

UURB 3031 – City Studio

Workflow for Virtual Walking Project

Spatial Affordances: Everyday Adaptations in Mexico City

Workflow for Virtual Walking Project, "Spatial Affordances"



This project examines the many ways that people make room for themselves and others in the everyday life of one of the world's largest cities. Based on fieldwork and visual data mining, the project locates active and creative practices of making room that, taken together, constitute a form of 'spatial affordance.' Spatial affordance is the production and reshaping of urban space to suit particular needs of comfort, conviviality, safety, desire, and belief. As urban design by other means, spatial affordance comprises routine adaptations that afford incremental improvement in life and circumstance.

The project focuses on relatively simple, low-cost, informal adaptations at the very small scale of the street that nevertheless multiply in patterns across many precincts of the metropolis. Such practices include erecting sidewalk shrines, marking off parking spaces, using colorful canopies to assert a place for selling goods. Each adaptive practice constitutes a specific spatial affordance, but also connects materially to other practices: using potted plants to mark off a property line, for example, connects to histories of land disputes as well as traditions of gardening and greening in the concrete landscape. Sidewalk shrines connect to weighty histories of religious devotion that have also produced grand cathedrals, and reflect in their construction a suite of craft and care traditions.

In the end, these small, incremental practices exert a cumulative, if often unnoticed, impact on the shaping and adapting of the city. Architects, planners, urban designers, policy makers, and municipal officials have much to learn from these spatial affordances. They constitute modes of urban problem-solving, space-claiming, and aesthetic intervention. They materially alter the landscape, modulate human interactions with the urban fabric, mediate social relations, and channel the experience of everyday life in Mexico City.

STEP 1. LEARNING THE TOOLS

This document will take you through the process of virtual walking through a neighborhood in Mexico City. The procedure involves the use of Google Street View to "walk" down a set of streets, and a set of tools to convert what you encounter into a data flow.

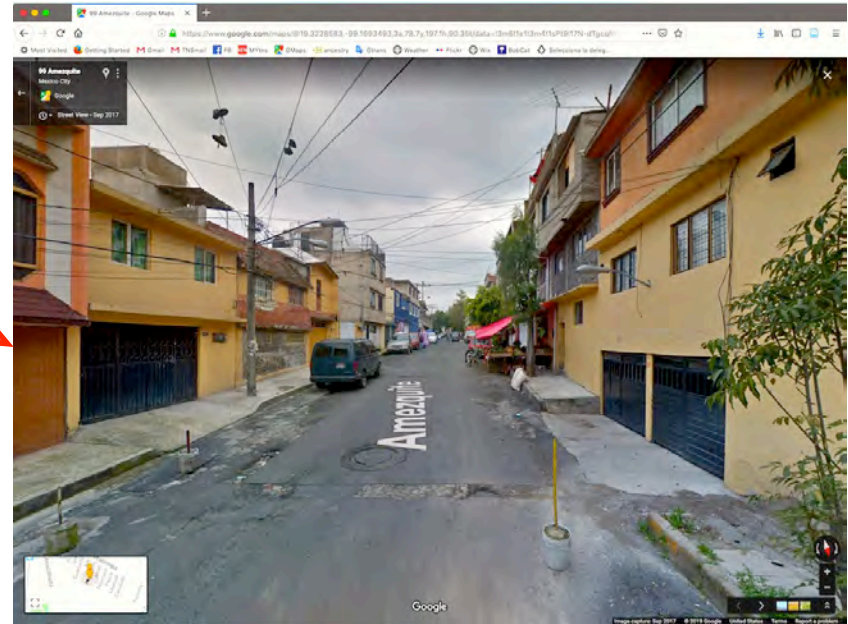
Tools include:

1. An up-to-date browser, preferably Firefox, Safari, or Chrome. Some older browsers are not fully compatible with the latest versions of Google Street View and can cause glitches and other difficulties.

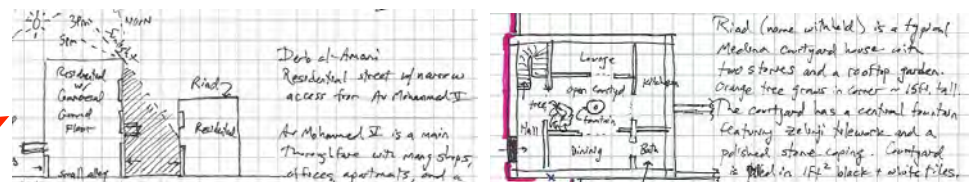
2. Airtable. This is our main database. The software should be downloaded and installed on your computer. You can use the free version (just select 'skip' when they ask if you want the Pro version and/or request any payment information). You will also receive an invitation to contribute to the Airtable database.

3. Screen capture. Many computer operating systems include screen capture software, but there are also many available online to download. I prefer SnapNDrag for its versatility.

4. Notebook. It is always a good idea to have a notebook dedicated to making fieldnotes, sketches, and other *aides-de-memoir*. We will engage in this procedure more formally later in the course.

A screenshot of an Airtable database table titled 'Spatial Affordances'. The table has columns for 'Green', 'No.', 'A. Area', 'Description', 'Lat', 'Long', 'Last use', 'SA Type', 'Description', and 'Img Date'. The rows contain data about various spatial features like parking spaces, vendors, and trees.

Green	No.	A. Area	Description	Lat	Long	Last use	SA Type	Description	Img Date
Changepts	64	Patrol de Santo Domingo	Copycat	19.316644	-99.171026	Residential	Parking space	Parking space owned by free 8-gallon b...	2019-04-01
Changepts	68	Patrol de Santo Domingo	Copycat	19.31618	-99.170393	Residential	Parking space	Parking space owned by free 8-gallon b...	2019-04-01
Changepts	77	Patrol de Santo Domingo	Copycat	19.316196	-99.170742	Residential	Parking space	Parking space owned by free 8-gallon b...	2019-04-01
Changepts	79	Patrol de Santo Domingo	Copycat	19.316196	-99.170742	Residential	Vendor	Vendor at corner of Tegmark, with a...	2019-04-01
Changepts	74	Patrol de Santo Domingo	Copycat	19.316638	-99.170742	Residential	Vendor	Vendor at corner of Tegmark, cooking...	2019-04-01
Changepts	38	Patrol de Santo Domingo	Copycat	19.316499	-99.170747	Residential	Plant	Planter boxes at active sidewalk corner...	2017-09-01
Changepts	39	Patrol de Santo Domingo	Copycat	19.316423	-99.170323	Residential	Plant	Corner boxes surrounded on two sides...	2017-09-01
Changepts	60	Patrol de Santo Domingo	Copycat	19.316439	-99.170140	Residential	Plant	Planter boxes used to demarcate a...	2017-09-01
Changepts	34	Patrol de Santo Domingo	Copycat	19.316222	-99.170362	Residential	Parking space	Vendor selling snacks under canopy at...	2017-09-01
Changepts	48	Patrol de Santo Domingo	Copycat	19.316195	-99.169851	Residential	Parking space	Corner kioskage using mixed implement...	2017-09-01
Changepts	63	Patrol de Santo Domingo	Copycat	19.316143	-99.169710	Residential	Plant	Large old tree has been painted around...	2017-09-01

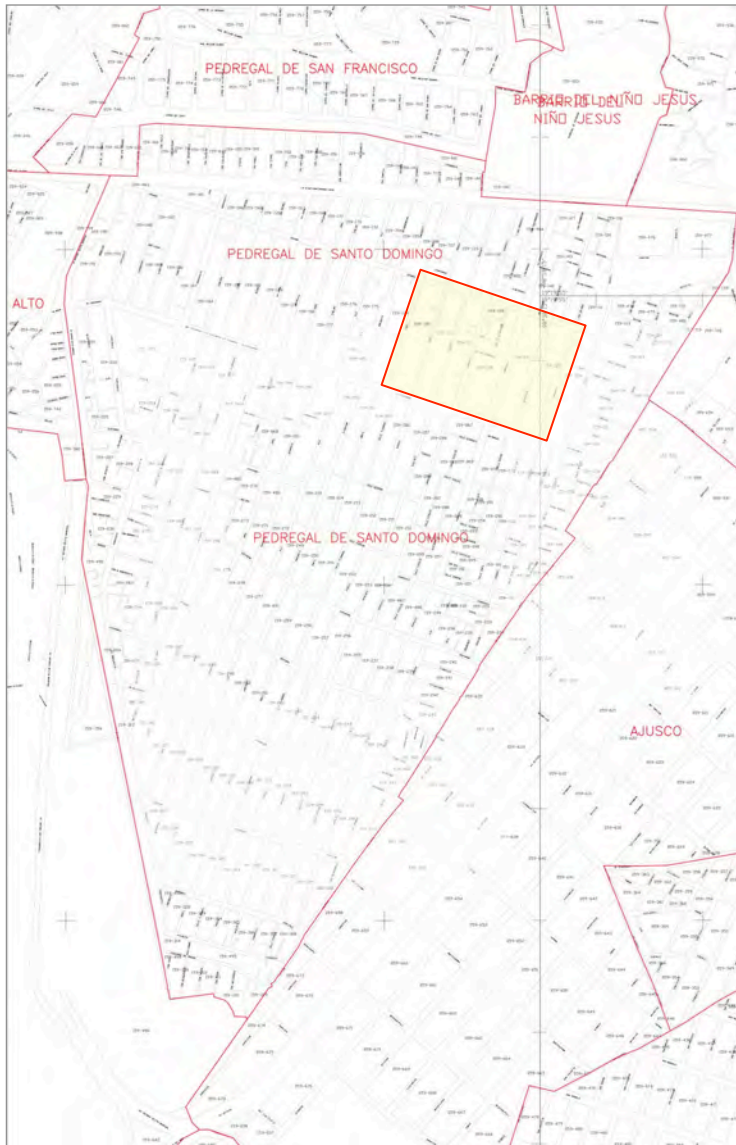


STEP 2. TRACKING SPATIAL AFFORDANCES

The first thing to do in this project is to familiarize yourself with the variety of 'spatial affordances' that we are seeking. The chart below should give you a sense of these. It is by no means exhaustive, but it is a start.

<ul style="list-style-type: none">  Overhead streamers  Parking space  Plan modification  Plants--planter 				
<ul style="list-style-type: none">  Plants--potted  Plants--tree accommodation  Shrine--sidewalk  Shrine--street  Shrine--other 				
<ul style="list-style-type: none">  Signage  Vendor--commercial extension  Vendor--home extension  Vendor--unattached  Other 				

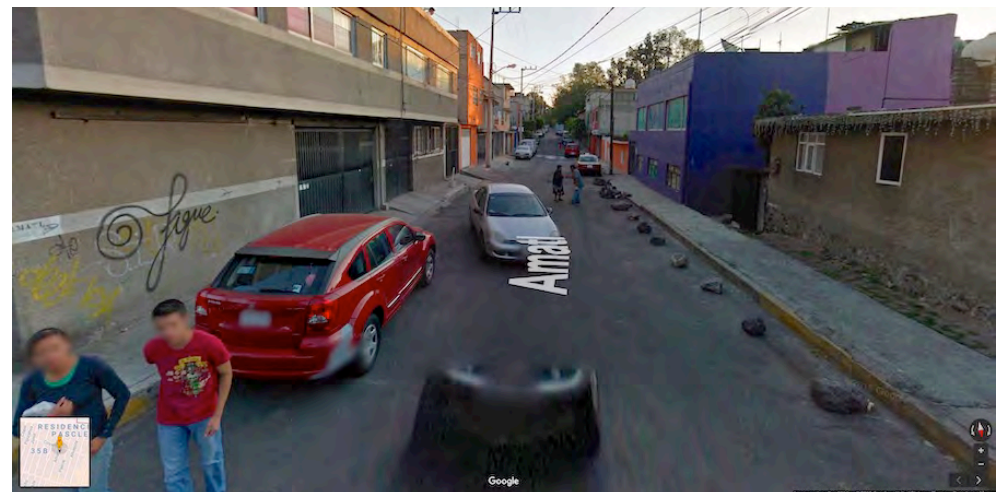
STEP 3. WALKING YOUR PATCH



Let's say that you have decided to walk the area bounded by Coyamel (north), Avenida Escuinapa (south), Amatl (west), and Tochtli (east). The patch is indicated by the yellow square on the map at left.

You should take some time to familiarize yourself with the various 'spatial affordances' that we are looking for in our walks before you get started. You might also want to do a little free-walking around the area, or even look at adjacent streets to get a sense of the place.

When you are ready, place your Google Street View walker on the virtual ground to begin. It does not matter where you start or in what order you walk the streets, as long as you are systematic and complete in your coverage. The key thing to note is that you should advance along the street frame by frame, taking care not to skip frames. In each frame you are observing the street life, built environment, and adaptations that people have made.



STEP 4. LOCATING SPATIAL AFFORDANCES

Open your browser to full screen. As you walk the streets of your patch, you will make observations about the nature of space and its use. You will turn these observations into data through recordation (see the next sections).

This is the first frame in the area selected for our example– Calle Amatl just south of Coyamel, in the Pedregal de Santo Domingo. Already in this first frame we see a particular spatial affordance! Along the right side of the frame, someone has lined up a series of 10 large stones near the curb as a way to block parking.

Using objects to demarcate or reserve parking spaces is a common practice of everyday urban life in Mexico City, one with a definite spatial impact on the landscape. Residents typically employ stones, buckets filled with concrete, tires (sometimes painted), wooden crates, and a wide variety of other materials.



STEP 5. GENERATING DATA POINTS

Geolocation

Latitude, Longitude

https://www.google.com/maps/@19.3333784,-99.1645853,3a,75y,208.91h,88.25t/data=!3m6!1e1!3m4!1swb1_aVObfaK0N3nDoDkLEw!2e0!7i13312!8i6656

**Street
address**



**Screen shot
boundary**

**Compass
heading**

Image capture date

The next step in the process is to turn your observation into data points. All of the data that you need can be found in the Street View frame.

You will also need to take a screen shot that includes the spatial affordance you have found. See the rectangle above for screen shot boundaries.

STEP 6. RECORDING DATA

Now you are ready to enter your information into the data control form in **Airtable**.

You should keep Airtable open either in a second browser or (more efficiently) in a second tab. That way you can toggle back and forth from Google Street view to Airtable.

Most of the fields are single-entry where you type data directly into the cell. However there are a few exceptions.

The Delegation and Land Use fields are established as drop-down menus with one value (choice) for each cell.

The SA (spatial affordance) Type field is established as a selection menu, with multiple values possible.

Once entered, your data will live in the dynamic spreadsheet, pictured below.

The form is titled "Spatial Affordances" and contains the following fields:

- Street:
- No.:
- Area:
- Delegation:
- Lat:
- Lon:
- Land use:
- SA Type:
- Description:
- Img Date:
- URL:
- BY:
- Attachments:

Buttons: Submit, Never submit passwords through Airtable forms. Report abuse

ID	Street	No.	Area	Delegation	Lat	Lon	Land use	Cor...	SA Type	Description	Img Date	URL	Attach...	BY
1	Chaucingo	64	Pedregal de Santo Domingo	Coyacán	19.316644	-99.171005	R--Residential o...		Parking space	Parking space saved by two 5-gallon b...	2015-04-01	https://www.go...		JH
2	Chaucingo	66	Pedregal de Santo Domingo	Coyacán	19.31658	-99.1708973	RC--Residential ...		Parking space	Parking space saved by one 5-gallon b...	2015-04-01	https://www.go...		JH
3	Chaucingo	77	Pedregal de Santo Domingo	Coyacán	19.3165516	-99.1707842	R--Residential o...		Parking space	Parking space saved by two 5-gallon b...	2015-04-01	https://www.go...		JH
4	Chaucingo	19	Pedregal de Santo Domingo	Coyacán	19.3165516	-99.1707842	R--Residential o...		Vendor--unattached	Vendor at corner of Tejamanil, with sma...	2015-04-01	https://www.go...		JH
5	Chaucingo	74	Pedregal de Santo Domingo	Coyacán	19.3165516	-99.1707842	RC--Residential ...		Vendor--commercial extension	Vendor at corner of Tejamanil, cooking ...	2015-04-01	https://www.go...		JH
6	Chaucingo	38	Pedregal de Santo Domingo	Coyacán	19.3164496	-99.1702477	R--Residential o...		Plants--planter	Planter takes up entire sidewalk space l...	2017-09-01	https://www.go...		JH
7	Chaucingo	36	Pedregal de Santo Domingo	Coyacán	19.3164623	-99.1703033	R--Residential o...		Plants--planter	Corner house surrounded on two sides ...	2017-09-01	https://www.go...		JH
8	Chaucingo	60	Pedregal de Santo Domingo	Coyacán	19.3164349	-99.1701402	R--Residential o...		Plants--potted Parking space	Plants in buckets used to demarcate pa...	2017-09-01	https://www.go...		JH
9	Chaucingo	54	Pedregal de Santo Domingo	Coyacán	19.3164232	-99.1700632	R--Residential o...		Parking space Vendor--home	Vendor selling snacks under canopy att...	2017-09-01	https://www.go...		JH
10	Chaucingo	46	Pedregal de Santo Domingo	Coyacán	19.3163895	-99.1699561	RC--Residential ...		Parking space Signage	Corner bodega using mixed implements...	2017-09-01	https://www.go...		JH
11	Chaucingo	52	Pedregal de Santo Domingo	Coyacán	19.3163743	-99.1697913	R--Residential o...		Plants--tree accommodation	Large old tree has been saved amount...	2017-09-01	https://www.go...		JH
12	Anatí	61	Pedregal de Santo Domingo	Coyacán	19.3333784	-99.164585	R--Residential o...		Parking space	Series of 8 large stones and 2 piles of s...	2014-12-01	https://www.go...		JH

APPENDIX ONE: SAMPLE FORM

Spatial Affordances

Street	<input type="text"/>
No.	<input type="text"/>
Area	<input type="text"/>
Delegation	<input type="text"/> <ul style="list-style-type: none">Álvaro ObregónAzcapotzalcoBenito JuárezCoyoacánCuajimalpa de MorelosCuauhtémoc
Lat	<input type="text"/>
Lon	<input type="text"/>
Land Use	<input type="text"/> <ul style="list-style-type: none">R--Residential onlyC--Commercial onlyI--Industrial onlyRC--Residential commercial mixRI--Residential industrial mixCI--Commercial industrial mixO--Open space
SA Type	<input type="text"/> Select an option
Description	<input type="text"/> <ul style="list-style-type: none">Find an optionBoulder accommodationDiene pathOverhead streamersPipe modificationPlants--planerPlants--pottedPlants--tree accommodationShrine--sidewalkShrine--streetShrine--otherSignageVendor--commercial extensionVendor--home extensionVendor--unattached
Img Date	<input type="text"/> YYYY-mm-dd
URL	<input type="text"/>
BY	<input type="text"/>
Attachments	<input type="text"/> Attach file

APPENDIX TWO: THE NEIGHBORHOOD

