called ‘Havelock Voices’ and made further video-authoring resources available at HIRO for residents to record their own stories; they considered low power radio broadcasts of Urban Tapestries audio content so that even those without digital devices could listen in via radio (Proboscis 2006b).

Ultimately, though, the team determined that its tools were not sufficient in addressing the fundamental disconnectedness of residents. In late 2006, project leaders wrote:

It was apparent that technological solutions can only go so far. One critical—and unpredictable—variable in the success of projects of this kind is the engagement, commitment and relationships of the participants.... [T]echnologically mediated shared encounters cannot exist in isolation of existing networks, social and otherwise (Martin & Lane 2007, 4).

This finding resonates with Chanan's (2000) claim, cited by Harris, that,

A certain sheer density of community activity—of people knowing each other, acting together, extending their awareness of what's going on around them—is essential before one can speak meaningfully of 'involving the community' in a higher forum (Harris 2006, 12).

In their final report, Harris and Lane (2007) are more specific about the project's outcome, identifying the weak connections between the volunteer-based residents' committee (HIRO) and the other residents as a key obstacle. While this was one of the problems Proboscis hoped to address at the estate, it was ultimately insurmountable when HIRO was also one of the primary partners in corralling participation. Other barriers included a lack of consistent community development support from the housing association; a failure to sufficiently convince HIRO members of the relevance of social development to the housing

issues they tended to prioritize instead; and a failure to find a resident interested in being a technical consultant to other locals in promoting participation in the project (Harris & Lane 2007).

REFLECTIONS ON PLACELOGGING IN COMMUNITY PRACTICE

For Urban Task Force, the unfamiliarity of placelogging technology posed a primary barrier to successfully engaging citizens. Frandsen says that for such projects to be more successful, the technology needs to be easier to use, with fewer steps and more automatic, GPS- and camera-enabled capacities. But most importantly, he says, citizens need to be convinced of the real potential of tools like Yellow Arrow both for building social relationships and for giving them a voice in public dialogue about local issues.

UTF has not given up on placelogging; it has been in contact with Socialight, which is both more automated and more consumer-friendly than Yellow Arrow, and which has been expanding into Europe. Frandsen says that if the project gains traction in Denmark, UTF might use it as part of a youth engagement process in a suburban Copenhagen housing project.

By comparison, Harris and Lane find no fault in the technology Proboscis used at Havelock. The team used a variety of tools and diversified the means of both making and accessing annotations to suit the different needs and abilities of residents (Harris & Lane 2007). One particularly interesting effort was a system that scavenged free online services for mapping, collecting

data and sharing media and combined them into one composite Web-based tool.

While undeterred in their pursuit of applications for digital tools in community development, the authors do list a variety of cautions and considerations for further attempts to spur civic participation in low-income communities. Among them: that a larger, more resourced authority than a volunteer residents' committee needs to administer the development and management of a community; that the success of any approach to local issues depends upon complete understanding of the subtleties and nuances of local relationships and politics; that funders and partners need to emphasize the mutual dependency of social development and concerns related to the built landscape so as to maintain their equal priority in achieving community goals; and that community development requires long-term and continuous commitment by local partners (Harris & Lane 2007, 20).

Technology and community developers continue to be optimistic about the opportunities afforded through placelogging and through other technologies, but it's clear that their successful implementation relies upon a foundation of some existing community presence and support. That is to say, the full potential of placelogs is not as a stand-alone tool of community development, but rather, as one of many tools in a coherent and sustained strategy to facilitate exchange and dialogue.

Of course, any community development tool is only useful under the right conditions and coupled with the right partners. What continues to seem powerful about placeloggging through the applications intended, if not fully executed, by the three cases reviewed here is its ability to be both intimate and collective. Havelock's circumstances aside, it's a bold attempt for Proboscis to position "what might be seen traditionally as cultural activities (music, video and image making) as vital and potent forms of democratic engagement" (Proboscis 2006a). Democratic engagement very rarely sounds like so much fun. Further, as Lane and Angus write:

“When asked to contribute to consultative exercises about their local area, people often struggle with the experience of publicly articulating their views, as well as the often unfamiliar experience of a conversation with authorities. Added to this is the frequently reported sense of exasperation for the wasted time and effort when consultations are disregarded by those who commission them or sink into bureaucratic obscurity” (Lane, G. & Angus, A. 2006).

The ability of citizens to formulate and convey opinions and concerns to public officials over a long term, through self-expressive media of their choosing, is a striking revision. It's no surprise for it to encounter some obstacles.

SUMMARY OF GOALS APPROACHED The explicit use of placeloggging in community development has been limited, but through subjective and participatory annotation, the community-oriented goals taken on by just these three projects included:

- Allowing diverse and often underrepresented communities to stake public claim to their territory;
- Cultivating residential and commercial interest in an area;
- Identifying local assets and issues;
- Providing democratic forums for input and dialogue;
- Building social connections among local residents;
- Countering negative connotations of place with human stories;
- Revealing shared concerns to build constituency around place-based issues.

These goals were not all achieved successfully, but the practitioners have gained insight on how to better approach them and are ready to try again.

There are other conceivable goals and products of employing placeloggging as well. The practice could turn up not just underreported built assets, but human assets as well. Citizen involvement could reveal a strong constituency or value for other organizations, like churches, institutions, labor unions and advocacy groups, who might be interested in forming partnerships. Identification of previously unheralded cultural resources could serve as the first stage of a larger cultural program—Hayden provides an example in the Waterbury, Connecticut Brass Workers’

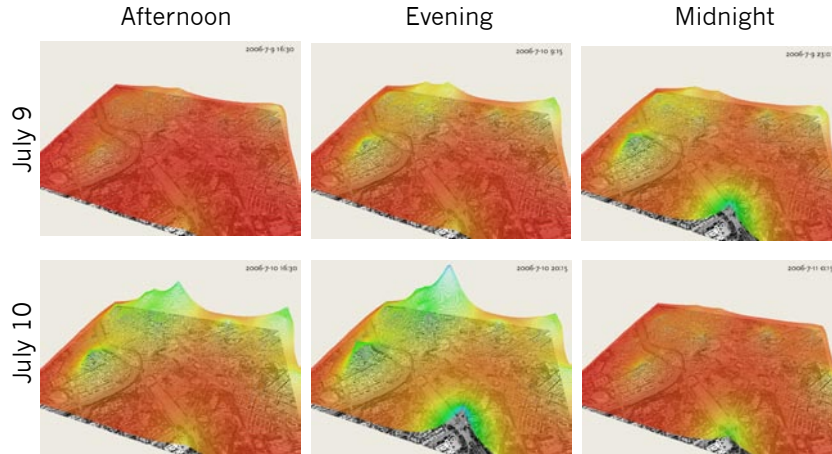
History Project, a 1979 book and videotape archive that was eventually integrated in the local school curriculum and served as the springboard for a yearly ethnic music festival (Hayden 1995, 49). As with any other tool, a variety of opportunities could or could not emerge, but by combining capacities of so many of those tools, placeloggging seems to widen the field of those opportunities.

Placelogs as guides in meaning-centered design and development

The role of placeloggging in community development emphasizes its use as a practice. But for urban design and development, the most compelling use of placelogs is as products—artifacts of behavior, experience and emotion. Through that shift of focus, however, I don't mean to diminish their identification as political tools. Rather, I mean to recognize that the capacity for democratic engagement afforded by placeloggging isn't limited to the direct address of issues and concerns about places. Democracy can also be engaged incidentally, through the patterns and accumulation of annotations that reveal shared meaning. Tiebout (1956) described residents' ability to "vote with their feet" on issues of local government services and costs through their selection of neighborhoods; it seems feasible to think of placelogggers as 'voting with their feelings,' expressing the value of particular places both through the exchange they engage in and through the traces of memories and thoughts they leave digitally.

The comparison with "Tiebout migration" and related economic models of public choice is fully intended to frame placelogg annotations as social science data. That they might consist of photographs of birthday parties and inside jokes between friends does not need to imply their triviality, and Chapter 2's methodology is, hopefully, a step toward systematizing the analysis of annotations as serious data. Urban planners and designers have never had the sort of minable, long-term, volunteered data set on public values of place that is suggested by the potential of placeloggging. It could be a powerful tool in understanding and guiding decisions about community growth and change.

But how, exactly, could that understanding be applied to guide decision-making? That's the big question. MIT's SENSEable City Lab expresses both optimism and uncertainty in writing about the implementation of similarly citizen-mined data in their 'Real-Time Rome' project.¹ Through collaboration with the City of Rome, Google and the city's taxi and bus systems, the project collects data on the location of cell phone owners in Rome by silently establishing contact with their phones at regular intervals. What results from the aggregation of this data is a dynamic topography of physical presence that reveals the city as what theorist Michael Batty might call "clusters of 'spatial events'" (Batty 2002, 1). Earlier research on a slightly less sophisticated tracking technique led to the suggestions that such data could be used to estimate traffic flows and patterns and to facilitate emergency



MIT's SENSEable City Lab's Real-Time Rome Project generated these maps of user presence based on cell phone signals. The Lab describes these images this way: "The final match of the World Cup was played on July 9, from 8 pm to 10 pm approximately. Afterwards, people started celebrating around the Circo Massimo, shown in the image. The following day the Italian winning team arrived in Rome and celebrations continued from the afternoon till morning." (images and description courtesy of SENSEable City Lab)

relief (Ratti et al 2006). While Real-Time Rome professes similar ambitions to reduce the inefficiency of urban systems, it leaves the methods and details of that reduction open to discussion. There are few models yet available for putting such data to use.

Though Real-Time Rome uses incidental citizen input to compose maps of favored spaces in the city, it's different from an analysis of placelog annotation because it focuses on mobility and temporality. Placelog analysis focuses on meaning and significance, which, while dynamic, operate on a much slower time scale than

human movement. And there do seem to be some established ways in which expressions of meaning and significance can be operationalized in urban design and development.

PRESERVATION AND MEASURES OF SUCCESS Perhaps the most obvious use for information that identifies sites of meaning and significance is preservation. Dolores Hayden writes that community-based public history can easily segue into historic preservation since “understanding the past encourages residents to frame their ideas about the present and future” (Hayden 1995, 228); resonant here are the notions that place attachment and claim can be generated through reflection upon and engagement with the built environment. Of course, more directly, Urban Task Force's primary goal in South Harbor was to stop the clearance of properties whose contributions to the identity and spirit of the local community might not be recognizable to outsiders or authorities. But in that case, placeloggging was used as a reactionary tool to oppose development already in progress. A longer-term monitoring of placelog annotations might be able to head off or properly adjust contentious redevelopment plans before they move into action.

On a practical level, then, identifying places of local meaning and significance and treating them sensitively can translate into reduced public opposition to development plans. One [murmur] contributor expressed frustration and distrust of

her local planning authority, who, at a recent public meeting she attended, seemed to have no sense of the neighborhood or what its residents valued ([murmur] contributor, personal interview, 2007). A quick survey of the [murmur] annotations might have provided a preliminary indication; a more dense supply of annotations could have contributed even more to their authority.

Even if it weren't the case that placeloggging reflected or created a constituency for particular places, a sizable volume of testimonials or shared memories could still reasonably identify local assets worth considering for preservation in the interest of honoring and supporting local culture. Other sites of marked significance might not receive special designation but could simply be guarded against destruction or unwelcome redevelopment so as to maintain, or even enhance, their community role. Still others could simply be noted for further investigation and review.

What's more, if we take the attachments of meaning and significance to a place as indicators of shared value, and we take shared value, in turn, as evidence of a successful built environment, then placelog data could be used as a gauge of success in shaping the city. That measure of success would not be directly dependent upon the rental income of a property or even its state of repair, but upon its potency of meaning. Developers and property owners could then potentially use placelog annotations as a measure of success in creating healthy community assets.

Orienting toward the establishment of meaning could also imply a shift in redevelopment strategy. Hayden suggests that urban neglect is an indicator of lost meaning—that places that go untended are those whose significance people have simply forgotten and have been unable to regenerate (1995, 11). In this sense, placeloggging could actually be a component of revitalization as powerful as a wrecking ball: coaxing meaning out of places could provide the context in which reclamation and re-uptake emerges organically from the increased claim and stewardship of nearby communities. Consider Havelock, of which Harris writes that,

”There really isn't any agreeable semi-private or semi-public space, there are no places where, if you bump into a neighbour, you'd be tempted to linger for a chat. It's almost as if neighbourliness were designed-out from the start” (Harris 2006, 2).

Though Proboscis determined the situation in Havelock to be beyond the assistance of technology alone, perhaps in other, similar circumstances a dearth of annotations could read—even to a remote authority—as evidence of a place in need of redevelopment, either of space or of meaning.

REVISITING LYNCH The even more ambitious way that placelog data could be read is in building an image of the city based on shared meanings. Planners and designers could use placelog data to compose a portrait of the types and volumes of meaning associated

with places in the city and to develop strategies to enhance or affect those meanings. Lynch's terms are still useful in the construction of what he called a 'group image of meaning,' and what I will call a 'meaning image.' After all, what is identified by a slew of fond testimonials about a place, if not a landmark? Couldn't a site engaging frequent exchange of messages, riffs and reflections be considered a node?

A 'meaning image' wouldn't necessarily invalidate Lynch's visual image of the city, but digital media and communication have called into check the validity of emphasizing form over meaning in assessing urban legibility. Page and Phillips write of paths, edges, nodes, districts, and landmarks that, "While the elements will not disappear as physical objects, their spatial potency is diminished as their meanings are transformed in the context of heightened flow networks" (Page & Phillips 2003, 74). At the least, then, a meaning-based image of the city can provide a resource through which to identify where meaning and form diverge, and to encourage more aggressive development attention at those points. At the most, the 'meaning image' could provide a new base map for the visual image to follow. Lynch, himself, wrote that, "in actual design, form should be used to reinforce meaning, and not to negate it" (1960, 46).

REVISING THE ROLE OF URBAN DESIGN To have city form grab hold of the shirttails of citizen-expressed meaning marks a further step in the democratization of urban planning. Giles

Lane's assertion that placeloggging will allow people to become their own urban planners (2004a, 6) is explicitly political, and it speaks to the growing use and development of digital tools to upend longstanding power structures through distributed authority. But that distribution does not have to imply the obsolescence of planning and design as a profession; it simply suggests that there are other, more facilitative roles for planners and designers to play in shaping the city. Malcolm McCullough writes: "As the embodiment, personalization, and bottom-up economies of mobile and embedded computing kick in, the older top-down cultural models are not enough" (2006, 4).

Essentially, the sort of culture-mining and observation required to respond to placelog data suggests that urban design become an ethnographic process. As Zsuzsa Gille writes:

"Ethnography is the researcher's commitment to let herself be surprised, to be caught off guard, and to be swept up by events that occur in the field as a result of which even the original direction of the inquiry may significantly change. This commitment is rooted in an insistence on the significance of from-below and partial perspectives for the understanding of an issue as well as for the contribution of theory" (2001, 319).

There is more to urban design than theory-building, of course; it would be a sort of interactive ethnography, tracing the

culture and behaviors of citizens through the landscape and trying best to accommodate and, where appropriate, influence them. This is not such a radically different role from some existing practices of urban design—William H. Whyte’s recommendations in *The Social Life of Small Urban Spaces* (1980) are similarly based in deep observation. But placeloggging and other digital data sources could provide a field of inputs to that process which would be constant, dynamic and user-generated. Most importantly, they would reflect mental and emotional associations not observable through typical visual observation and data research.

A different understanding of 'site' emerges from this ethnographic process—a contextual understanding of intertwined associations and values among a series of built and unbuilt places. An ecosystem of meaning, and a sense of the cumulative significance of particular types of places. This sort of understanding is neither sought nor achievable through public meetings, though it might strongly inform the opinions expressed in them. Consider, for instance, the placelog data’s identification of everyday space as something of considerable value. A straw poll might not indicate that a given street corner, apartment building or storefront was a place of ‘public value.’ And even the volume of placelog annotations on that site might not be as impressive as that attached to a local museum. But the sum total of annotations for such everyday spaces could far outweigh those of big-ticket ‘cultural’ assets, and that cumulative value is significant. Writing

about the tendency of what he calls ‘locative media’ to emphasize the value of smaller assets, McCollough cites Chris Anderson’s theory “The Long Tail”:

This theory explains the impact of large numbers of items with low numbers of instances. The most common example is the book sales ranking on Amazon. There, the sales from the huge catalogue of low-selling items (the tail of the company’s bestsellers graph) have greater volume than the sales from the big sellers at the head of the list (i.e., all that would be practical to carry without information technology for inventory and distribution). Similarly, the integral sum of bottom-up street life—the everyday urbanism of flea markets, food carts, pick-up games, meet-up points, etc.—outnumbers what has been top-down formulated, branded, and pushed by corporations (Anderson 2005, cited in McCullough 2006, 3).

To return to the notion of incidental democracy and ‘voting with your feelings,’ a design process that takes such expressions of value into account is not a neutered one, but a politically inclusive one. Hayden writes of public history, specifically, that, “Understanding the history of urban cultural landscapes offers citizens and public officials some basis for making political and spatial choices about the future. It also offers a context for greater social responsibility to practitioners in the design fields” (1995, 43).

DESIGN AND DEVELOPMENT RESPONSES What all that this discussion of responsibility and responsiveness ultimately means is that planners and designers could have access to a type of information that might help them in making more publicly-informed development decisions. Take, for example, the TagMap of The Annex (**Exhibit 10**) I presented in Chapter 3. If a public or private developer wished to encourage the growth of a local arts and music culture in this area (if not for the fact that one already exists there), it might use the TagMap to identify Lee's Palace and graffiti as assets of considerable local affection and center programmatic and physical development around them. This development could involve hosting a local music festival in the area, programming Lee's Palace as a restaurant during daytime hours, ensuring a supply of both traditional and alternative gallery spaces, and providing opportunities for nearby middle-income housing. Alternatively, if Lee's Palace were under survey for redevelopment, we might consider how that change of use could impact the local ecosystem of meaning and the fate of neighboring places.

Placelog-derived 'meaning images' could also lead to the identification of alternate or local forms of public space for a particular community—everyday spaces like grocery stores, laundromats and street corners. If an ethnic grocery store were the center of more dialogue and exchange among members of a particular community than any other local place, then it might be identified as a public space worth maintaining. What's more,

it might be worth designing and developing around it as would conventionally be done for a public square, since it fulfills similar functions of public exchange and interaction. Maybe it could benefit from some nearby outdoor seating, or a café. Maybe it could be used as the cornerstone of a new town center.

Using placelog data to inform design can also operate on the micro scale. Perhaps a stretch of street where people often stop to take pictures of the skyline could use a wider sidewalk to divert the disruption of foot traffic—perhaps it could even use a viewing platform. Again, these types of design measures are not that different from those recommended by William H. Whyte (1980). Whyte relied upon observation, time-lapse filmmaking and activity mapping to identify adopted uses for public space and to recommend design solutions to accommodate those uses. Perhaps placeloggging could be employed to identify new breeds of small urban spaces and to provide more insight into how they are used and what meanings they carry. Here, the social responsibility that Hayden discusses would manifest through sensitivity to local culture and priorities.

Being sensitive, of course, doesn't mean preserving every annotated place. In the spirit of ethnography, it could simply mean monitoring and being aware of a particular group's tendencies of shared meaning, and shaping development to suit them. This awareness could provide exciting new approaches to designing city space. By identifying place types that tend to cultivate a particular

range of meanings, development could take on more narrative approaches, building from one set of meanings to the next in sequential space. It could even undertake a melodic structure, as Lynch suggests of formal image creation (1960, 99): invoking meaning, or a series of meanings, over a substantial amount of time and space, with rhythms, refrains and crescendos. The tools of shaping this type of image-based development might still be those that Lynch suggests in shaping the formal image of the city: general zoning provisions, advisory review, persuasive influence over private design (1960, 117). But they might equally be events, installations, or even the encouragement of a particular type of local annotation.

Further, let us again consider **Exhibit 9**, in which some sites in the neighborhoods annotated by [murmur] showed a higher volume of calls made to access annotations than others. As I wrote in Chapter 3, contextual and circumstantial factors play into a downloader's inclination to call in, but many of these factors can also be mediated by design. Undertaking the sort of observational analysis that Whyte did in studying onsite behavior in small urban spaces could provide clues as to what sorts of environmental conditions encourage people to download annotations. Let us revisit Joseph Burr Tyrrell Park in the Annex; what encourages people to call in there? Perhaps boredom. Perhaps interest. Either of these might be directed toward listenership given the right conditions--places to sit, feelings of safety in taking out your cell phone, lack of crowds but lots of indicators of nearby human life,

no rushing, few other annotations or aural distractions, a limited selection of activities. Considering what makes a place not only encourage the contribution of annotations but also the access of annotations is half of the enterprise of designing to enable meaning to be shared.

ISSUES TO CONSIDER Designing and developing a city according to shared meanings is not without its complications. Part of the reason that Lynch stepped away from considering meaning in *The Image of the City* was that it “is not so easily influenced by physical manipulation as are [identity of form and clarity of position]” (1960, 7). That's still true. The 'meaning image' will likely not be useful in identifying a café where thirty couples fell in love and translating that significance to another café on the other side of town. But in analyzing trends of placelog annotation, the 'meaning image' does suggest ways in which people tend to relate to particular types of places. As with analysis of any other type of data, the relationships identified might not be causal, but they could be predictive. It's particularly important to develop a more rigorous methodology for placelog analysis to intensify its predictive capacity.

There are further issues to consider about development and shared meanings. Developing around an asset with particular significance could change the local ecosystem of meaning so much as to alter or destroy the original significance of the place. It could displace or discourage the community that maintained

that significance. This concern is similar to a common discussion around the issue of gentrification: how do you bring better assets and services to a neighborhood without disrupting what does work and inviting a more privileged population to displace existing residents?

While there are no simple answers to these questions, it's important to remember that design and development centered on places of meaning can take a variety of forms: large-scale construction of new buildings and facilities; installation of a street lamp or a bench; a series of public performances. By taking into account the relationship between the built context and the spatial context of meaning, it can be possible to identify a strategy of enhancing local shared meanings and supporting the people and places that generate them.

APPROACHES TO TEMPORALITY Meanwhile, it's unwise to treat all shared meanings as sacred cows. The city breathes, after all, and meanings change, even for individuals. Some places phase in and phase out of significance. In a mobile culture, especially, groups and individuals can migrate from place to place, establishing new meanings as they go. If anything, placeloggging makes the construction of shared meaning faster, by spreading word of mouth.

But what does this imply for urban planners and designers? Why design or develop for shared meaning if that meaning could

evaporate? Here, again, we start to confront claims about the increasing irrelevance of the built environment. Of course, not all meanings are fleeting and itinerant: some move at a snail's pace, and some don't move at all. Longevity of significance can depend upon a number of factors, among them the size of the population affected and the depth and intimacy of their attachment. These are dimensions about which placelog data can provide clues, and which development and design based on meaning can take into account in defining a scale and method of approach.

Places whose meanings are transient or tentative could benefit from shorter-term approaches to planning and design. Lynch, himself, wrote that shaping the city is a temporal art (1960, 1), that any given effort only represents a moment in a continuum. In *What Time is This Place?*, he wrote:

Places and events can be designed to enlarge our senses of the present, either by their own vivid characters or as they heighten our perception of the contained activity--setting off the people in a parade, an audience, or a market. Places can be given a particular look at particular times (Lynch 1978, 40).

A number of practitioners have made use of temporary structures like tents and lattices in programming what Sabaté i Bel, Frenchman & Schuster (2004) call 'event places'—public spaces where large gatherings for special events or activities take place.

But there hasn't yet been a formalized urban design approach to cultivating the temporal meanings of everyday space.

There have, however, been informal approaches to temporal urban design. Margaret Crawford writes about 'everyday urbanism' through which citizens participate in and take advantage of swells of activity by selling crafts in empty parking lots and hanging rugs for sale on the fences of their homes (Mehrotra 2004, 24). A 2005 proposal by Los Angeles-based architecture firm UrbanRock Design² focused on systematizing and enhancing the capacity of citizens to take advantage of everyday space. The firm envisioned a series of small-scale interventions in the Yucca Corridor neighborhood of Los Angeles to occupy and program interstitial spaces like sidewalks, alleys and parking lots at opportune moments. Interventions such as an armature for alleyway art exhibitions, collapsible bleachers attached to fences for street performances, and a system of sprinkler jets that can be inlaid in a parking lot are examples of what could be considered 'sometimes' urban design. These interventions provide some clues as to how to support the uses of everyday space as public space, and in turn to generate and respect shared meaning.

Temporary interventions of a medium scale, from farmer's market setups in vacant lots to weekend use of intersections as public squares, are also ways of cultivating meaning where it lives—and where the people who generate it live. Temporary or tentative interventions could, of course, also evolve into permanent or more

expansive ones as meanings settle and find long-term homes: many farmer's markets become regular fixtures, and trials of pedestrian-only shopping and leisure districts have become permanent in a number of cities (Carfree Cities 2007).

Politics of participation

For all of the possible benefits I have identified, there are some concerns to consider in adopting placeloggng projects, either to engage a community or to identify shared meanings. Foremost among them are issues of representation and inclusion. In considering placelog annotations as votes, what of voter fraud? When I asked former Yellow Arrow co-director Jesse Shapins to put me in touch with several participants whose annotations I had surveyed, he told me that three of the users I identified were, in fact, the same person. What's more, that person was an employee of Counts Media. It starts to become clearer how data like the call log provided to me by [murmur] and the cell phone identification data used by Real-Time Rome might be useful in properly processing the significance and substance of digital annotations.

But further, while placelogs could act as agents of social and democratic empowerment for those who participate, what about those people who can't or don't participate? Choosing not to participate exercises a democratic right to opt out. But some cell phone users might simply be daunted or confused by the idea of placeloggng, as evidenced by Urban Task Force's experience

in South Harbor. Many people have never used their phones for purposes other than making and receiving calls. Engaging in something as unfamiliar as placelogging, especially if it involves text or media messaging, might deter them from participating.

But populations grow into the uses of technology. From 2004 to 2005 alone, the volume of text messages sent in the US doubled from 24.7 billion to 48.7 billion (Lasar 2007). Placelogging may simply be a habit that mobile phone users need to grow into. In the meantime, that some citizens don't participate in placelogging simply reaffirms the notion that while placelog data could represent the interests of *a* public, it likely doesn't represent *the* public, the entire population at large.

Inability to afford a cell phone is a different matter. Proboscis' involvement in Havelock made clear that some communities and community members lack the financial resources to own a phone and participate in placelogging. While cell phone ownership is on the rise globally, by the end of 2005, the US penetration rate was only 70% (Lasar 2006). Meanwhile, across the world, ownership tends to skew toward higher income groups (Castells et al 2004). Considering issues of community development and urban design based on placelogging and annotations, then, it is important to recognize a potential class bias of participation. In the context of the 'digital divide' separating those with ready access to technology from those without, the exclusion of citizens from public processes involving placelogs has the potential to exacerbate

what Pippa Norris calls the 'democratic divide': "the difference between those who do and do not use the panoply of digital resources to engage, mobilize and participate in public life" (Norris 2001, 4).

A relationship between income and placelog participation could not only lead to a misrepresentation of the meanings associated with places in the city, but also to class bias in related development. Consider the Spadina Avenue implementation of [murmur] as part of Toronto's Culture Plan for the City and its goal of attracting the 'creative class' to Toronto. While [murmur] made a particular effort to record stories from people of various cultural, ethnic and social groups for the project, those stories are likely more accessible to the wealthy targets of the city's development campaign than they are to the working-class residents who make up many of the storytelling communities along Spadina. The community development benefits of contribution to the project might be substantial, but the fact that listenership favors potential gentrifiers of that community territory calls into question the social responsibility of the project implemented as a public tool.

ADDRESSING PROGRAMMATIC POLITICS On the flipside, [murmur]'s directors have worked fairly hard to be inclusive. For the Spadina Project, they partnered with the Chinese Canadian National Council of Toronto in order to ensure the representation of that community, and they have expressed further interest in

partnering with local cultural and ethnic organizations whose stories are underrepresented in the city (Micallef, personal interview, 2007). In an interview with media arts collective Year Zero One, project co-director Shawn Micallef expressed an interest in ceding the authority over storyteller identification to individual communities:

“Once the project is more established, we’d like to set up an editorial board made up of community members, much like a newspaper editorial board, who will help us ensure whatever personal innate biases we might have do not skew story selection in a particular direction” (O’Donovan 2003).

Further, [murmur] has the lowest barriers to downloader participation of any of the placeloggging projects I reviewed; all it requires is calling a number, dialing a code printed on a sign, and listening. In interviews, Micallef, co-director Gabe Sawhney and former Senior Cultural Affairs Officer Andrew Lee all identified that relatively low-tech approach as instrumental to the project’s success.

Yellow Arrow’s barriers to participation are higher; contribution requires registering on the website, purchasing stickers and being able to send text messages. Downloading similarly requires text messaging capacity and facility. The project’s authorship is less representative than [murmur]’s because it doesn’t seek out participants based on the potential content of their annotations. Rather, it seeks out participants based on their

interest in the technology, techniques and ethos of the project. As a result, Jesse Shapins admits that Yellow Arrow participants have tended to draw from the typical early adopter group of young and technologically savvy urbanites for whom text messaging is nothing new (Shapins, personal interview, 2006). For all [murmur]’s efforts at contributor inclusiveness, even Micallef admits that [murmur]’s listener base is likely comprised of hipsters, creatives, longtime residents with an interest in urban history and patrons of other cultural institutions and events (personal interview, 2007). In other words, not underrepresented groups. But as Shapins suggests, placelog annotation is still an experimental practice (personal interview, 2006). As the method and concept become more familiar to a larger group of people, the participant base is bound to change.

ADDRESSING THE DIGITAL DIVIDE Technical barriers to participation will sort themselves out over time as well, and in the meantime, agencies and organizations hoping to adopt placeloggging as part of a public strategy might hold information sessions or post instructions online about how to participate. Financial barriers, though, are more of an obstacle. Many community development organizations have come to address the digital divide by providing centralized computer facilities for community members to use and learn on (Servon 2001). Community development corporations using public participation GIS often have labs in which they hold classes and invite community members to work. Some also

loan members mobile devices for use in mobile GIS applications (Hoffman 2002). Organizations hoping to engage citizens in placeloggging might undertake similar partnerships and loans of cell phones or provide workstations for people without phones to participate in offsite annotation through project websites.

Meanwhile, the digital divide for cell phones is not as dramatic as that for computers (Castells et al 2004), and as the penetration rate increases, prices drop, making cell phones more and more affordable. Issues of income disparity do complicate the application of placeloggging to public processes, but ultimately, any tool of community input is limited in its representation, whether surveys or public meetings or online bulletin boards. Applying placelog annotation in the socially responsible way advocated by Hayden includes recognizing the limits of its representation and making special efforts to take excluded public interests into account. Proboscis' multi-media approach to sharing and accessing annotations in Havelock provides a prime example.

There are other, more practical issues to sort out about adopting placeloggging as a tool or indicator, like content management of directed projects, coordination with other annotation and input strategies, and building and sustaining a participant base. These are issues specific to technology and context and are best worked out in partnerships among planning or design authorities and project developers.

Toward Place 2.0

At the nexus of emerging mobile trends in location-based services and user-generated content, placeloggging seems likely to be adopted by the mainstream in the near future. And as practitioners concerned with both locations and users, urban planners and designers are positioned to step in and interface with those services and that content.

Here we revisit the idea of ‘community technology.’ It’s a term that’s often used in talking about digital tools employed in participatory urban planning and design practices. There’s a hierarchy to the words, regardless of how you read them—either the community owns the technology, or the technology references the community. And, to this point, technology developers and shapers of the city have mostly remained separate, responding to each other from afar. But growing reliance on digital information and communication in managing urban experience really recommends that we start to read the words together, as one: communitytechnology. As in, “Boy, that Lower East Side! What a great communitytechnology!” Regardless of what technical incarnation placeloggging assumes next, the immediate future promises exciting opportunities for the co-development of technology, interaction and built space.

The idea of the city has changed since Lynch reflected upon it. It’s a different animal—or not even an animal but, to paraphrase Bill Mitchell (2003), a cyborg. But for all the remote

chilliness that image conjures, the hybridization of digital and physical that has been possible so far through placeloggging feels warm, social, intimate. My own experience with the Daily Museum of Amazement made a big impact on me. I haven't seen the man with the umbrella and the trench coat again, but I remember him every time I pass that corner. I've since moved to a different neighborhood—my fifth in Cambridge—but that's the only one I have ever felt connected to. I still think of it as my neighborhood. And all it took to cement those feelings was an unremarkable encounter and three phone calls. Even if my experience was only a beta version of what's to come, it was powerful.

Notes

¹ <http://senseable.mit.edu/realtimerome/>

² <http://www.urbanrockdesign.com/>

Appendices

APPENDIX A

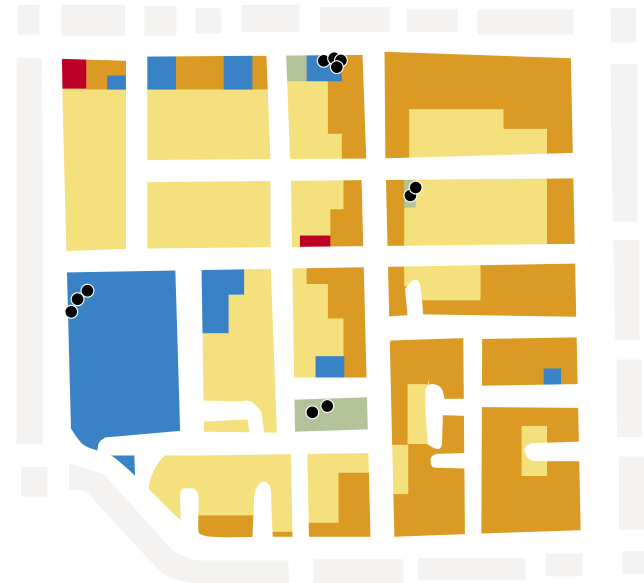
Kensington Market annotation survey data

Monuments

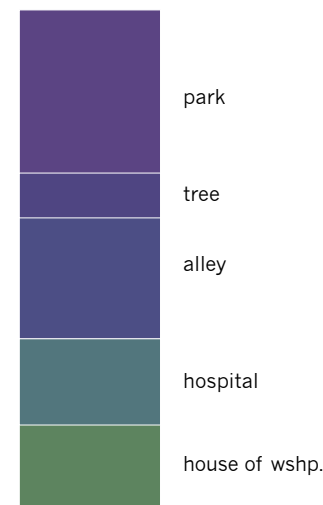
Monument	Place type	Content
plaque on St. Stephens in the Field's church	house of worship	history
inscription in brick on Toronto General Hospital building	hospital	document
Alley beside St. Stephens in the Field's church	alley	memorial, expression
Alley beside St. Stephens in the Field's church	alley	memorial, expression
Alley beside St. Stephens in the Field's church	alley	memorial, expression
plaque on Toronto General Hospital building	hospital	document
tree in Toronto General Hospital plaza	tree	memorial
Statue of Al Waxman in Denison Square Park	park	memorial, expression
plaque on rock marking contribution to Fitness Trail	park	document
mural of Kensington Market in Sonia's Park	park	expression
plaque on Sonya's Park wall	park	memorial

Place type	Count	Representation
park	4	36%
tree	1	9%
alley	3	27%
hospital	2	18%
house of worship	1	9%

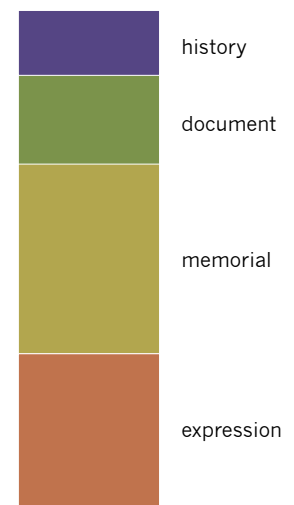
Content	Count	Representation
history	2	13%
document	3	19%
memorial	6	38%
expression	5	31%



Place Type



Content



Graffiti

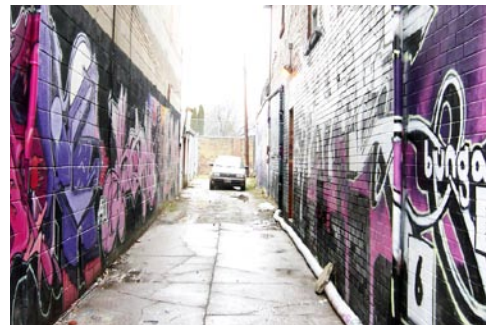
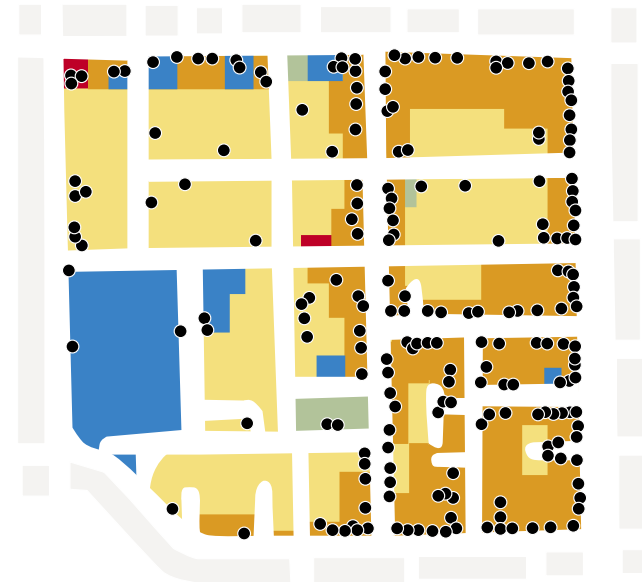
Graffiti concentrated along streets with commercial activity. On commercial and residential streets alike, it could be found on almost every post office box, electric service box, parking meter, lamp post, trash receptacle and bus stop.

The majority the neighborhood's graffiti was tagging, particularly on storefronts, doors between them and on street furniture. More expressive tags, images and printed street art tended to locate in alleys, blank sides of buildings (mostly stores, sometimes apartment buildings) running along the side of a street, or in setbacks between buildings.

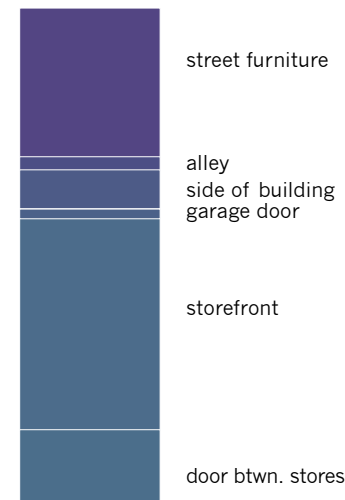
For every 1000 instances of graffiti:

Place Type	Count	Rpn.
street furniture	300	30%
alleys	30	3%
side of building	75	8%
garage doors	10	1%
storefront	435	44%
doors btwn. storefronts	150	15%

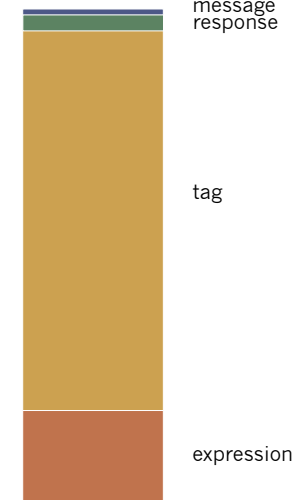
Content	Count	Rpn.
message	10	1%
response	30	3%
tag	790	77%
expression	200	19%



Place type

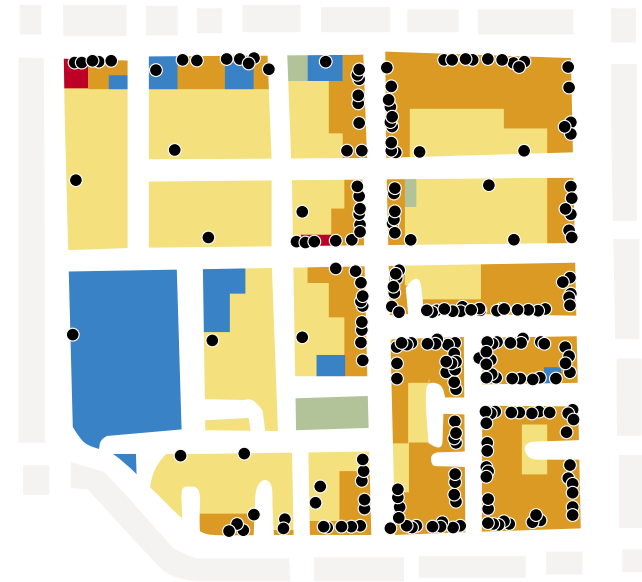


Content



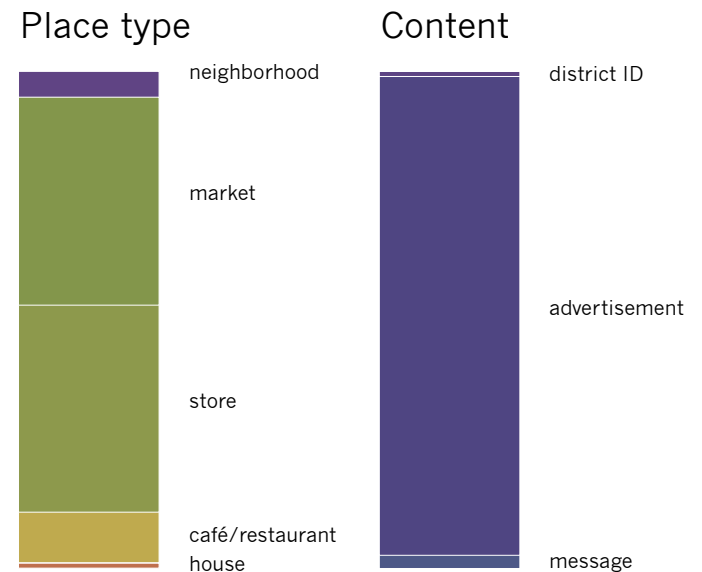
Signs (excluding posters)

Sign	Place type	Content
cultural banner	neighborhood	district ID
cultural banner	neighborhood	district ID
Toronto's Discovery District sign	neighborhood	district ID
Kensington Market pole with hand-painted globe	neighborhood	district ID
Kensington Market pole with hand-painted globe	neighborhood	district ID
"Please Keep it Clean" sign	public garden	message
hand-printed fabric sign encouraging walking and biking	street sign	message
Room for Rent sign	house	advertisement
Room for Rent sign	house	advertisement
Chalk messages all over front porch of brick building	house	message
sign in handwritten Chinese	house	message
sign in handwritten Chinese	telephone pole	advertisement
12 Neighborhood Watch signs	neighborhood	message
signs advertising services	store	advertisement
signs advertising services	café/restaurant	advertisement
signs advertising services	market	advertisement



Place type	Count	Representation
neighborhood	18	4%
street furniture	1	0%
public garden	1	0%
market	200	42%
store	200	42%
café/restaurant	50	11%
house	4	1%

Content	Count	Representation
district identification	5	1%
advertisement	454	96%
message	15	3%



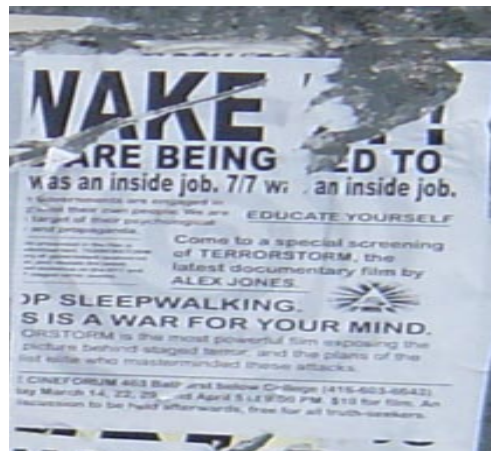
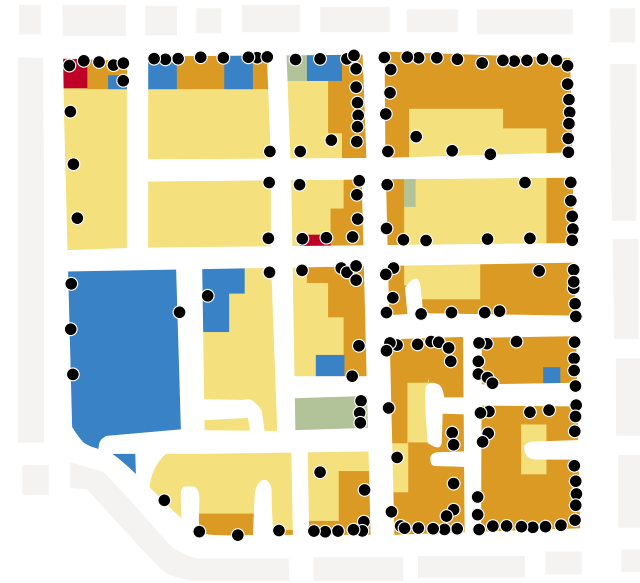
Posters

Like graffiti, posters were most present on streets hosting commercial activity. On residential streets, they were often located on corner telephone poles. Though the vast majority of them were advertisements, there were also quite a few message-based posters on topics like lost pets and political action.

For every 1000 posters:

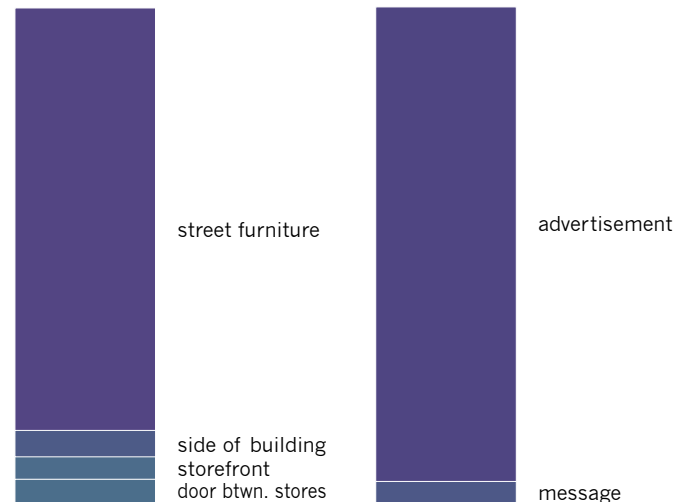
Place type	Count	Representation
street furniture	850	85%
side of building	50	5%
storefront	50	5%
door btwn stores	50	5%

Content	Count	Representation
advertisement	950	95%
message	50	5%



Place type

Content



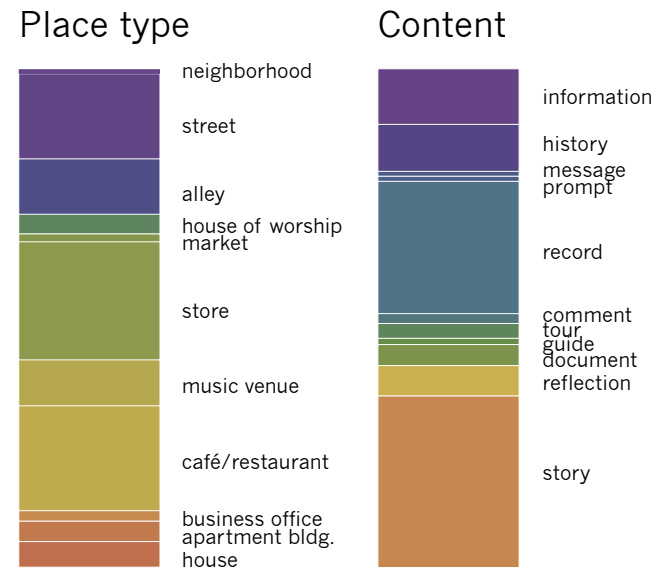
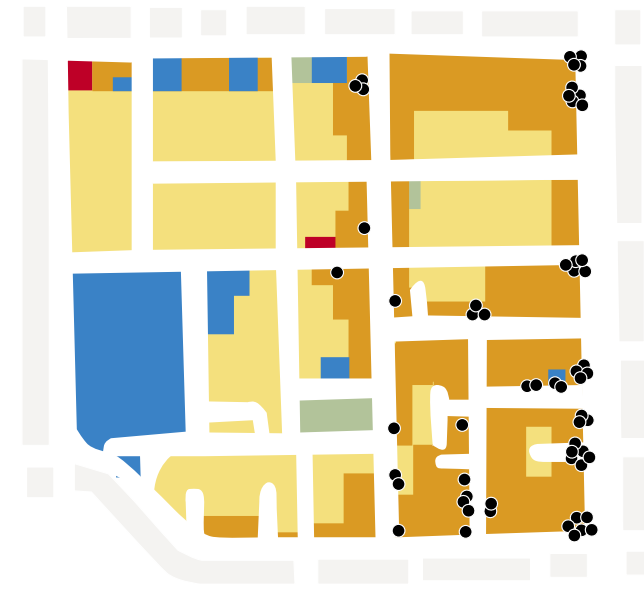
[murmur] annotations

[murmur] site	Site type	Content
Dundas & Augusta	street	story
2 Kensington	café/restaurant	story
17 Kensington	store	record, story
17 Kensington	store	story
14 Kensington	store	record
14 Kensington	store	story
16 Kensington	street	story
169 Augusta	store	record
169 Augusta	store	story
30 Kensington	house	story
183 Augusta	house	story
Kensington Place	alley, street	history, information, tour
30 St. Andrew	café/restaurant	story, record
30 St. Andrew	café/restaurant	record, story
178 Baldwin	house	record
178 Baldwin	store	history
178 Baldwin	store	record
249 Augusta	store	story, record
69 Nassau	café/restaurant	story
236 Augusta	store	story
274 Augusta	street	story
274 Augusta	store	story
274 Augusta	store	story
275 College	street	story
275 College	café/restaurant	history, comment, information
275 College	street	record, story
275 College	street	record
462 Spadina	music venue	record, story
462 Spadina	music venue	information
462 Spadina	music venue	record
462 Spadina	music venue	story
462 Spadina	music venue	information
398 Spadina	store	record

[murmur] site	Site type	Content
398 Spadina	street	story
398 Spadina	street	information, tour, history
398 Spadina	apartment building	record, history, reflection
398 Spadina	street	information, prompt
360 Spadina	street, café/restaurant	comment, story, document
360 Spadina	street	story, record
360 Spadina	café/restaurant	information, reflection
360 Spadina	street	story
10 St. Andrew	house of worship	record, story
10 St. Andrew	house of worship	history, comment, story
346 Spadina	café/restaurant	history
346 Spadina	café/restaurant	history, information
346 Spadina	café/restaurant	record
328 Spadina	alley	record, story, message
328 Spadina	café/restaurant, alley	history, information, tour
328 Spadina	alley	record, document, reflection
326 Spadina	street	record, history, reflection
328 Spadina	alley	information, record
328 Spadina	alley	information, tour, document, story
283 Spadina	street, business office	record, story
283 Spadina	café/restaurant	record
283 Spadina	neighborhood	story
283 Spadina	café/restaurant	record
294 Spadina	market	story, guide, document, reflection
320 Spadina	apartment building	record



Place type	Count	Representation	Content	Count	Representation
neighborhood	1	2%	information	10	11%
street	10	18%	history	9	10%
alley	6	11%	message	1	1%
house of worship	2	4%	prompt	1	1%
market	1	2%	record	23	26%
store	13	24%	comment	2	2%
music venue	5	9%	tour	3	3%
café/restaurant	12	22%	guide	1	1%
business office	1	2%	document	4	4%
apartment building	2	4%	reflection	5	6%
house	3	5%	story	30	34%



Walking tour

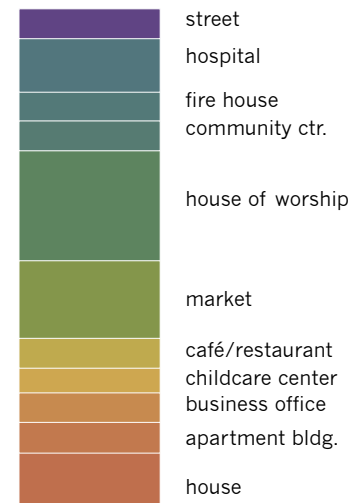
The walking tour comes from the *Kensington Alive* history project by neighborhood social service agency St. Stephen's Community House (2007).

Tour site	Place type	Content
United Negro Improvement Association founding site	house	history, tour
former site of Doctor's Hospital	hospital	record, tour
St. Stephen-in-the-Fields Church	church	history, tour
No. 8 Hose Station	fire house	history, tour
95 Bellevue, former doctor's home	childcare center	history, tour
91 Bellevue, former minister's home	community center	history, tour
87 Bellevue, former private home	apt building	history, tour
former site of Bell Canada's central office	business office	history, tour
former home of Sonia Lunansky	house	history, tour
Toronto Western Hospital	hospital	history, record, tour
67 Wales, former settlement house	house	history, tour
29 Wales, house and sometimes synagogue	house	history, record, tour
Kiever Synagogue	synagoge	history, tour
Kiever synagogue site	synagogue	history, record, tour
Sanci's banana store	market	history, tour
Kensington place	street	history, tour
former site of the Labor Lyceum	café/restaunt	history, record, tour
Anshei Minsk	synagogue	history, tour

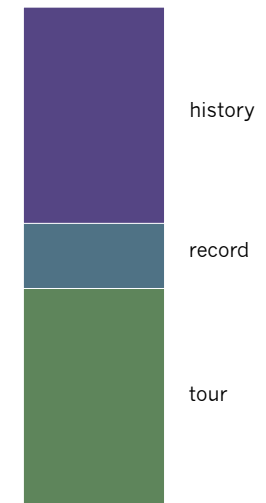
Place type	Count	Representation	Content	Count	Representation
street	1	6%	history	17	43%
hospital	2	11%	record	5	13%
fire station	1	6%	tour	18	45%
community center	1	6%			
house of worship	4	22%			
market	3	17%			
café/restaurant	1	6%			
childcare center	1	6%			
business office	1	6%			
apartment building	1	6%			
house	2	11%			



Place type



Content



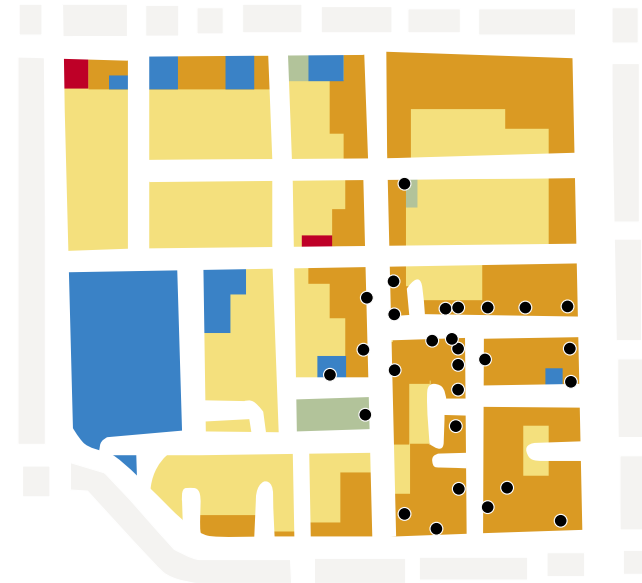
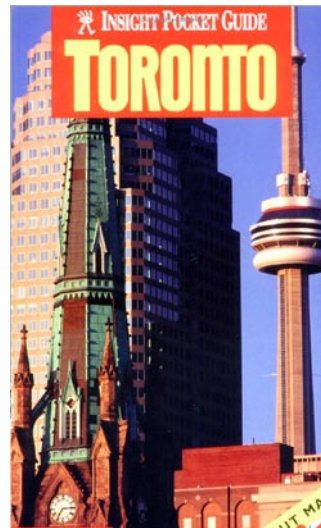
Guidebook

The sites catalogued draw from *Frommer's Toronto 2006* (Davidson 2006) and *Insight Pocket Guide: Toronto* (Ebbut 2005).

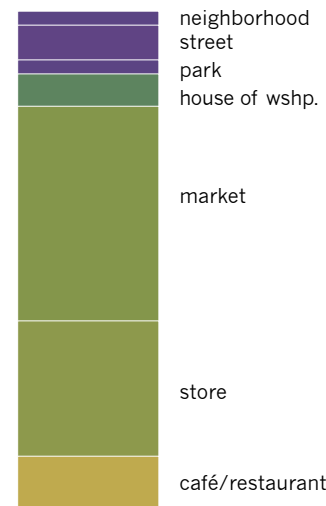
Guidebook site	Place type	Content
neighborhood	neighborhood	history
Augusta/Nassau	street	information
Tai Kong Supermarket	market	guide
Tap Phong Trading Co.	store	guide
Plaiter Place	store	guide, history
Medeiro's Fish Market	market	guide
My Market Bakery	market	guide
Abyssinia	market	guide
Mendels Creamery	market	guide
Asylum	store	guide, story
Courage My Love	store	guide
Dancing Days	store	guide
Win's Flowers	market	guide
Bellevue Park	park	guide
Kiever Synagogue	house of worship	history, guide
Sasmart Smart Wear	store	guide
Casa Acoreana	market	guide
Perola Supermarket	market	guide
Iberica Bakery	market	history, guide
Fairland	store	guide
Amadeu's	café/restaurant	guide
New Seaway Fish Market	market	guide
Baldwin Street Bakery	market	guide
Patty King	café/restaurant	guide
European Quality Meat	market	guide
Global Cheese Shoppe	market	guide
Kensington Café	café/restaurant	guide
Anshei Minsk	house of worship	guide
Last Temptation	store	guide
Dundas Street	street	reflection

Place type	Count	Rpn.
neighborhood	1	3%
street	2	7%
park	1	3%
house of worship	2	7%
market	13	43%
store	8	27%
café/restaurant	3	10%

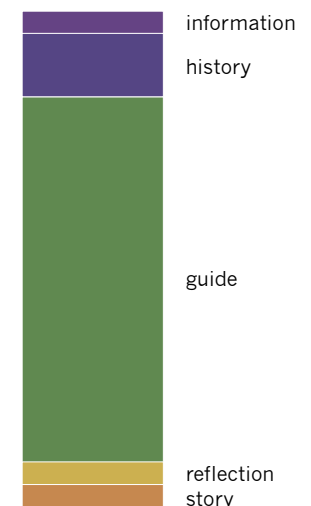
Content	Count	Rpn.
information	1	4%
history	3	13%
guide	17	74%
reflection	1	4%
story	1	4%



Place type



Content

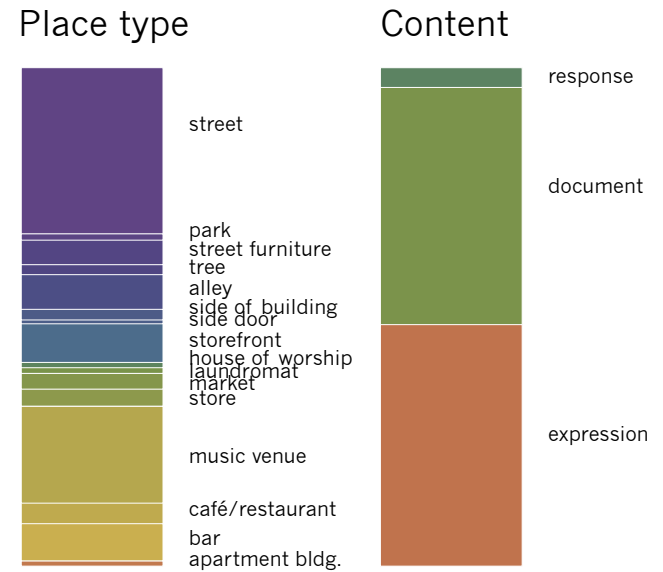


Flickr map



Place type	Count	Representation
street	65	36%
park	1	1%
street furniture	9	5%
tree	3	2%
alley	12	7%
side of building	9	5%
side door	1	1%
storefront	14	8%
house of worship	2	1%
laundromat	2	1%
market	7	4%
store	3	2%
music venue	34	19%
café/restaurant	4	2%
bar	12	7%
apartment building	2	1%

Content	Count	Representation
response	12	3%
document	174	48%
expression	174	48%



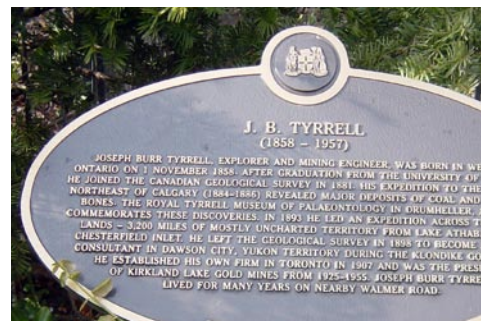
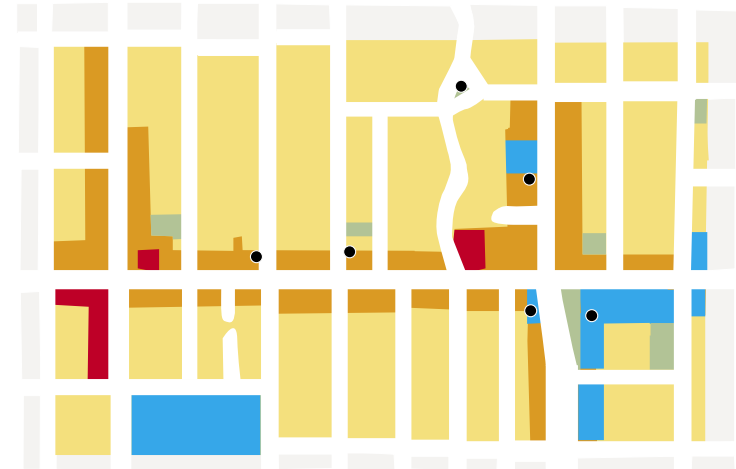
APPENDIX B

The Annex annotation survey data

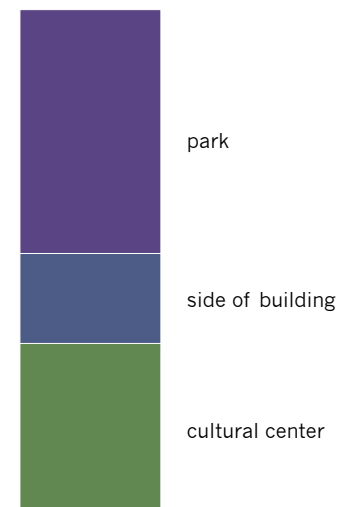
Monuments

Monument	Place type	Content
mural of neighborhood	side of building	expression
plaque in Joseph Burr Tyrrell Park	park	memorial, history
totem pole outside Native Canadian Centre of Toronto	cultural center	expression
biography and excerpts of work by Matt Cohen	park	memorial, expression
placard dedication to Canadian Jews who died in battle	cultural center	memorial
bust of Gwendolyn McEwan	park	memorial

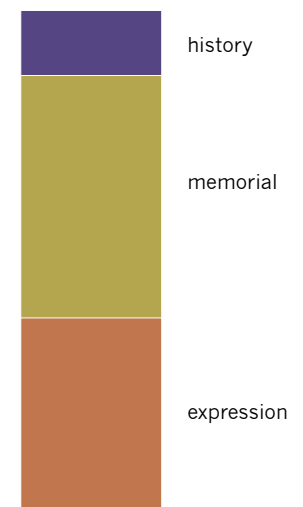
Place type	Count	Representation	Content	Count	Representation
park	3	50%	history	1	13%
side of building	1	17%	memorial	4	50%
cultural center	2	33%	expression	3	38%



Place Type



Content



Graffiti

Graffiti was much less present in this neighborhood than in Kensington Market. It was present on a number of storefronts along Bloor Street but was less dense. In residential-only parts of the neighborhood, graffiti concentrated on street furniture.

Most of the graffiti found in the neighborhood was tags, though a few alleys and sides of buildings were elaborately and fully covered with expressive imagery. In one laneway of private garages facing each other, a community group has turned frequent undesirable tagging of garage doors into an organized graffiti art project, covering all of the garage doors in the laneway, presumably with the owners' consent.

For every 1000 instances of graffiti:

Place type	Count	Rpn.
street furniture	785	79%
alley	5	1%
side of building	20	2%
side door	10	1%
garage door	30	3%
storefront	150	15%

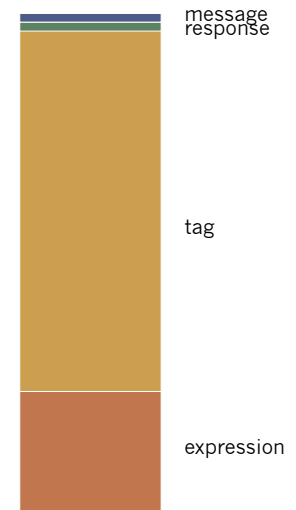
Content	Count	Rpn.
message	20	2%
response	30	2%
tag	900	72%
expression	300	24%



Place type

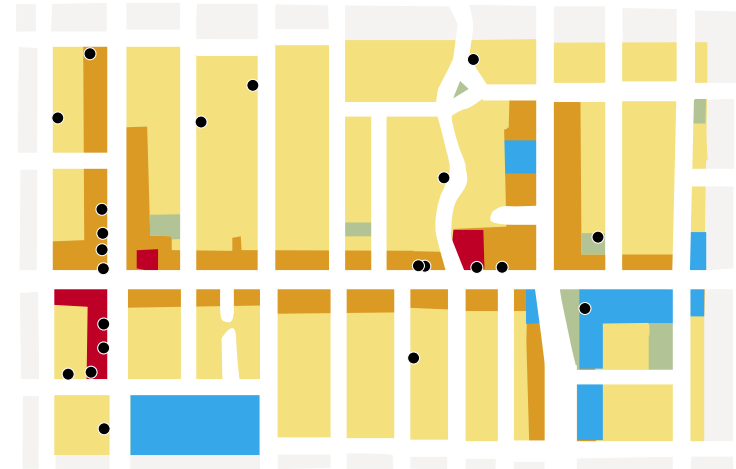


Content



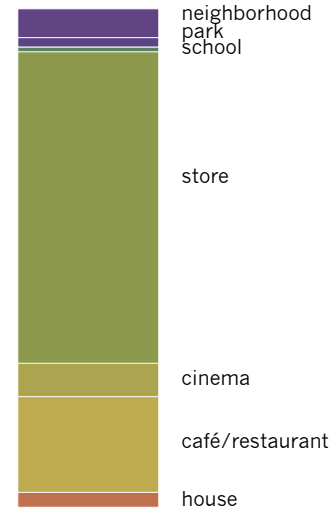
Signs (excluding posters)

Sign	Place type	Content
House with chalk messages on porch	house	message, response
5 neighborhood watch signs	neighborhood	message
3 Annex banners	neighborhood	district identification
8 Mirvish Village banners	neighborhood	district identification
3 Annex special street signs	neighborhood	district identification
Apartment for Rent sign	house	advertisement
No Trespassing sign	school	message
"We have moved" sign	store	message
Volunteers needed sign	park	message
excerpts of work by Matt Cohen	park	expression, fiction
signs advertising services	store	advertisement
signs advertising services	café/restaurant	advertisement
signs advertising services	cinema	advertisement

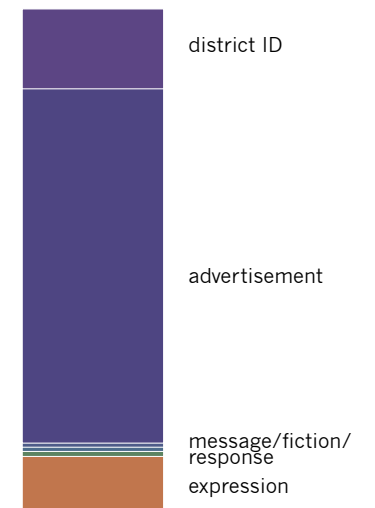


Place type	Count	Representation	Content	Count	Repn.
neighborhood	5	6%	advertisement	65	71%
park	2	3%	district identification	14	15%
school	1	1%	message	9	10%
store	50	63%	fiction	1	1%
cinema	5	6%	response	1	1%
café/restaurant	15	19%	expression	1	1%
house	2	3%			

Place type



Content



Posters

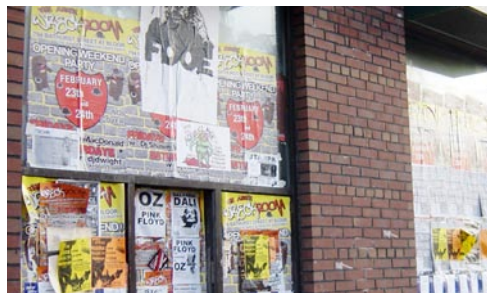
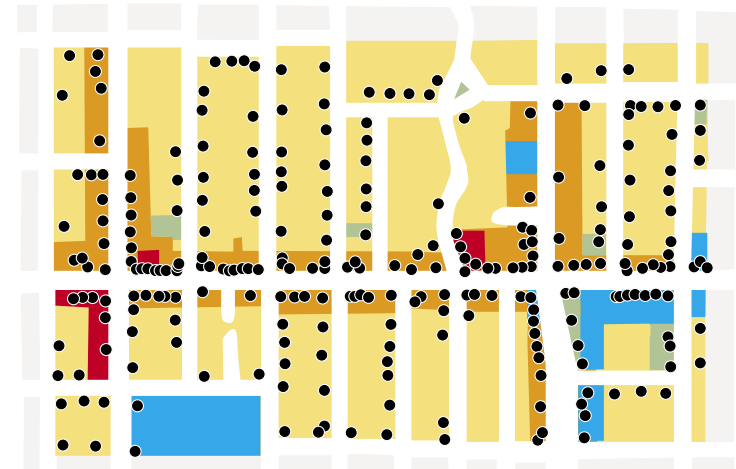
As in Kensington Market, posters attached most often to telephone poles in this neighborhood. They were less densely applied to telephone poles in residential-only parts of the neighborhood, though still omnipresent.

The content of posters in residential-only parts of the neighborhood were still overwhelmingly advertisements, though they tended less to be advertising commercial establishments and events than moving sales, apartments for rent and tutors. Lost and found signs were also more present in residential-only areas than along commercial streets.

For every 1000 posters:

Place type	Count	Representation
street furniture	900	90%
storefront	100	10%

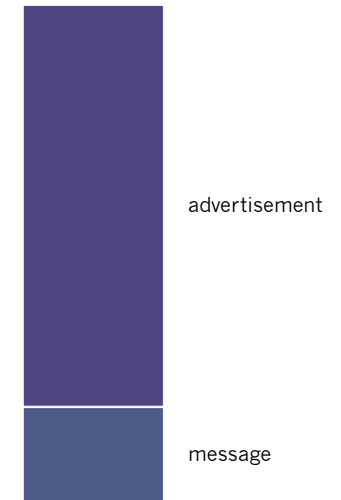
Content	Count	Representation
advertising	800	80%
message	200	20%



Place type

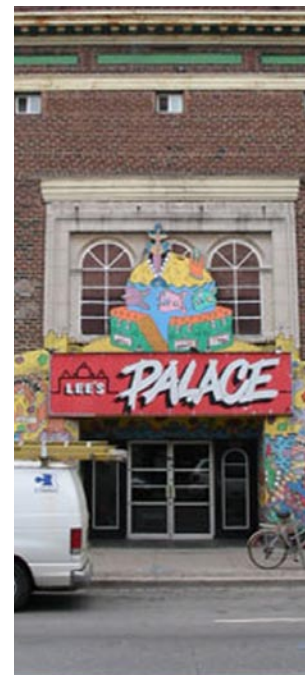


Content



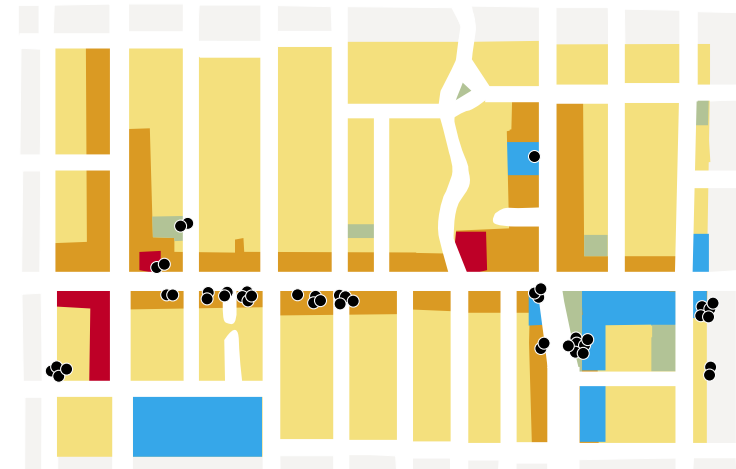
[murmur] annotations

[murmur] site	Place type	Content
581 Markham	café/restaurant	story
581 Markham	café/restaurant	story
581 Markham	café/restaurant	record
581 Markham	alley	story
Bloor and Albany	park	information
Bloor and Albany	park	story
506 Bloor	apartment building	story
506 Bloor	cinema	story
Bloor and Lippincott	apartment building	story
Bloor and Lippincott	apartment building	story
535 Bloor	dentist's office	story
529 Bloor	music venue, apt. building	story
529 Bloor	music venue	story
511 Bloor	café/restaurant	record, story
511 Bloor	café/restaurant	story
511 Bloor	café/restaurant	record, story
511 Bloor	café/restaurant	history
495/501 Bloor	café/restaurant	record, story
483 Bloor	street	story
483 Bloor	café/restaurant	record, story
483 Bloor	store	story
481 Bloor	hotel	record
481 Bloor	street	story
481 Bloor	bar	information
481 Bloor	hotel	story
341 Bloor	senior's residence	history
341 Bloor	senior's residence	story
341 Bloor	senior's residence	history
341 Bloor	senior's residence	story
341 Bloor	public art	record
401 Huron St	business office	history
401 Huron St	business office	story
24 Spadina	street	story, record, history, information

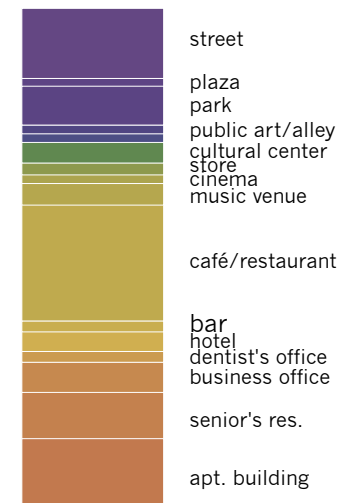


[murmur] site	Place type	Content
710 Spadina	apartment building	story
710 Spadina	apartment building	record
750 Spadina	street	story, record
750 Spadina	cultural center, café/restaurant	story
750 Spadina	street	story, history
Spadina & Bloor	salon/studio	record
Spadina & Bloor	plaza	history, documentation
Spadina & Bloor	street	record
Spadina & Bloor	cultural center	record
Spadina & Bloor	street	story
Spadina & Bloor	street	story, documentation
Spadina & Bloor	park	history, story, documentation

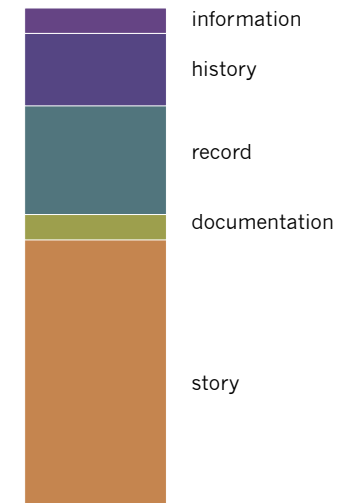
Place type	Count	Rpn.	Content	Count	Representation
street	6	13%	information	3	5%
plaza	1	2%	history	6	14%
park	3	7%	record	13	22%
public art	1	2%	documentation	3	5%
alley	1	2%	story	28	53%
cultural center	2	4%			
store	1	2%			
cinema	1	2%			
music venue	2	4%			
café/restaurant	10	22%			
bar	1	2%			
hotel	2	4%			
dentist's office	1	4%			
business office	3	7%			
senior's residence	4	9%			
apartment building	6	16%			



Place type



Content

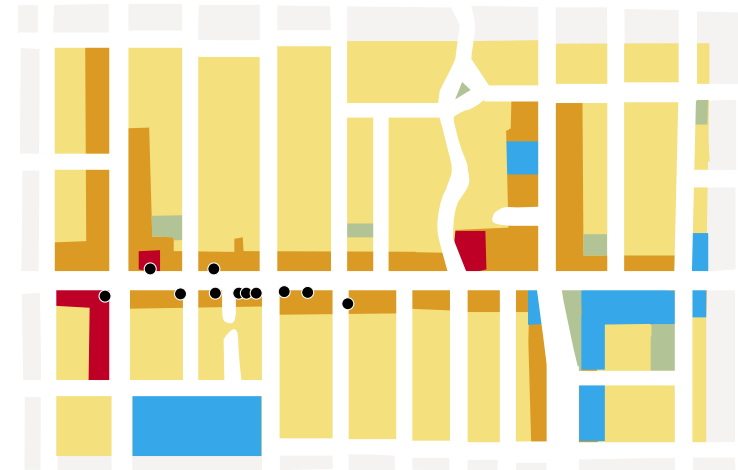


Guidebook

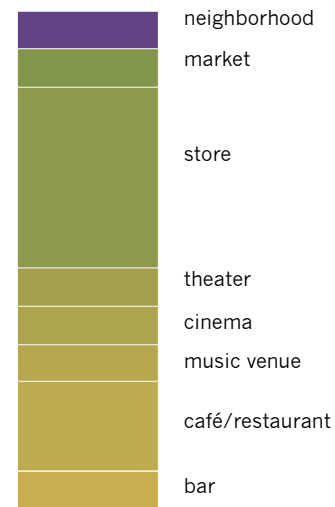
Most Toronto guidebooks do not detail sites worth visiting in the Annex, though many do describe it as a popular residential area for University of Toronto students and faculty. Sites catalogued here are drawn from *Insight Pocket Guide: Toronto* (Ebbut 2006).

Site	Place Type	Content
Honest Ed's bargain emporium	store	guide
Bloor Street Cinema	cinema	guide
Lee's Palace	music venue	guide
Pauper's	bar	guide
Kensington Natural Bakery & Café	café/restaurant	guide
The Cheese Dairy	market	guide
Dooney's café	café/restaurant	guide, record
The Outer Layer	store	guide
Eternal Moment	store	guide
Poor Alex Theater	theater	guide
Seeker's Books	store	guide
neighborhood	neighborhood	information

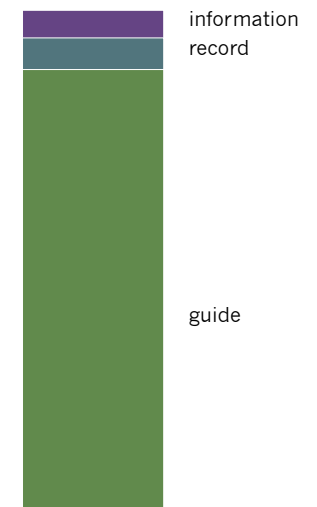
Place type	Count	Representation	Content	Count	Representation
neighborhood	1	8%	information	1	6%
market	1	8%	guide	15	88%
store	4	33%	record	1	6%
theater	1	8%			
cinema	1	8%			
music venue	1	8%			
café/restaurant	2	17%			
bar	1	8%			



Place type



Content



Flickr map

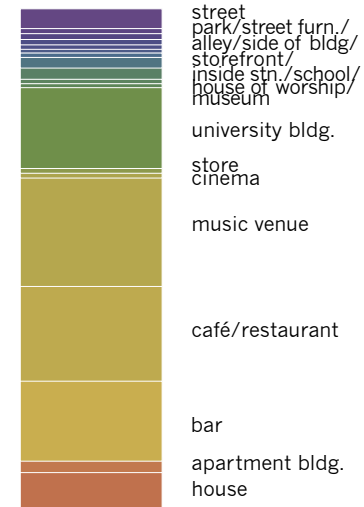
Two of the larger clusters on the Flickr map, one at a bar and one at a restaurant, represent photos taken at Flickr meetups—social events at which Flickr users who live in the area meet in person. Another cluster, at a restaurant, represents a Blogger meet-up: a gathering of local bloggers who use the Blogger service. In this particular neighborhood, then, both a dynamic collaborative mapping project and one of the ‘other narrative media’ have prompted documented, in-person social connections.

Place type	Count	Repn.
street	11	4%
park	2	1%
alley	2	1%
street furniture	2	1%
tree	1	0%
side of building	4	1%
storefront	3	1%
inside station	5	2%
school	8	3%
house of worship	2	1%
museum	1	0%
university building	45	16%
store	3	1%
cinema	2	1%
music venue	61	22%
café/restaurant	59	21%
bar	44	16%
apartment building	4	1%
house	23	8%

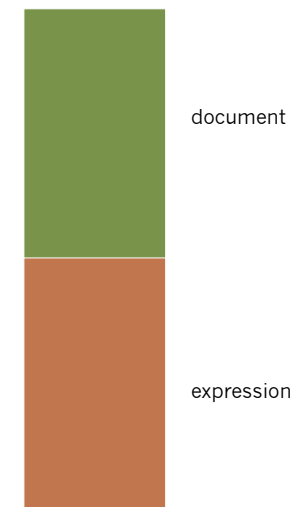
Content	Count	Repn.
history	1	0%
record	1	0%
document	280	50%
expression	280	50%



Place type



Content



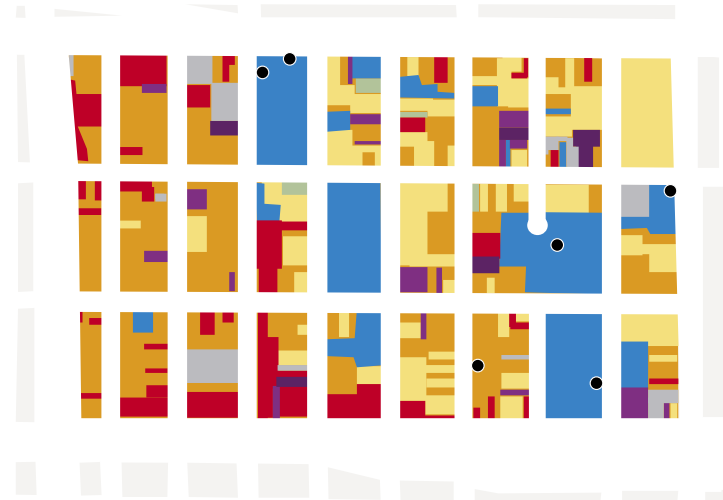
APPENDIX C

Lower East Side annotation survey data

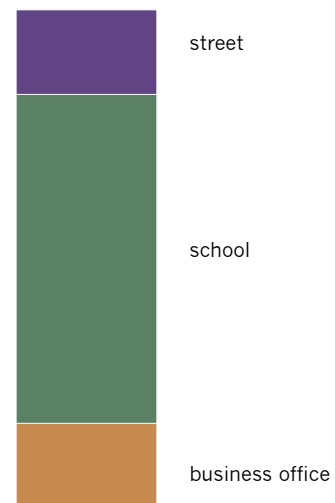
Monuments

Monument	Place type	Content
plaque on Our Lady of Sorrow Parish School	school	memorial
sculpture memorial to victims of 9/11	school	memorial
bicycle memorial for Brandie Bailey	street	memorial
Life Adjustment Center donor appreciation plaque	business office	document
year of construction inscribed in brick	school	document
year of construction inscribed in brick	school	document

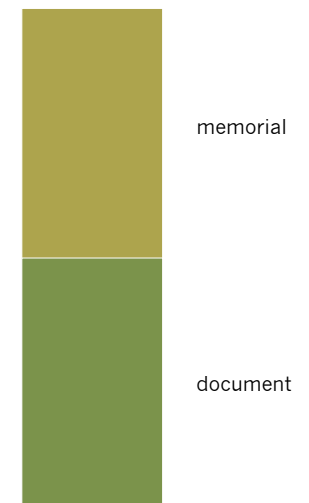
Place Type	Count	Representation	Content	Count	Representation
street	1	20%	document	3	50%
school	4	80%	memorial	3	50%
business office	1	20%			



Place type



Content



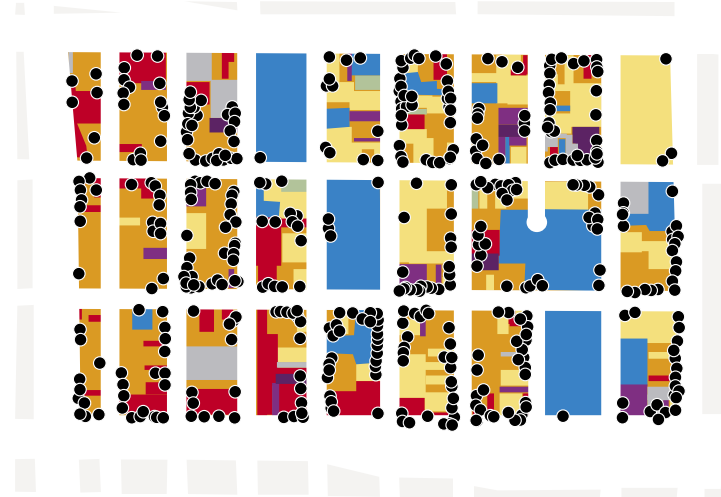
Graffiti

Many of the stores and restaurants in the neighborhood were still closed during the hours I visited (9 am-1 pm on a Tuesday), and almost all of them have pull-down garage door grates securing their storefronts. These storefronts were all marked by graffiti, almost without exception. Some of them were covered in more expressive graffiti, but most of the marks were tags. Here, I have counted these instances of graffiti as locating on storefronts. It is possible that, had I toured the neighborhood at another hour when the grates were lifted, I would not have catalogued as much graffiti on storefronts.

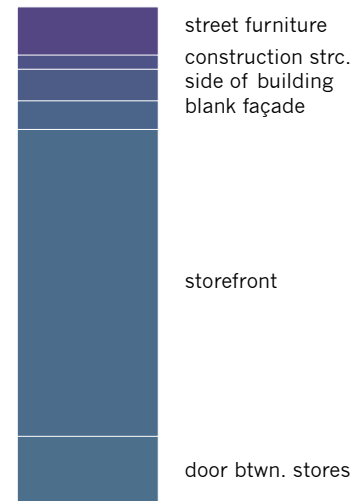
For every 1000 instances of graffiti:

Place type	Count	Repn.
street furniture	100	10%
construction structure	60	6%
side of building	30	3%
blank façade	60	6%
storefront	600	60%
door between stores	150	15%

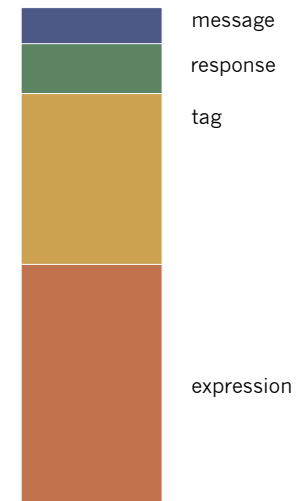
Content	Count	Repn.
message	100	7%
response	150	10%
tag	700	48%
expression	500	34%



Place type



Content

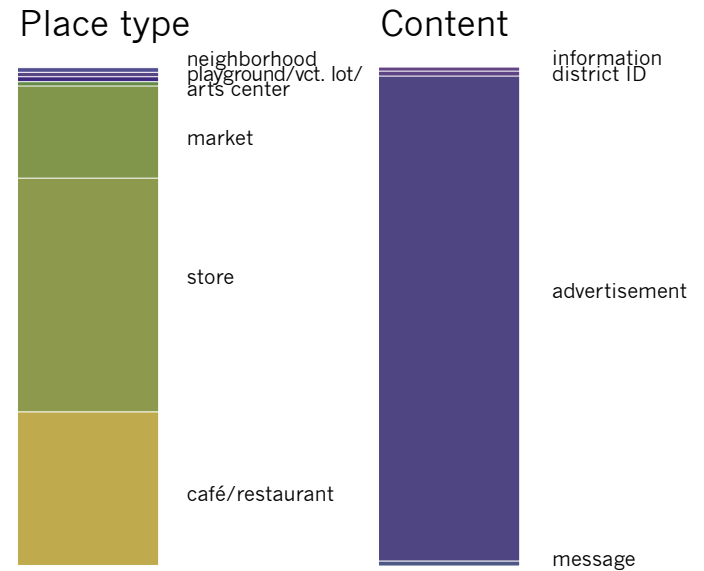
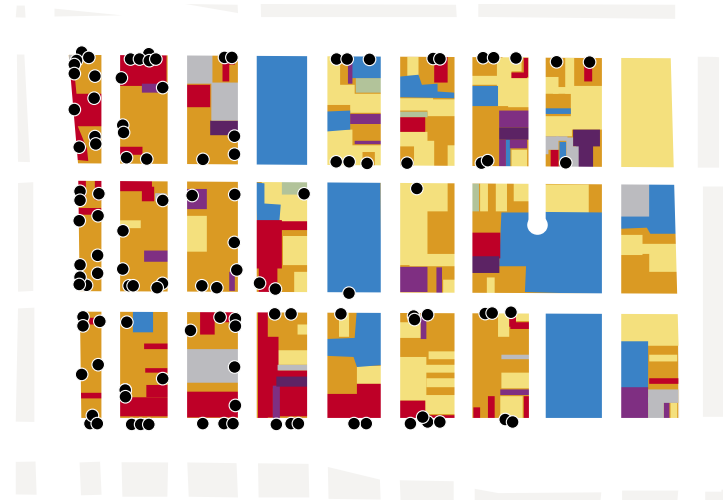


Signs (excluding posters)

Sign	Site type	Content
Request for political support: Children's Magical Garden	vacant lot, playground	message
New York City's Bargain District sign	neighborhood	district ID
New York City's Bargain District sign	neighborhood	district ID
Description of ABC No Rio	arts center	information
signs advertising services	store	advertisement
signs advertising services	café/restaurant	advertisement
signs advertising services	market	advertisement

Place type	Count	Representation
neighborhood	2	1%
playground	1	1%
vacant lot	1	1%
arts center	1	1%
market	30	19%
store	75	47%
café/restaurant	50	31%

Content	Count	Representation
information	1	1%
district identification	2	1%
advertisement	155	97%
message	1	1%



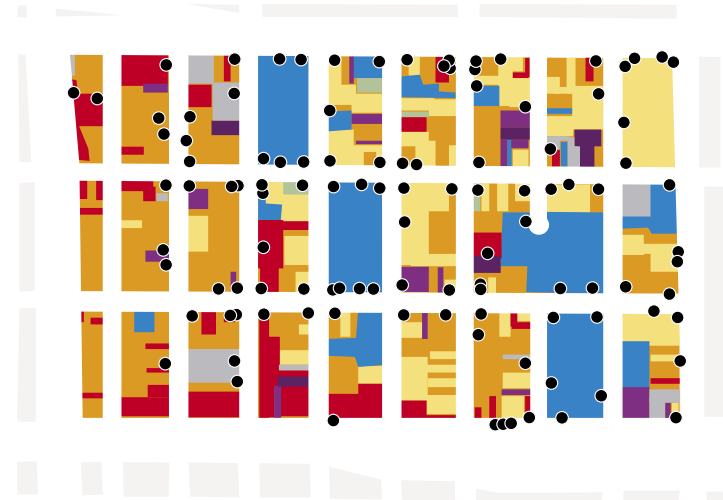
Posters

There were many less posters in this neighborhood than there were in either of the Toronto neighborhoods. Posters tended to locate on telephone poles and, to a lesser degree, on postal boxes. Most were advertisements, particularly for moving companies and language classes, though some were messages.

For every 1000 posters:

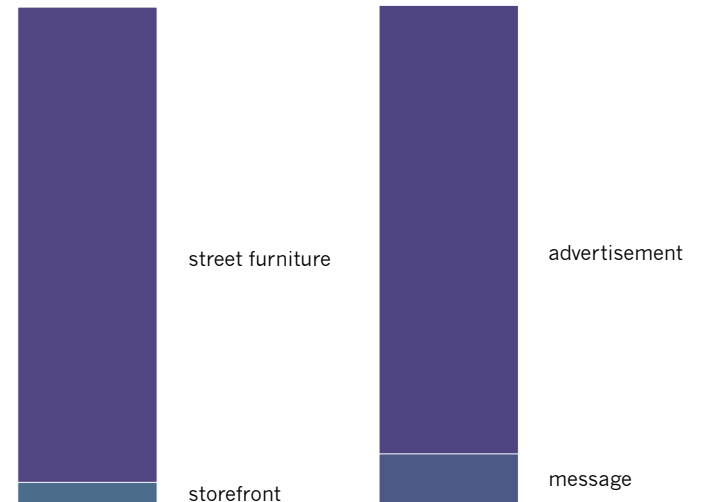
Place type	Count	Representation
street furniture	1000	95%
storefront	50	5%

Content	Count	Representation
advertisement	900	900%
message	100	100%



Place type

Content



Stickers

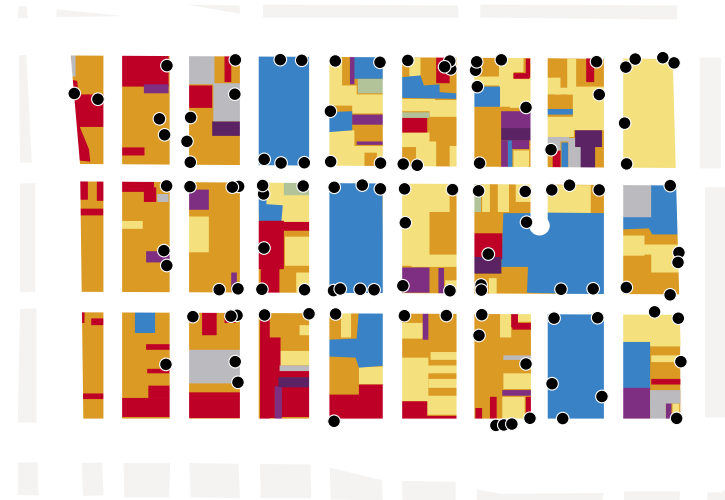
Stickers were abundantly present on street furniture on the western side of the neighborhood, but their presence declined steadily as I moved into the eastern half of the neighborhood. The break in their omnipresence might relate to the presence of many schools on the neighborhood’s eastern side, as well as to a shift in demographics. The eastern side of the neighborhood hosts both a lingering low-income minority population—the shift in language from English to Spanish was audible walking through the neighborhood—and new or in-progress condo developments whose target residents are less likely to be among Yellow Arrow’s largely hipster contingent.



For every 1000 stickers:

Place type	Count	Repn.
street furniture	900	90%
construction structure	50	5%
storefronts	10	1%
door between stores	40	4%

Content	Count	Repn.
advertisement	800	44%
expression	1000	56%



Place type



street furniture

construction strc. storefront door btwn. stores

Content



advertisement

expression

Yellow Arrow

Though the visual impact is less in the map of Yellow Arrow annotations than in that of stickers, there is a noticeable decline in the presence of annotations on in the easternmost blocks of the neighborhood. Again, this difference seems likely due to a combination of schools acting as buffers, demographic difference between the two sides of the neighborhood and new construction on the easternmost blocks.

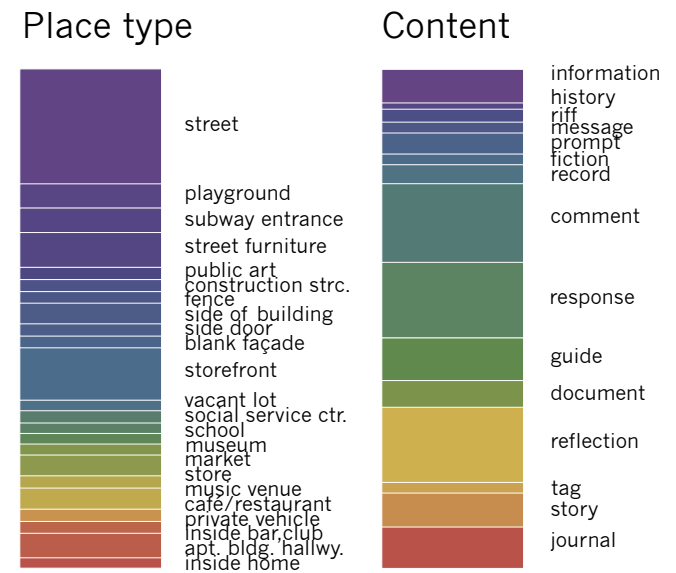
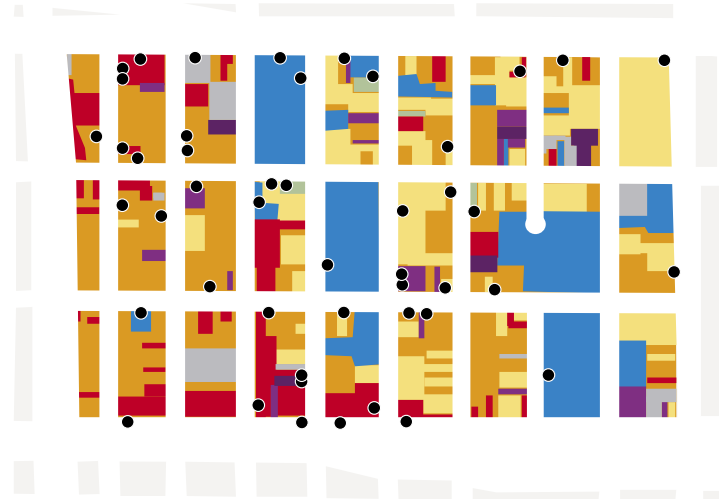
User	Project	Message	Place type	Content
weil		there is no fucking white button. Just some fucking empty bottles.	inside bar/club	comment, response
jshapes		you can't take a shit and eat it too.	inside bar/club	comment, response
jshapes		this toilet paper machine reminds me my high school.	inside bar/club	reflection
gOff		Huxley said, "What we love will eventually destroy us."...Was he right?	storefront	reflection, prompt
>blank		nice image. I'm going to look out for your arrow when I walk by.	storefront	message, response
Vid		Beward the Rats of Nimh. They are here. Plotting our demise. The electricity they have stolen will electrocute us all.	street	riff
nils		this place is awesome. It's bright, the people are bright. They have soymilk in the morning and Guinness at night.	café/restaurant, bar	guide
nino		Confession: I buy some food just ot watch it explode in the microwave. A twinkie takes 45 seconds. A turkey...go ahead and find out	store	journal, prompt
sirHC	The First Arrows	Etymology: yiddish pastrame, from Romanian pastrama. A highly seasoned pressed smoked beef prepared especially from shoulder cuts.	storefron	information, response
>snapdaddy		my grandpa used to take me to katz's	storefront	record, response
sirHC		Monkey's uncle came to orchard st when it was all push carts and buy a pickle. When Monkey's kids were born their neighbor was luxury.	fence	story
sirHC		Beware you are in a branded environment. Even the fridge at the fader/fuse party conspires to sell you cool. The video gamers at the door are planted.	inside home	comment
nino		Confession: I think crossing guards are the stupidest people on earth. HOW IS THAT A JOB? Cross this street. Any problems?	street	journal
Bachata		Little known Historical Fact: This is where Frank Zappa first said "to me cigarettes are food."	street	history, fiction
gOFF	Street Art	Flowers in the concrete jungle	street	document, response
new612	The First Arrows	Manhole incidents can range from smoke to explosions that shoot manhole covers several stories into the air. Source:NYTimes	street	information
Vid		This is Joshua. Not to be confused with the Tree. He robbed us with his harmonics, and promptly made his way off to Burning Man.	street	story
nils		There are some things you can't prepare yourself fo. The first time, a natural wonder, meeting a hero. All this amazing sugar...	store	reflection

User	Project	Message	Place type	Content
new612	Street Art	The city does not tell its story, but contains it, like the lines of a hand, written in the corners of the streets. Thankx, Swoon	side of building	reflection, response
ninka		Cool baby that you can meet several places in this area	blank façade	comment, information, response
weil	Out of Their Element	A tree grows on brooklyn? Nope. A tree grows in a random les hipster bar	inside bar/club	guide
glowlab		Organic produce from upstate NY on Rivington at Clinton every Wednesday. Cheerful owner says "Have a salad tonight from lettuce"	market	guide
new612	The First Arrows	Every Sunday your grandfather and I would go to the Lower East Side to buy pickles from the street vendors. Are they still there?	museum	riff, prompt
jshapes	Street Art	Tonic. What is worth more: independent culture or a 5 story building? If you have the answer, tell the bartender.	music venue	reflection
atrain		Drums. Hisham was rad! In the womens bathroom of tonic I once scrawled an I love you note for my ex. Oh the permanency. Embarassing.	inside bar/club	journal
Bachata		Ryan Flint, who died in Vietnam, would park his 1963 Corvette right here. His mom sold it or \$50 when he went MIA. I bought it.	street	story
house		this was just junk--now its my favorite playground. That is my red swing.	vacant lot, playground	record, comment, tag
nino		Between 2 am and like 6 am it smells like donuts right here. Ya think?	street	document, guide
nino		Flushable toilets go back to ancient Rome. Why is it so hard to accept the fact that there needs to be public toilets?	playground	comment
new612	The First Arrows	Whether you live, work or visit NYC, recycling s the law. Right: NYC is environmentally friendly. How many bags with my bagel?	street furniture	information, reflection
jane		my door counts--so does the color blue. Every time I walk in my room, I drown.	inside apartment building	journal
>Vid		I like the color blue. My room is about the color of your door. Everytime I walk into it, I fly.	inside apartment building	comment, reflection, response
Bachata		Webster's dictionary once accidentally printed a word, 'Dord', that doesn't exist. What do you think it meant?	school	reflection
Ziztrrr		What is American? Apple Pie is from England. And I am too. The former around 1066 the latter 910 years later.	side door	reflection, information
new612	Primo	Wie gross ist er? He's six foot ten. We called him "DaddyLoongLegs" in middle school. He's the greatest. El es mi mejor amigo.	side of building	journal

User	Project	Message	Place type	Content
froot		I just got in trouble. I hate it here.	street	document, journal
glowlab	Street Art	The evolution of urban communication.	street furniture	comment, response
Ziztrr		Poem for this spot..."girlfriend. Stopping. Why stop to argue girlfriend? I don't understand your insane ways of behavior."	street furniture	story
weil		we love the plasma slugs! Now our only task is to find out what the plasma slugs are...I am guessing a band? Or a really hardcore gang!	public art	comment
Bachata		I saw a C.H.U.D. coming out of this sewer, on Tuesday April 6th, 2004.	street	document
Bchico		It is the perfect expression of brown. It is the Karma Train.	subway entrance	reflection
>Grove		Karma will now come your way, since you helped me fix my alarm clock!	subway entrance	message, response
gOFF		Technological Transcendence	construction structure	comment, response
ninka	Kaos Project	the coolest vab [sic] with the coolest guy!	private vehicle	comment
Bchico		how do fish mark their territory? If a dog pees on another dog's pee are they neighbors? Are you my neighbor?	street furniture	reflection
glowlab		LUCKY toy store's cheap plastic delights!	storefront	guide
new612		Yellow is the most striking color. The arrow is the most fundamental symbol of human communication. Lotus Club is the coolest place in NYC. Aug 26 8pm	café/restaurant, bar	reflection, guide
clbhouse		This is a place to use youre [sic] originality and use youre [sic] own talents to make something special.	social service center	guide
nino		Kareem Abdul Jabbar once tripped right here. If I hadn't been there, he could have twisted his ankle. Lucky I got good reflexes	street	story

Place type	Count	Repn.
street	10	23%
playground	2	5%
subway entrance	2	5%
street furniture	3	7%
public art	1	2%
construction structure	1	2%
fence	1	2%
side of building	2	5%
side door	1	2%
blank façade	1	2%
storefront	5	11%
vacant lot	1	2%
social service center	1	2%
school	1	2%
museum	1	2%
market	1	2%
store	2	5%
music venue	1	2%
café/restaurant	2	5%
private vehicle	1	2%
inside bar/club	1	2%
inside apartment bldg.	2	5%
inside home	1	2%

Content	Count	Representation
information	5	7%
history	1	1%
riff	2	3%
message	2	3%
prompt	3	4%
fiction	1	1%
record	3	4%
comment	11	15%
response	11	15%
guide	6	8%
document	4	5%
reflection	12	16%
tag	1	1%
story	5	7%
journal	6	8%



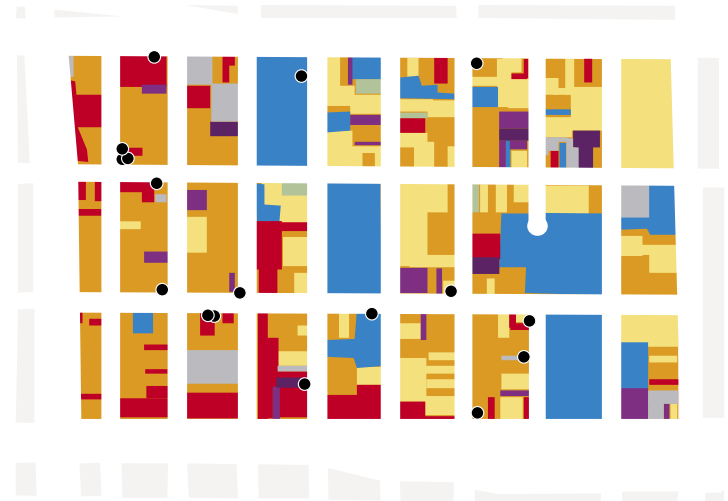
Socialight

As with Yellow Arrow, Socialight annotations tend to fall in the western and southern blocks of the neighborhood.

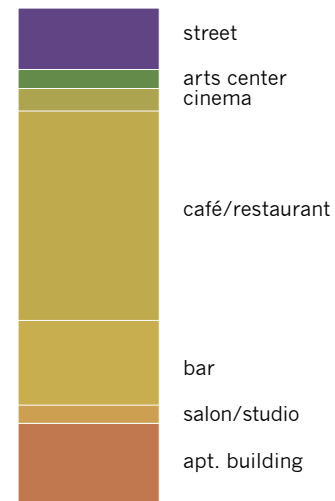
User	Headline	Message	Place type	Content
Mmmyk	Out of this world	Inoteca is a busy little place on the corner of Rivington and Ludlow in the LES	café/restaurant	guide
>cjn208		have to check this--it is now on my list. perhaps before JB's	café/restaurant	comment, response
Mmmyk	Never forget.	This was scrawled on the sidewalk: Max Lehrer, 22 yrs old Sam Lehrer, 19 yrs old Lived here at 114 Essex St Died March 25 1911, Triangle Factory Fire. See Wikipedia for more details on the Triangle Shirtwaist Factory Fire .	street	document, response
>Mmmyk		Dens found something outside his apartment today too – check it out “here”: http://flickr.com/photos/dpstyles/435342024/	street	comment, response
enmita	lovely joint with creative comfort foods	a great spot with comfort foods done creatively using high-quality ingredients. my tacos (duck, shrimp) worked in lentil which sounded suspect but totally WORKED. decor is whimsical and interesting, love the burnt orange wall. service is slow, though, so only go if you've got the time to leisurely enjoy an evening. I hear their brunch is awesome too, but haven't been.	café/restaurant	guide
Lithiumstatic	Katz's Deli	They have a giant pastrami sandwich that is great! Went thier several times when I was on vacation in 2002. Throw in a couple of bucks at the tip jar while the guy is cutting up the pastrami for your sandwich and say... “Pile it high.” He will give you extra meat. LOL!!! for real!	café/restaurant	guide, story
>dan		I live 2 blocks from Katz's. I never get bored. Place is like no other.	café/restaurant	guide, response
>scott		last of a breed	café/restaurant	comment, response
>Mmmyk		Great review! I think the deli is called Katz's though...	café/restaurant	message, response
>Lithiumstatic		fixed...	café/restaurant	message, response
Mmmyk		fireplace at public	bar	expression
Mmmyk		ghostbusters in the LES	bar	riff
dan	Wow.	Brunch here today was soooo good. Tons of tapas-style small dishes, I think I'd have to say that of the brunch items, the ricotta fritters with raspberry jam were a standout. Then again, so was the kobe beef burger/slider and the french onion soup dumplings. I'll definitely be going back to this place in my 'hood for meals and drinks.	café/restaurant	guide, story
thincvox	\$8 haircut	Get a proper haircut eastern block style. Best cut for the money although pretty darn grotesque. As for ambience, you couldn't ask for a better set unless Robert DeNiro walked in and a director called action. Clocks everywhere. It's in the back of the essex market.	salon/studio	guide

User	Headline	Message	Place type	Content
Mmmyyk		weird guy in some bar	bar	expression
Mmmyyk	randy making some	now if only i had uploaded the picture	street	document
scott	Back Room: fills up quickly, teacup thing silly.	Ah yes, it's kind of fun tunneling through the intentionally covert entrance, but once in the bar it's like many others. Pretty much need a reservation to sit in the plush limited seating. And oh yeah, their "thing" is to serve drinks in teacups... just don't do the math of price per liquor ounce and you'll enjoy this gimmick more.	bar	guide
dens	this is where I live	come on over and play some mf'ing nintendo wii!	apartment building	message
>southMonkey		dude. got my own. playin tonite on the socialight plasma. sweeeet..	apartment building	message, response
>Mmmyyk		Wiiiiiimonkey!!!!	apartment building	riff, response
Mmmyyk	movies at the horror house	the horror house in the lower east side wasn't all that scary at all...	cinema	comment
dan	Sake fruit jello and avocado ice cream!!!!	Had dinner at Chubo tonight for the first time – our early Valentine's Day dinner. The pic is of my dessert, which was odd, but pretty good – a sake-based jello with a side of avocado ice cream (tasted like cold, creamy guacamole – not necessarily a good thing, but you can't say it wasn't inventive). It's a nice spot with good service, and very good food presented well. Ann had the escobar, which was amazing, and I had a coffee-rubbed steak, which was also really good. I'll be back.	café/restaurant	guide, story
dens	my apt	hey, check out my apt	apartment building	message
dan	angel orensanz center	Eli and Mara's wedding	arts center	document

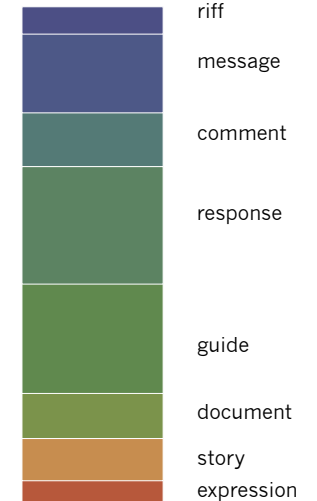
Place type	Count	Repn.	Content	Count	Repn.
street	3	13%	riff	2	5%
arts center	1	4%	message	6	16%
cinema	1	4%	comment	4	11%
bar	4	17%	response	9	24%
café/restaurant	10	42%	guide	8	22%
salon/studio	1	4%	document	3	8%
apartment building	4	17%	story	3	8%
			expression	2	5%



Place type



Content

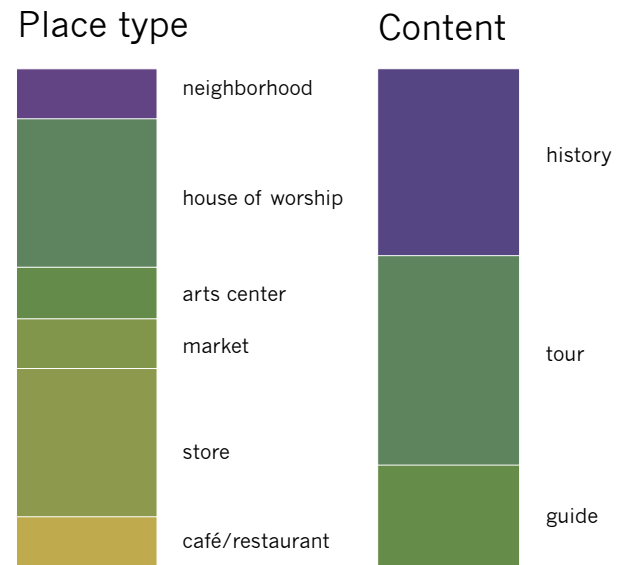
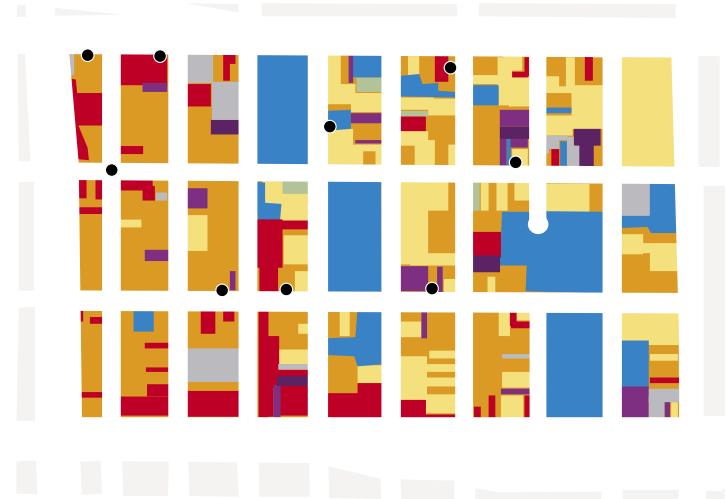


Walking Tour

Though the Lower East Side Tenement Museum and various Jewish and Chinese cultural organizations offer a number of walking tours of the Lower East Side, most of the sites of interest of those tours lie south of Delancey Street. The sites catalogued here are from the South Manhattan Development Corporation’s Jewish Heritage Walking Tours (Mendelson 1999).

Walking tour site	Place type	Content
Katz’s Deli	café/restaurant	guide, history, tour
Russ & Daughters	market	guide, history, tour
First Roumanian-American Congregation	house of worship	history, tour
Economy Candy	store	guide, tour
Schapiro’s Kosher Wines	store	guide, history, tour
Streit’s Matzos	store	guide, history, tour
Congregation Bnai Jacob Anshe Brzezan	house of worship	history, tour
Congregation Chasam Sopher	house of worship	history, tour
Angel Orensanz Foundation	arts center	history, tour
Lower East Side	neighborhood	history, tour

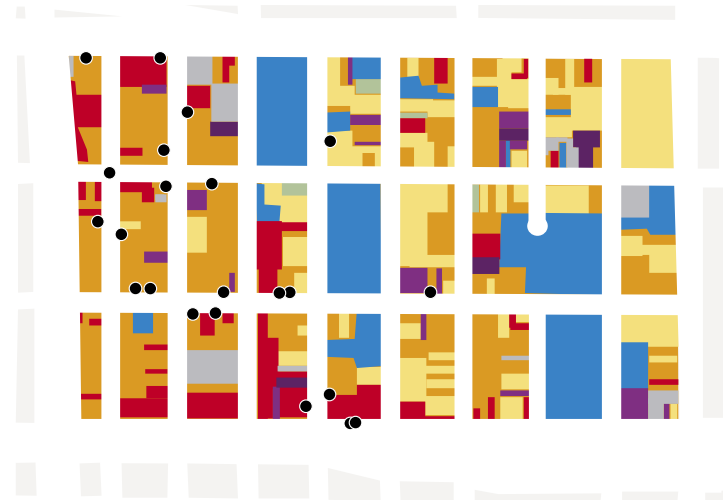
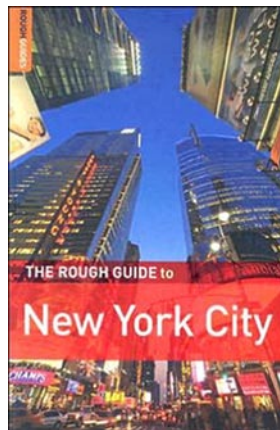
Place type	Count	Repn.	Content	Count	Representation
neighborhood	1	10%	history	9	38%
house of worship	3	30%	tour	10	42%
arts center	1	10%	guide	5	21%
market	1	10%			
store	3	30%			
café/restaurant	1	10%			



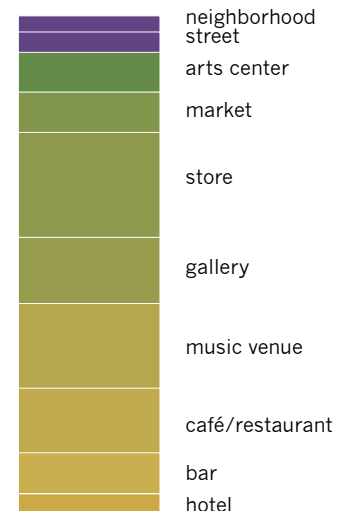
Guidebooks

Sites catalogued here are drawn from *The Rough Guide: New York* (Dunford 2007), *Time Out: New York* (Time Out 2007) and *The Unofficial Guide to New York City* (Aibart et al 2006).

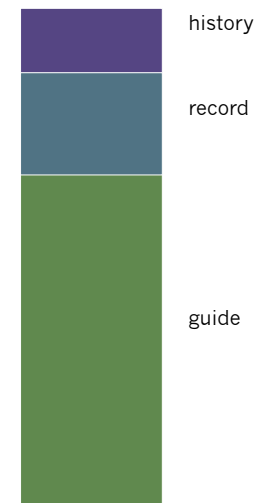
Guidebook site	Place type	Content	Place type	Count	Rpn.
Max Fish	café/restaurant	guide	street	1	4%
Arlene's Grocery	music venue	guide	neighborhood	1	4%
Katz's Deli	café/restaurant	guide	arts center	2	8%
Russ & Daughters	market	guide	market	2	8%
Orchard St. Sunday bargains	street	guide	store	5	21%
Pianos	music venue	record, guide	gallery	3	13%
Essex St Market	market	history, guide	music venue	4	17%
Ratner's Deli	café/restaurant	guide	café/restaurant	3	13%
Lansky Lounge	bar	record	bar	2	8%
Lower East Side	neighborhood	history	hotel	1	4%
Schapiro's House of Wines	store	guide			
nightspot	bar	guide	Content	Count	Rpn.
ABC No Rio	arts center	guide, record	history	3	10%
Luna Lounge	music venue	record	record	5	17%
Corset Center	store	guide, history	guide	21	72%
Frock	store	guide			
Toys in Babeland	store	guide			
Economy Candy	store	guide			
Surface Hotel	hotel	guide			
Angel Orensanz Cultural Ctr.	arts center	guide, record			
Rivington Arms	gallery	guide			
Participant, Inc.	gallery	guide			
Gallery Onetwentyeight	gallery	guide			
Tonic	music venue	guide			



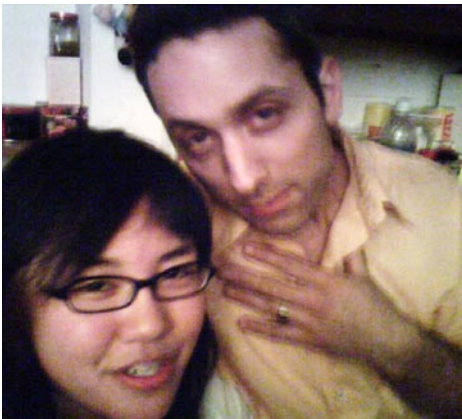
Place type



Content

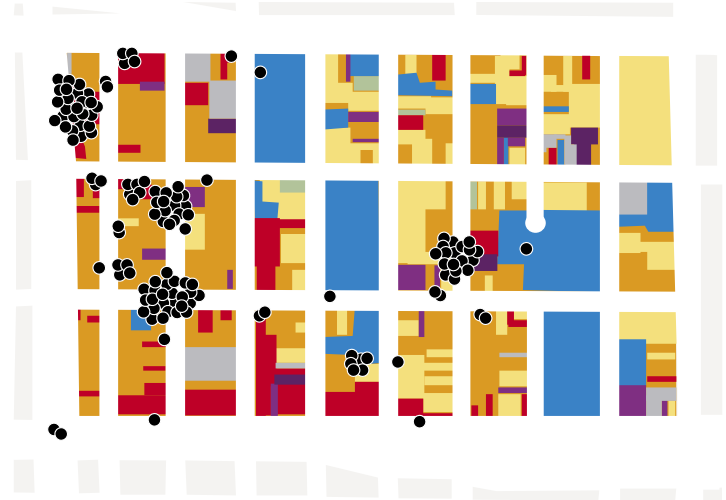


Flickr map

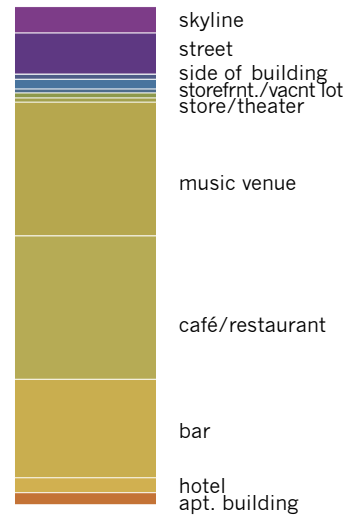


Place type	Count	Repn.
skyline	10	6%
street	12	8%
side of building	2	1%
storefront	3	2%
vacant lot	1	1%
store	1	1%
theater	1	1%
music venue	42	27%
café/restaurant	46	29%
hotel	4	3%
bar	31	29%
apartment building	5	3%

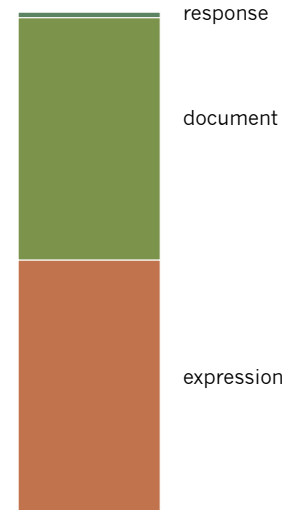
Content	Count	Repn.
advertisement	1	0%
record	1	0%
response	2	1%
document	156	49%
expression	158	50%



Place type



Content



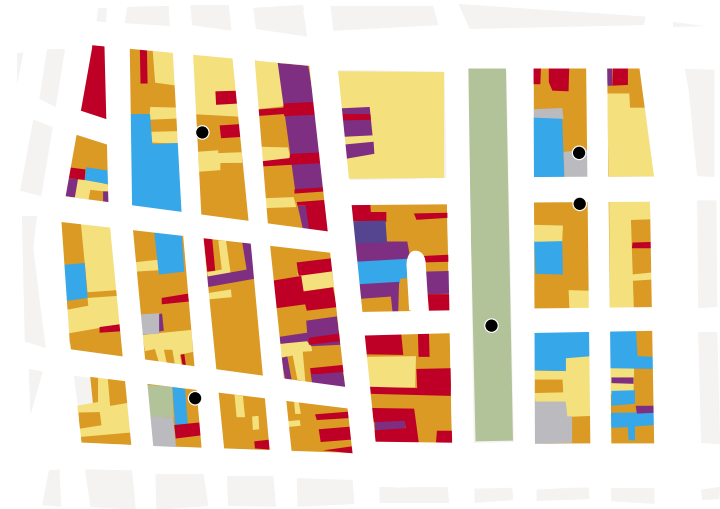
APPENDIX D

NoLIta/North Bowery annotation survey data

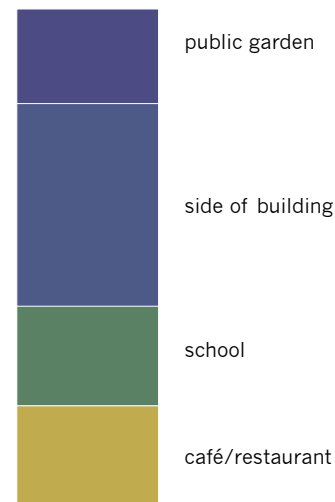
Monuments

Monument	Place Type	Content
14th Ward Industrial School plaque	school	history
graffiti memorial to G-Money	side of building	memorial
mural about youth empowerment	side of building	expression
M'Funda Kalunga Garden memorial sign	public garden	memorial, history, record
Lombardi's Pizza plaque	café/restaurant	history

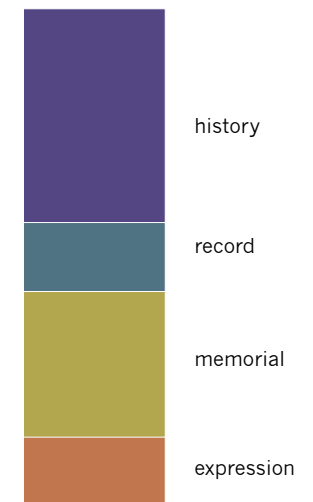
Place type	Count	Representation	Content	Count	Representation
public garden	1	20%	history	3	43%
side of building	2	40%	record	1	14%
school	1	20%	memorial	2	29%
café/restaurant	1	20%	expression	1	14%



Place Type



Content



Graffiti

Of all of the neighborhoods I toured, NoLIta had the most elaborate and visually creative image- and text-based graffiti. Two corner apartment buildings, in particular, essentially have graffiti facades. Images run a gamut of materials and processes, and many were clearly responding to one another. It seems obvious that there is a strong culture of and exchange through expressive graffiti art in NoLIta.

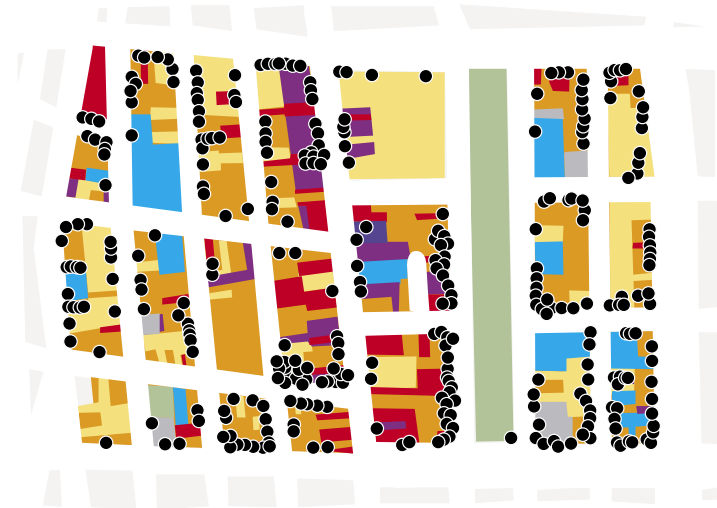
There were also many simple tags in NoLIta and in the North Bowery, clustering, as in the Lower East Side, on street furniture, blank facades, sides of buildings, storefronts and the non-commercial doors between them.



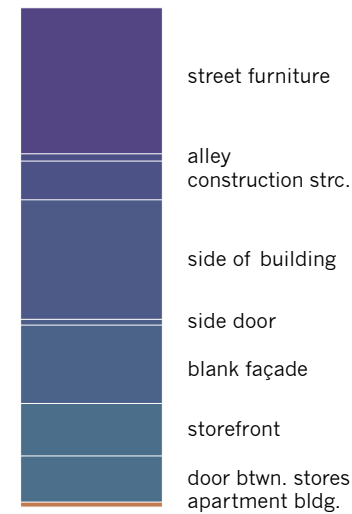
For every 1000 instances of graffiti:

Place type	Count	Repn.
street furniture	300	30%
alley	15	2%
construction structure	65	7%
side of building	245	25%
side door	15	2%
blank façade	150	15%
storefront	110	11%
door between stores	90	9%
apartment building	10	1%

Content	Count	Repn.
message	15	1%
response	150	12%
tag	450	35%
expression	685	53%



Place type



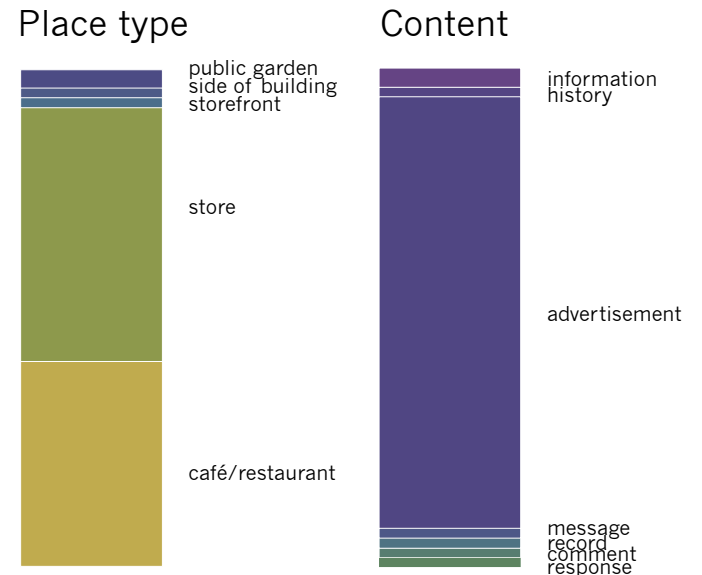
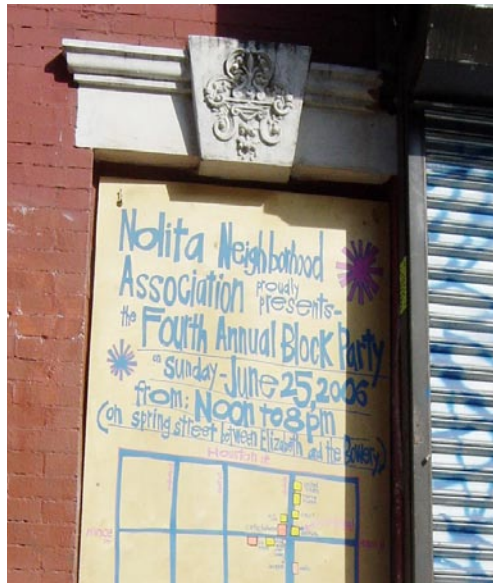
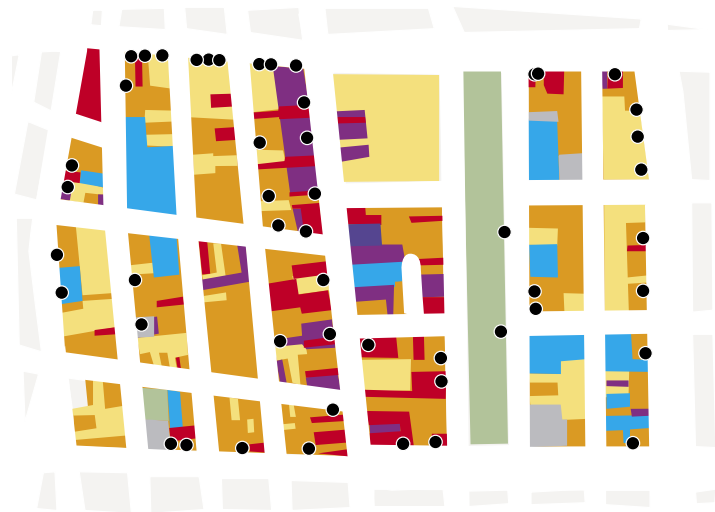
Content



Signs (excluding posters)

Sign	Place type	Content
M'Funda Kalunga Garden memorial sign	public garden	information
Sign for volunteering to work on community garden	public garden	information
Block Party sign	storefront	advertisement
old newspaper articles in Schimmel's bakery window	café/restaurant	history, record
sign about graffiti and aesthetics	side of building	message, comment, expression, response
signs advertising services	café/restaurant	advertisement
signs advertising services	store	advertisement

Place type	Count	Repn.	Content	Count	Representation
public garden	2	4%	information	2	4%
side of building	1	2%	history	1	2%
storefront	1	2%	advertisement	50	88%
store	25	51%	message	1	2%
café/restaurant	20	41%	record	1	2%
			comment	1	2%
			response	1	2%



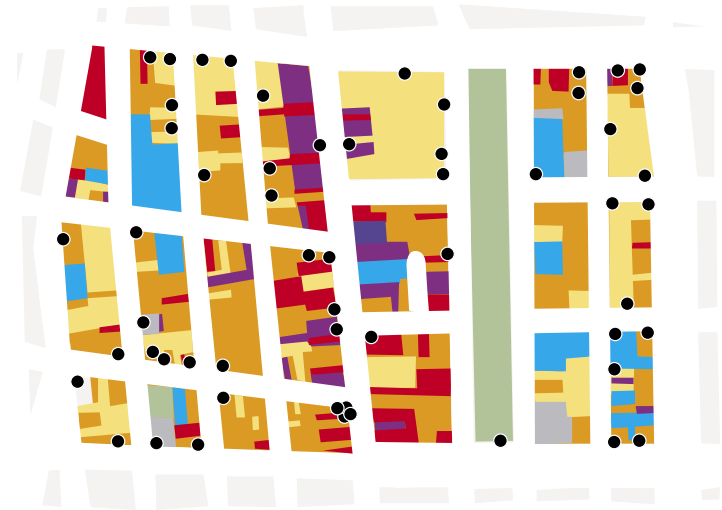
Posters

As in the Lower East Side neighborhood I surveyed, posters were not as present in this neighborhood as they were in Toronto. They were found mostly on telephone poles at street corners, and occasionally on dumpsters and mail drop boxes. Some had clearly been posted months ago and never removed or covered over.

For every 1000 posters:

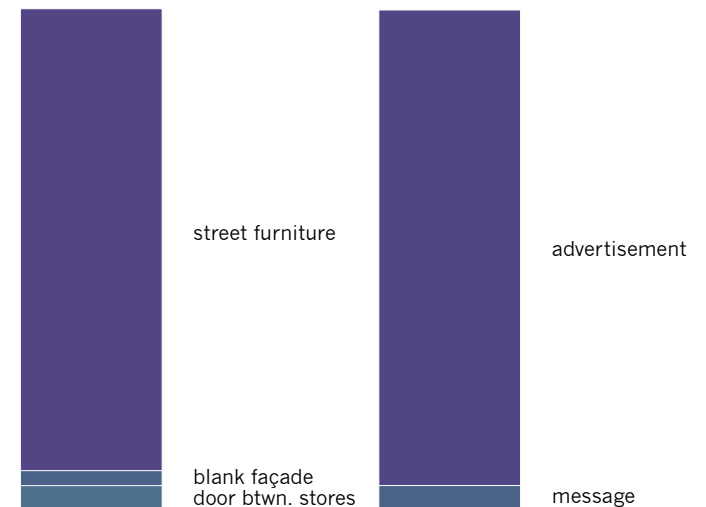
Place type	Count	Repn.
street furniture	925	93%
blank façade	25	3%
door between stores	50	5%

Content	Count	Repn.
advertisement	950	95%
message	50	5%



Place type

Content



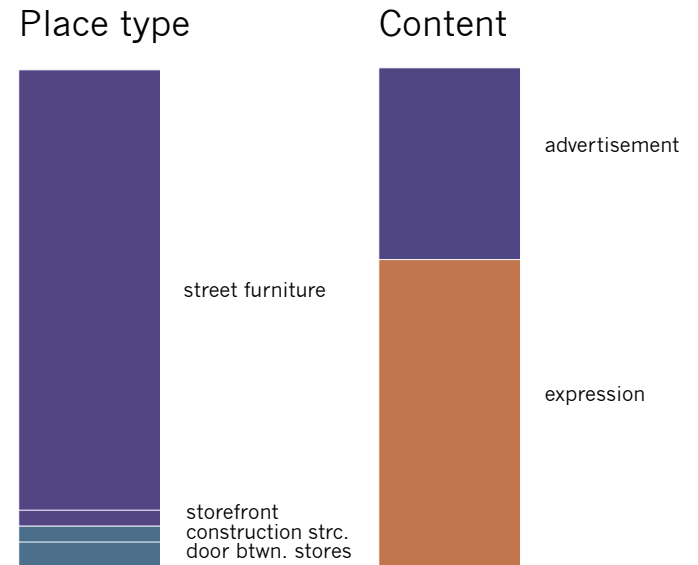
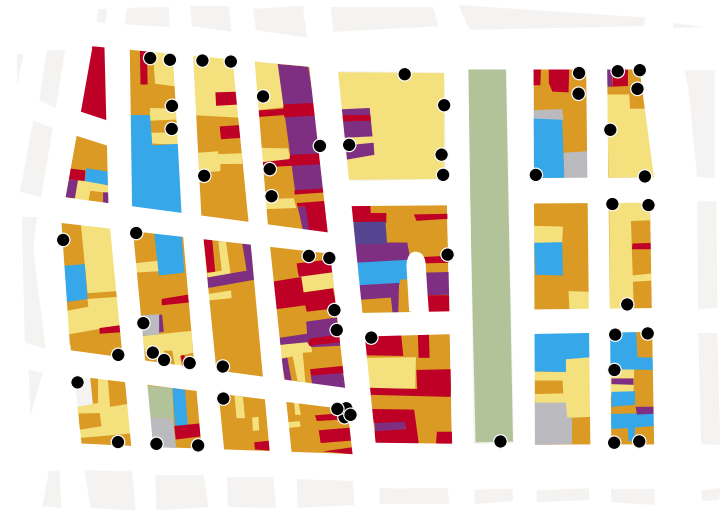
Stickers

As in the Lower East Side neighborhood, stickers were found in abundance on street furniture here—lampposts, postal boxes, street signs. They also tended to cluster on storefronts, doors between stores and construction structures—maybe evidence of responsive annotation, or maybe just open floodgates.

For every 1000 stickers:

Place type	Content	Representn.
street furniture	890	89%
construction structure	30	3%
storefront	30	3%
door between stores	50	5%

Content	Count	Representn.
advertisement	600	38%
expression	1000	63%



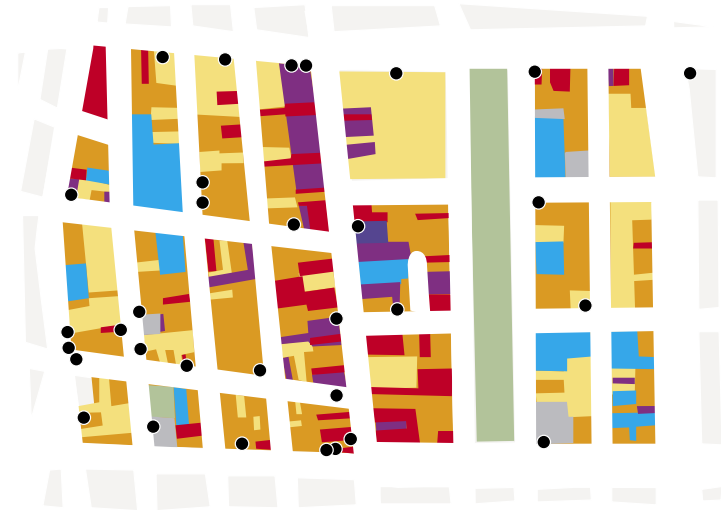
Yellow Arrow

As with instances of expressive graffiti, there were fewer Yellow Arrow annotations in the North Bowery than in NoLIta, which might be related to demographic differences between the two neighborhoods. There are three public housing complexes in the North Bowery along Eldridge Street north of Rivington Street, and a community center serving that population on Rivington at Forsyth. Residents might be less likely to own a cell phone or to use one for digital annotation than the residents of NoLIta.

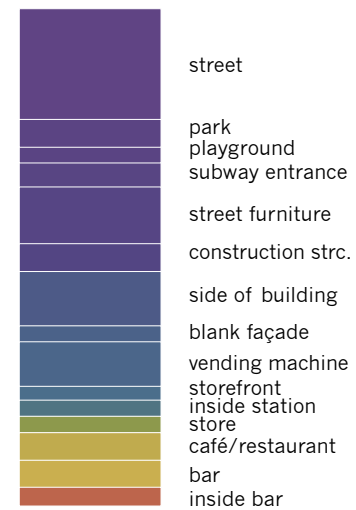
User	Project	Message	Place type	Content
gOFF		Slow down and life might catch up with you	subway entrance	reflection, response
gOFF		Roosevelt Park AKA 'Houston Rails'...one of the best skate spots in NYC, stop and enjoy the show	park	guide
sirHC		This arrow was one of the first gen 2 stickers up in NYC. Arrows were originally distributed in bars like this. Props to them for keepin it up.	inside bar	document
jane		houston street is an artery in the circulatory system of manhattan	street	reflection
>jshapes		one of the 1st and most origiinal arrows. Completely blown away to find it finally walking on thurs. houston is no longer the same.	street	comment, reflection, response
jane		\\\"before it was cool\\\"...you walk past this place & wonder who could possible own such a collection of mad scientist gear	store	reflection
jane		you think there are homeless people in new york, but its really just people waiting for the cross-houston bus	street furniture	riff, reflection
sirHC		walking past this point, corn cobs in hand, with her I knew it would we were past the hard part. She lost her cookies in the can.	street	story
Zizztrrr		Hear a bongo. Bah-boo-Bah-Bah-boo-Bah. Now a djembe. Doweee-dway-dowee. Now a car horn. Hernkee Hernkee	street	document, expression
Zizztrrr		A harsh winters night, Jumping beans and pleasant bums, gather round the fire.	street	document, expression
jshapes	Street Art	My favorite hidden face. He occupies the wall of a gracious gap. The city needs its holes.	side of building	comment, reflection, response
jshapes		You keep me walking tall. I find you and your colorful light whenever I need direction. U r NYC.	street	reflection
new612		My girlfriend and I had our first date here 2 and a half years ago. It's Café Habana and it's still one of our favorite places.	café/restaurant	story, guide
Bachata		Little known History: This spot was the first to be leveled by explosives in this whole country.	street	history, fiction
jshapes	Out of Their Element	alligators are an integral part of nyc street lights. Don't worry, they're friendly.	street furniture	riff
jshapes	Street Art	You are the most beautiful woman in NYC. I want to join you on that wall.	side of building	comment, reflection

User	Project	Message	Place type	Content
tgal	Quotations	"Take it out on the streets, in the avenues. Play it loud like you always wanted to." - The Alternate Routes	playground	reflection
froot		John Denver and John (Cougar) Mellencamp met only once. In this bar. They hated each other.	bar	story
hutos	Street Art	the sticker is a painting of the most boring guy in the universe! That's what makes him so interesting!	street furniture	comment, response
ninka	Out of Their Element	I have never met so many mice in so short time, but this is definitely the coolest and most online one	street furniture	comment
fehdex		S ring Street? I've never heard of it, but much can accomplished with proper planning and attentive contractors.	subway entrance	riff
bgenius	Quotations	It is not length of life, but depth of life. -- Ralph Waldo Emerson	inside station	reflection
panda	Quotations	sage advice. Never grow up too much.	side of building	comment
cook	Street Art	The pieces of a relationship appear in the pageantry of the street. The private becomes public and we are all some how comforted.	construction structure	reflection, response
sirHC	Street Art	bots are back. For years we've watched admiring from the sidewalk now we stand among the giants claiming our place in the machine.	construction structure	riff, reflection, response
jshapes	Street Art	She gave me a token as a necklace. A reminder. I returned, alone, but still adorned. I could not escape the magic of the Subway.	side of building	story, response
Wilson		windows into the soul of the lower east side	storefront	reflection
jshapes		Seeing the sidewalk is the key to unlocking the secretes of the city	street	riff, reflection, response
Ziztrrr		I recommend walking this block listening to Lyle Lovett. What is it about country music that shapes melancholy?	street	guide, reflection
jshapes	Primo	Ruby's. Always grateful when filter coffe isn't even an option. One of nyc's best little cafes.	café/restaurant	guide
jshapes		chibi is the coolest, calmest dog. A real urban hound. Must have been a wildebeast in a past life. Find him live and framed inside.	bar, blank façade	comment, guide
jshapes		The city needs more public drinking fountains.	park	comment
sirHC		Eat the contents of a vending machine. We tried on 10.17.05. A competition here. Technically we lost and puked, but if you count in style points we prevailed.	vending machine	story, prompt
>lens		Thanks for your note on my page. Are you one of the core group behind YA>? If so, I'd love to connect with you soon.	vending machine	message, response
>Glans		just saw the video. What a beautiful but also sick event. I admire that. Glans.	vending machine	message, response

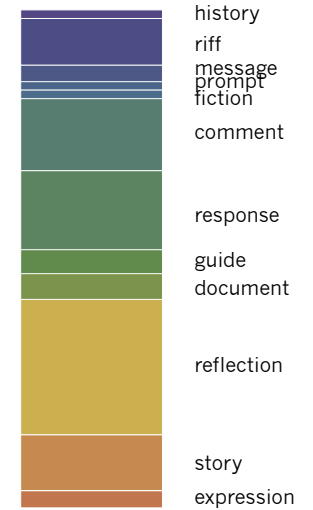
Place type	Count	Representn.	Content	Count	Representation
street	8	23%	history	1	2%
park	2	6%	riff	5	9%
playground	1	3%	message	2	4%
subway entrance	2	6%	prompt	1	2%
street furniture	4	11%	fiction	1	2%
construction structure	2	6%	comment	8	14%
side of building	4	11%	response	10	18%
blank façade	1	3%	guide	3	5%
storefront	1	3%	document	3	5%
vending machine	3	9%	reflection	15	26%
inside station	1	3%	story	6	11%
store	1	3%	expression	2	4%
café/restaurant	2	6%			
bar	2	6%			
inside bar	1	3%			



Place type



Content

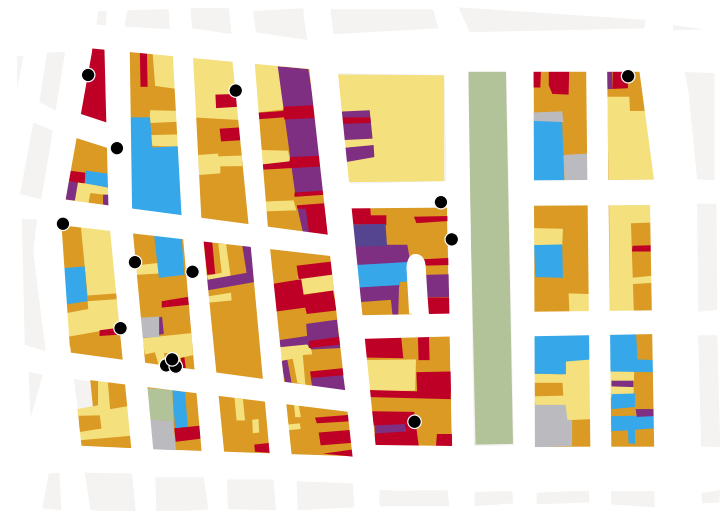


Socialight

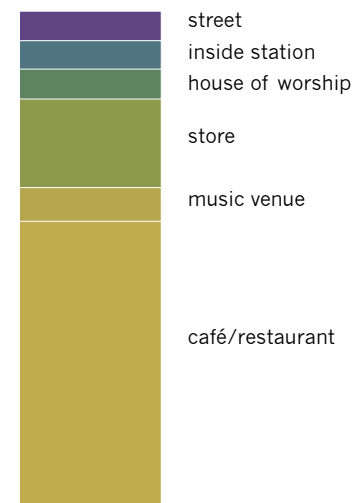
User	Headline	Message	Place type	Content
dan	Britney Shears	Guy reading the post with bald Britney on the cover with the headline, Britney Shears. Oh Britney. Well, the razor got you some much-needed press.	inside transport station	document
dan	interesting, tasty burger	In the bar in the basement of Eight Mile Creek, they serve a burger unique in NYC. The Aussie burger is served with bacon, pineapple, beet, and fried egg. Amazingly yummy. This used to be our go-to spot when I worked at Katahdin. I promise to add a picture the next time I have one.	café/restaurant	guide
cjn208	Downtown coffee	A perfect cafe with good eats (try the posh blt) and easily the best coffee downtown. The aussies know how to do it. Order a “flat white.”	café/restaurant	guide
cjn208	Downtown breakfast	most people know about it, but balthazar is my preferred friday breakfast locale. amazing eggs benedict, waffles, etc. a perfect vibe to get through the morning papers. beware: it is a zoo on weekends esp sunday.	café/restaurant	guide
>Psimondo		and the bread!	café/restaurant	comment, response
>cjn208		so so good!	café/restaurant	comment, response
enmita	Great jewelry from up-and-coming artists!	So much cuter and nicer than the crap you’ll see at high-end boutiques, b/c straight from the artists themselves! save on great necklaces, earrings, some funkier T-shirts and clothes. More jewelry than clothes, tho’. You’ll pay for quality stuff, not subsidize overhead and fixed costs. Open Sat and Sun in a church basement.	house of worship	guide
cjn208	Downtown breakfast	most people know about it, but balthazar is my preferred friday breakfast locale. amazing eggs benedict, waffles, etc. a perfect vibe to get through the morning papers. beware: it is a zoo on weekends esp sunday.	café/restaurant	guide
enmita	great New Moroccan restaurant	beautiful, beautiful decor – but only if you get seated in the back, under the namesake orange, billowy tent. otherwise, seating up front is nothing special at all. I had an eggplant tagine, all 3 others in my group loved their food too. kinda pricey.	café/restaurant	guide
kicksography	Prohibit	Interesting mix of stuff from sneakers to their own fashion line a little random but sometimes you can catch some rare kicks	store	guide
kicksography	Clientele	Hard to find and rare nike, bapes, adidas, and nb some stuff is a little pricey	store	guide
dan	Tai Chi in Chinatown	passed by these women practicing Tai Chi on a 23-degree, cold, December morning	street	document
Mmmyyk	Bowery Ballroom - 16 July	This show is gonna be awesome If you get here early – see if you can find our free album StickyShadows...	music venue	comment, advertisement

User	Headline	Message	Place type	Content
dan	lo side diner	(relatively) new diner in my neighborhood. i've eaten there twice now and both times have been pleased. i just picked up a vanilla milkshake and homefries after my dental surgery. the milkshake was nothing special. the homefries were actually extra good, slightly spicy with peppers and onions.	café/restaurant	guide
dan	I got an Ice-Bot here!	I got the new orange Ice-Bot vinyl toy from Kidrobot – http://www.kidrobot.com – here on Halloween at the Kidrobot party!	store	document

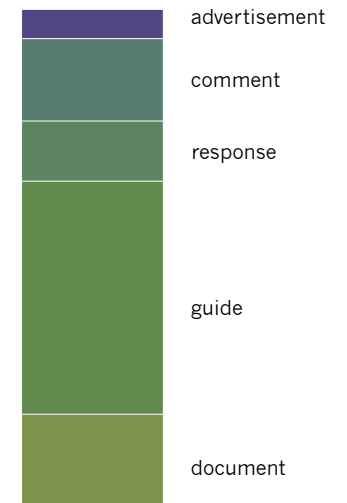
Place type	Count	Representation	Content	Count	Representation
street	1	7%	advertisement	1	6%
inside station	1	7%	comment	3	18%
house of worship	1	7%	response	2	12%
store	3	21%	guide	8	47%
music venue	1	7%	document	3	18%
café/restaurant	7	50%			



Place type



Content

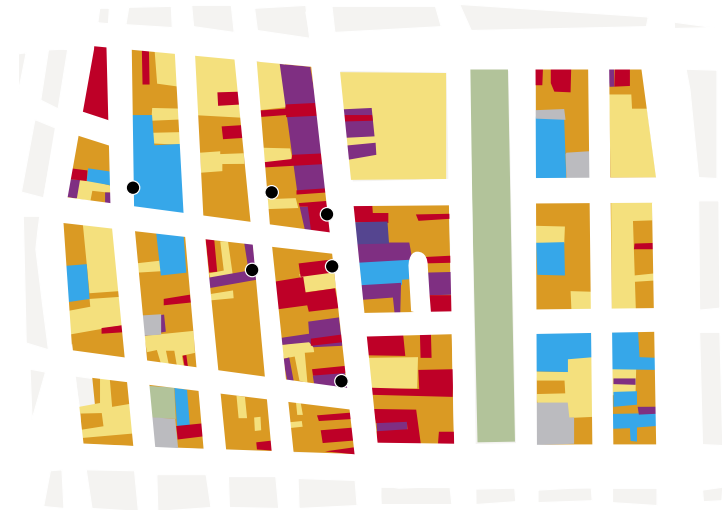


Walking Tour

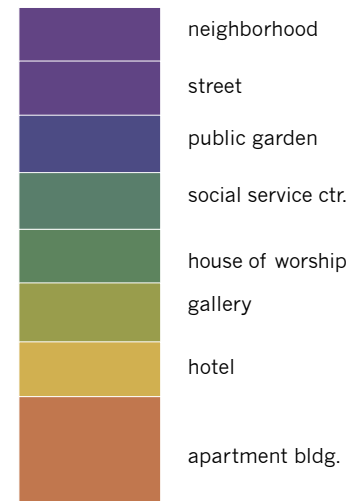
Walking tour sites are drawn from two walking tours, “The Little Italy/ NoLiTa Walking Tour” (Pommer 2007) and “Back to the Bowery” (Forgotten New York 2005).

Guidebook site	Place type	Content
St. Patrick's Old Cathedral	house of worship	history, record, information, tour
Elizabeth Street Gardens	public garden, gallery	history, record, information, tour
14th Ward Industrial School	school	history, tour
Germania Bank building, apartment building	apartment building	history, tour
apartment building	apartment building	information, tour
Bowery	street	information, tour
Bowery	neighborhood	history, tour
Sunshine Hotel	hotel	information, tour
Bowery Mission	social service center	information, tour

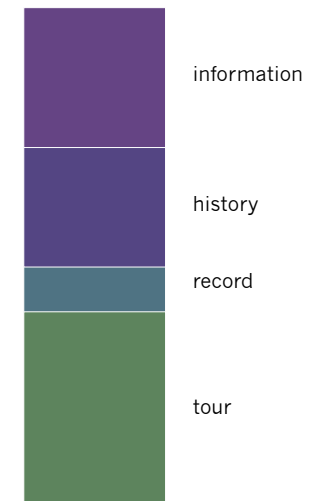
Place type	Count	Representation	Content	Count	Representation
neighborhood	1	11%	information	6	27%
street	1	11%	history	5	23%
public garden	1	11%	record	2	9%
social service center	1	11%	tour	9	41%
house of worship	1	11%			
gallery	1	11%			
hotel	1	11%			
apartment building	2	22%			



Place type



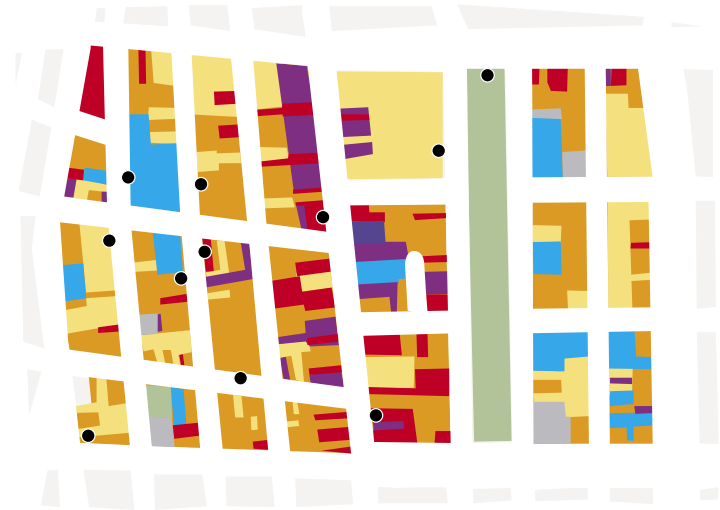
Content



Guidebook

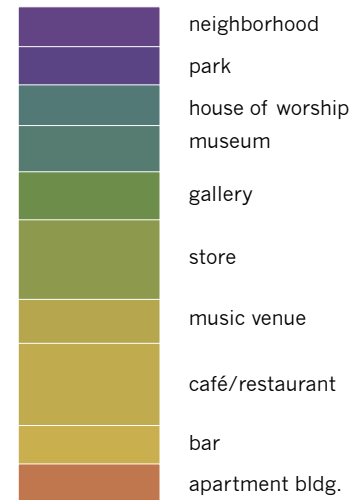
The sites listed here were drawn from *Inside New York 2007 Edition: The Ultimate Guidebook* (Belmont 2007) and *Time Out: New York* (Time Out 2007).

Guidebook site	Place type	Content
neighborhood	neighborhood	history, record
St. Patrick's Old Cathedral	house of worship	history, guide, information
Amy Chan	store	record
Bread	café/restaurant	guide
Sara Delano Roosevelt Park	park	information, guide, record
Rice	café/restaurant	guide
Chibi's Bar	bar	guide
Rebecca Taylor	store	guide
Avalon Chrystie Palace	apartment building	information
New Museum of Contemporary Art	museum	information
Storefront for Art and Architecture	gallery	guide
Bowery Ballroom	music venue	guide

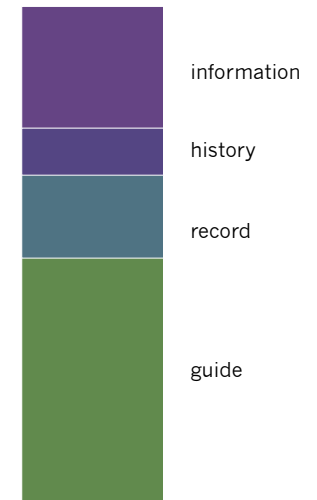


Place type	Count	Representation	Content	Count	Representation
neighborhood	1	8%	information	4	24%
park	1	8%	history	2	12%
house of worship	1	8%	record	3	18%
museum	1	8%	guide	8	47%
store	2	17%			
gallery	8	8%			
music venue	1	8%			
café/restaurant	2	17%			
bar	1	8%			

Place type



Content

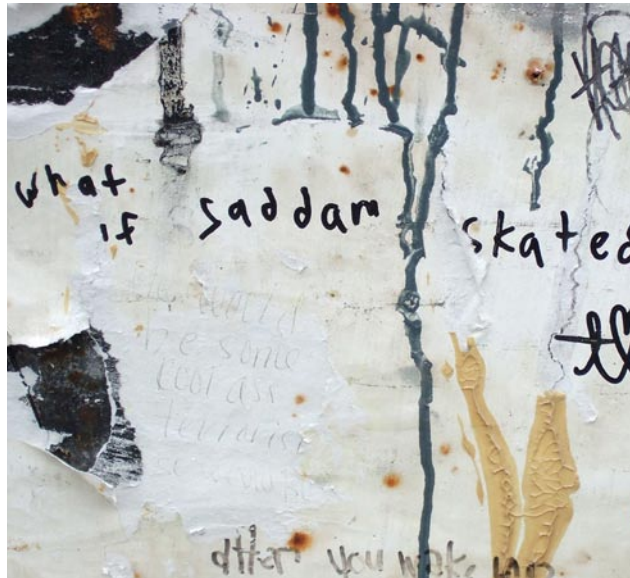
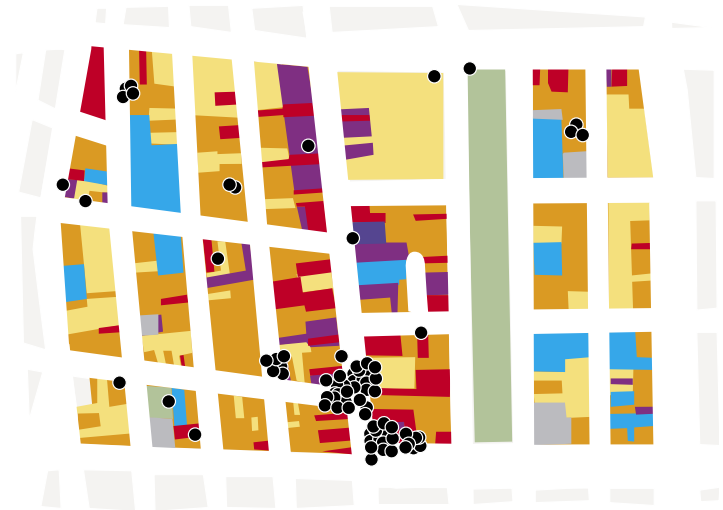


Flickr map

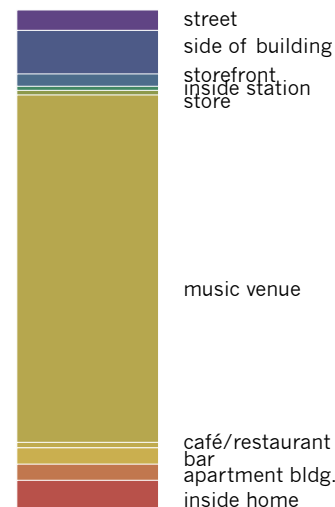


Place type	Count	Repn.
street	4	5%
side of building	7	8%
storefront	2	2%
inside station	1	1%
store	1	1%
music venue	58	68%
café/restaurant	1	1%
bar	3	4%
apartment building	3	4%
inside home	5	6%

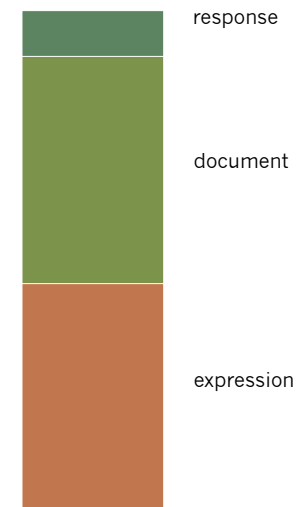
Content	Count	Repn.
response	20	11%
document	85	45%
expression	85	45%



Place type



Content



Bibliography

Yellow Arrow

Howe, J. (2004). Text in the City. *Wired*, 12(9).

Todras-Whitehill, E. (2006, January 25). Making Connections, Here and Now. *The New York Times*: 3.

Urban Task Force. (2007). South Harbor Voices. Retrieved on May 13, 2007 from <http://www.supertanker.info/19287>

Moore, E. (2005, July 7). The Web is all around us - even on the walls. *Christian Science Monitor*.

[murmur]

Micallef, S., Roussel, J. & Sawhney, G. (2007). [murmur]. Retrieved on May 16, 2007 from <http://rhizome.org/object.php?30068>

O'Donovan, C. (2003). Murmurings: An interview with members of the [murmur] collective. *Year Zero One Forum*, 12. <http://www.year01.com/forum/issue12/caitlin.html>

Underwood, N. (2003, August 25). Walk softly, carry a tiny phone. *Eye Weekly*.

Urban Tapestries

Harris, K. & Lane, G. (2007, April). Social Tapestries: Conversations and Connections. Evaluation Report for the Ministry of Justice. http://socialtapestries.net/havelock/ST_Conversations_MoJReport.pdf

Harris, K. (2006, May). Common Knowledge: community development and communication on a housing estate. *Proboscis Cultural Snapshot 12*. http://proboscis.org.uk/publications/SNAPSHOTS_CommonKnowledge.pdf

Lane, G. (2004a, June). Urban Tapestries: Sensing the city and other stories. *Proboscis Cultural Snapshots*, 8. http://proboscis.org.uk/publications/SNAPSHOTS_sensingthecity.pdf

Lane, G. (2004b, July). Social Tapestries: public authorship and civil society. *Proboscis Cultural Snapshots*, 9. http://proboscis.org.uk/publications/SNAPSHOTS_socialtapestries.pdf

Lane, G. & Angus, A. (2006). *Social Tapestries: Neighborhoods and Communities*. London: Proboscis.

Lane, G. & Thelwall, S. (2006). Urban Tapestries: Public Authoring, Place and Mobility. Retrieved May 8, 2007 from <http://socialtapestries.net/outcomes/reports/>

Martin, K. & Lane, G. (2007, April 29). Making Glue: Public Authoring in Urban Tapestries. Paper presented at conference Shared Encounters: Content Sharing as Social Glue in Everyday Places, *Workshop at CHI 2007*, San Jose.

Proboscis (2006a). Conversations & Connections. Retrieved on May 14, 2007 from <http://socialtapestries.net/havelock/>

Proboscis (2006b). Recording Havelock. Retrieved on May 14, 2007 from http://urbantapestries.net/weblog/archives/cat_bodystorming_workshops.html

Silverstone, R. & Sujon, Z. (2005). *Urban Tapestries: Experimental Ethnography, Technological Identities and Place*. London: Media@lse.

Wariabharaj, K. (2001). Report of the drugs misuse needs assessment carried out by Southall Community Drugs Education Project amongst the South Asian communities in Southall. Preston, UK: University of Central Lancashire.

Public history and monuments

Department of Housing and Urban Development (2004). Community Development Block Grant Program: Preserving America. Retrieved on April 1, 2007 from <http://www.hud.gov/offices/cpd/>

Duncan, D. (2003). The Missing Plaque Project. *Spacing*. Retrieved on April 4, 2006 from <http://spacing.ca/missing-plaque.htm>

Dwyer, O. (2000). Interpreting the Civil Rights Movement: Place, Memory, and Conflict. *The Professional Geographer* 52(4): 660-671.

Evans, G. (2002). Living in a World Heritage City: stakeholders in the dialectic of the universal and particular. *International Journal of Heritage Studies*, 8(2): 117-135.

Fogelson, R. D. (1989). The Ethnohistory of Events and Nonevents. *Ethnohistory*, 36: 133-147.

Hayden, D. (1995). *The Power of Place: Urban Landscapes as Public History*. Cambridge, Mass.: MIT Press.

Lowenthal, D. (1996). *Possessed by the Past: The Heritage Crusade and the Spoils of History*. New York: The Free Press.

Osborne, B.S. (2001). Landscapes, memory, monuments, and commemoration: putting identity in its place. *Canadian Ethnic Studies Journal*, 33: 39-77.

Graffiti

Alonso, A. (1998). *Urban Graffiti on the City Landscape*. Paper presented at Western Geography Graduate Conference, San Diego State University, San Diego.

Bandaranaike, S. (2001). *Graffiti: A culture of aggression or assertion?* Paper presented at The Character, Impact and Prevention of Crime in Regional Australia Conference, James Cook University, Townsville, Australia.

Baudrillard, J. (1993), *Symbolic Exchange and Death*, trans. I. Grant, London: Sage.

Childress, H. (2004). Teenagers, Territory and the Appropriation of Space. *Childhood* 11(2): 195-205.

Dang, S. (2005). A Starter Menu for Planner/Artist Collaborations. *Planning Theory & Practice*, 6(1): 123-126.

Ferrell, J. (1995). Urban graffiti: Crime, control and resistance. *Youth & Society*, 27(1): 73–92.

Hanauer, D.I. (2004). Silence, voice and erasure: psychological embodiment in graffiti at the site of Prime Minister Rabin's assassination. *The Arts in Psychotherapy* 31: 29–35.

Social Fiction (2007). Graffiti and the Obelisk: For those Graffiti Writers who Care: Some Thoughts about Remaking Language. Retrieved on April 3, 2007 from <http://socialfiction.org/obelisk.html>

Low power radio

Charlé, S. (2003). (Low) Power to the People. *Ford Foundation Report Online*. Retrieved on April 2, 2006 from http://www.fordfound.org/publications/ff_report

Fuller, R. R. (2003, June 4). Low Power to the People. *The Times of Acadiana*.

Kelliher, L. (2003). Emerging Alternatives: Low Power, High Intensity: Building Communities on the FM Dial. Retrieved on April 8, 2007 from http://oldsite.prometheusradio.org/story_cjr_sept03.shtml

Prometheus Radio Project (2007). Low Power Radio. Retrieved on May 8, 2007 from http://prometheusradio.org/low_power_radio/

Mapping and critical annotation

Crampton, J. & Krygier, J. (2005). An Introduction to Critical Cartography. *ACME: An International E-Journal for Critical Geographies*, 4(1): 11-33.

Isaacs, R. (2000). The Urban Picturesque: An Aesthetic Experience of Urban Pedestrian Places. *Journal of Urban Design*, 5(2): 145-180.

kanarinka (2005). Art-Machines, Body-Ovens and Map-Recipes: Entries for a Psychogeographic Dictionary. *Cartographic Perspectives*, 53: 24-40.

Wodiczko, K. (1999). *Critical Vehicles: Writings, Projects, Interviews*. Cambridge, Mass.: MIT Press.

New York City

Acitelli, T. (2004, December). Hip NoLLIta eclipses Little Italy. *The Real Deal*. Retrieved on May 4, 2007 from http://www.therealdeal.net/issues/December_2004/1102207532.php

Aibart, E., Sehlinger, B., Freeman, R.F. & Lane, L. (2006). *The Unofficial Guide to New York City*. Hoboken, NJ: John Wiley and Sons, Inc.

Belmont, J. (2007). *Inside New York 2007 Edition: The Ultimate Guidebook*. Inside New York: New York.

Citi Habitats: New York (2005). Chinatown, Little Italy and the Lower East Side. Retrieved on May 1, 2007 from <http://www.citi-furnished.com/neighborhoods/chinatown.pdf>

Dunford, M. (2007). *The Rough Guide to New York City*. London: Rough Guide.

Forgotten New York (2005). Back to the Bowery: the end of McGurk's Suicide Hall. Retrieved on May 1, 2007 from <http://www.forgotten-ny.com/STREET%20SCENES/bowery/bowery.html>

McCrary, J. (2004). Sunshine Setting on the Bowery. *The Bigger Apple: Politics, Policy and City Life in America's Greatest Metropolis*. Retrieved on May 3, 2007 from <http://www.biggerapple.com/2004/08/sunshine-setting-on-bowery.html>

Medici Foundation (2007). NoLIta NOWAY Petition Letter. Retrieved May 1, 2007 from <http://www.themedicifoundation.org/pet4.html>

Mele, C. (2000). *Selling the Lower East Side: Culture, Real Estate, and Resistance in New York, 1880-2000*. Minneapolis: University of Minnesota Press.

Mendelsohn, J. (1999). Brief History of the Jewish Lower East Side. *The Lower East Side on the Web*. Retrieved on May 3, 2007 from <http://www.thelowereastside.org/historyJ.htm>

Pommer, A. (2007). The Little Italy/NoLIta Walking Tour. *New York City Cultural Walking Tours*. Retrieved on April 13, 2007 from <http://www.nycwalk.com/midtown-gc.html>

Press, J. (2005, March 1) The Last Days of Loserville. *Village Voice*: 34.

Quart, L. (2000). Gentrifying the Lower East Side. *American Studies Today Online*. Retrieved May 4, 2007 from <http://www.americansc.org.uk/Online/>

South Manhattan Development Corporation. Jewish Heritage Walking Tours of the Lower East Side. *The Lower East Side*. Retrieved on May 17, 2007 from www.thelowereastside.org. *Time Out*. (2007). *Time Out New York*. London: Time Out.

Toronto

Caulfield, J. (1994). *City Form and Everyday Life: Toronto's Gentrification and Critical Social Practice*. Toronto: University of Toronto Press.

City of Toronto. (2007). Live with Culture. Retrieved on May 12, 2007 from <http://www.livewithculture.ca/>

City of Toronto. (2003). *Culture Plan for the Creative City*.

Davidson, H. (2006). *Frommer's Toronto 2006*. Hoboken, NJ: Wiley Publishing.

Ebbut, J. (2005). *Insight Pocket Guide: Toronto*. Duncan, SC: Langenscheidt Publishing Group.

Kinnear, J. (2007). The Annex Real Estate. Retrieved on May 3, 2007 from <http://juliekinnear.com/toronto-neighbourhoods/the-annex-real-estate>

McKenzie, C. (2005). Welcome to Kensington. *Kensington Market*. Retrieved on May 1, 2007 from http://www.kensington-market.ca/article.asp?article_id=18

Miller, A. D. (2007, March 26). A City Intersected: Bathurst Street & Bloor Street. *Torontoist*. Retrieved on May 3, 2007 from <http://www.torontoist.com/archives/2007/03/>

Relph, E. (1995). *The Toronto Guide: The City, Metro, The Region*. Toronto: Center for Urban and Community Studies.

St. Stephens House. (2007). Kensington Alive. Retrieved on April 17, 2007 from http://www.ststephenshouse.com/kensingtonalive/his_begining2.html

St. Stephen's House. (2007). Discover Kensington Market: A walking tour of Kensington. http://www.ststephenshouse.com/kensingtonalive/fa_activity2_over6.pdf

Toronto Life (2007). Annex. Retrieved on May 4, 2007 from <http://www.torontolife.com/guide/real-estate/central/annex/>

Place and urban theory

Altman, I. & Low, S., [Eds.] (1992). *Place Attachment*. New York: Plenum Press.

Florida, R. (2002). *The Rise of the Creative Class*, New York: Basic Books.

Gille, Z. (2001). Critical Ethnography in the Time of Globalization: Toward a New Concept of Site. *Cultural Studies <=> Critical Methodologies*, 1(3): 319-334.

Tiebout, C. (1956, October). A Pure Theory of Local Expenditures. *The Journal of Political Economy*, 64(5): 416-424.

Urban design

Batty, M. (2002). Thinking About Cities as Spatial Events. *Environment and Planning B: Planning and Design*, 29(1): 1-2.

Carfree Cities. (2007). Carfree Places. Retrieved on May 15, 2007 from <http://www.carfree.com/>

Debord, G. (1955, September). Introduction to a Critique of Urban Geography. *Les Livres Nues*, 6: September 1955. Trans. K. Knabb.

Jacobs, J. (1961). *The Death and Life of Great American Cities*. New York: Vintage Books.

Lynch, K. (1960). *The Image of the City*. Cambridge, Mass.: MIT Press.

Lynch, K. (1978). *What Time is This Place?* Cambridge, Mass.: MIT Press.

Mehrotra, R. [Ed.] (2005). *Everyday Urbanism: Margaret Crawford vs. Michael Speaks*. New York: Distributed Arts Press.

Sabaté i Bel, J., Frenchman, D. & Schuster, J. [Eds.] (2004). *Llocsambesdeveniments/Event Places*. Barcelona: Unversitat Politècnica de Catalunya; Massachusetts Institute of Technology; International Laboratory on Cultural Landscapes.

Vale, L. & Warner, S.B. Jr. (2001). *Imaging the City: Continuing Struggles and New Directions*. New Brunswick, NJ: Center for Urban Policy Research.

Whyte, W. (1980). *The Social Life of Small Urban Spaces*. Washington, D.C.: The Conservation Foundation.

Technology

Anderson, C. (2005). The Long Tail. Retrieved on May 15, 2007 from http://longtail.typepad.com/the_long_tail/

Castells, M., Fernandez-Ardevol, M., Linchuan Qiu, J. & Sey, A. (2004). The Mobile Communication Society: A cross-cultural analysis of available evidence on the uses of wireless communication technology. Research report presented at the International Workshop on Wireless Communication Policies and Prospects: A Global Perspective, University of Southern California, Los Angeles.

De Waele, R. (2006, December 11). Understanding Mobile 2.0. *Read/Write Web*. Retrieved on May 5, 2007 from <http://www.readwriteweb.com/archives/>

Lasar, M. (2006, September 30). U.S. consumers text messaging more than ever; But Western Europe and Japan lead in mobile penetration. Retrieved on May 15, 2007 from <http://www.lasarletter.net/drupal/node/151>

Lasar, M. (2007, January 31). Broadband and mobile phone use continues to rise in U.S. Retrieved on May 15, 2007 from <http://www.lasarletter.net/drupal/node/317>

Digital urbanism

Brown, E. (2007, January). IT Conference Celebrates New, Agile Technologies. *MIT Technology Insider*: 7-8.

Chang, M. & Goodman, E. (2006). Asphalt Games: Enacting Place Through Locative Media. *Leonardo Electronic Almanac*, 14(3).

Ito, M. (2005). *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*. Cambridge, Mass.: MIT Press.

McCullough, M. (2006). On the Urbanism of Locative Media. *Places*, 18(2): 26-29.

Mitchell, W. (2003). *Me++: The Cyborg Self and the Networked City*. Cambridge, Mass.: MIT Press.

Page, S. & Phillips, P. (2003). Telecommunications and urban design: Representing Jersey City. *City*, 7(1): 73-94.

Ratti, C., Pulselli, R. M., Williams, S. & Frenchman, D. (2006). Mobile Landscapes: using location data from cell phones for urban analysis. *Environment and Planning B: Planning and Design*, 33(5): 727-748.

Online communities

Castells, M. (2001). *The Internet Galaxy: Reflections on the Internet, Business, and Society*. Oxford: Oxford University Press.

Cummings, J. N. et. al. (2002). The Quality of Online Social Relationships. *Communications of the ACM*, 45 (7): 103-108.

Dellarocas, C. (2003). The Digitization of word-of-mouth: Promise and challenges of online feedback mechanisms. *Management Science*, 49(10): 1407-1424.

Forte, A. & Bruckman, A. (2005). Why Do People Write for Wikipedia? Incentives to Contribute to Open-Content Publishing. Unpublished paper, Georgia Institute of Technology, College of Computing.

Garton, L. (1997). Studying online social networks. *Journal of Computer-Mediated Communication*, 3(1).

Digital Divide/community development

Chanan, G. (2000). Community responses to social exclusion. In *Policy responses to social exclusion*. Ed. J. Percy-Smith. Buckingham: Open University Press: 201-215.

Hoffman, E. (2002). Wireless handheld computers and neighborhood-based data collection. Paper presented at URISA Conference on Public Participation GIS (PPGIS), New Brunswick, NJ.

Norris, P. (2001). *Digital Divide: civic engagement, information poverty, and the Internet worldwide*. Cambridge, UK: Cambridge University Press.

Servon, L. (2001). *Bridging the Digital Divide: Technology, community and public policy*. Oxford: Blackwell Publishing.

Acknowledgments

I would like to thank the following people for their invaluable help in this project: Larry Vale, Mark Schuster, Antoni Muntadas and Bill Mitchell at MIT; Jesse Shapins, formerly at Yellow Arrow; Shawn Micallef and Gabe Sawhney at [murmur]; Andrew Lee, formerly at the Toronto Culture Division; Martin Frandsen at Urban Task Force; Sandra Shaul, Madeleine Hague, Bruce Wilson and David Horemans.

Thanks also to my friends Clay Ward, Peter Fagenholz, Jessica Gath, Jeff Rosenblum, Jessica Kuh, Peter Huybers, Downing Lu, Paulina Varshavskaya, Luke Zettelmoeyer, Lucy Mendel, Elke Hodson, Ona Ferguson, Garth Goldstein, Ben Stephens, Francisca Rojas, Ilana Brito, Mandy Hu, Stephanie Hsu, Nithya Raman and, especially, Gena Peditto for their unfailing support and good company while writing this thesis.

At DUSP, I have been privileged to know so many talented, committed, sincere, goofy people. I am grateful for having had the chance to be a part of this community and to draw almost constant inspiration from my colleagues. Our cities are lucky to have them.

-Rajesh Kottamasu, June 2007.