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Chapter 5. Google Maps in Words and Pictures

Google Maps Hacks By Schuyler Erle, Rich Gibson

ISBN: 0596101619 Publisher: O'Reilly Print Publication Date: 1/1/2006

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Chapter 5. Google Maps in Words and Pictures

5.1. Hacks 42–50: Introduction

The reason people love maps so much is that maps tell stories about places, and people love stories. Maps provide a narrative and a context for understanding the world around us. Even the most mundane maps tell a story; for example, a road or subway map's story is about how to get around quickly.

In this chapter, we're going to explore the narrative possibilities inherent in Google Maps. We'll see how Google Maps can be a reading aid, how satellite images don't always tell the full story, and how Google Maps can be mated with online photo services such as Flickr to establish a geographic context for the stories that our photographs tell. Finally, we'll look at the user-friendly end of the "geospatial web," where Google Maps can be used to produce and visualize feeds of information from other sources, to weave our story together into the many stories being told every day on the Internet.

Hack 42. Get More out of What You Read



If maps tell stories, what about the stories that tell maps?

"I lean against a USA Today paper box on Washington and Clark and think, 'Who the hell are you to make such a claim?'" That's the second sentence from the book *Bike Messengers and the Cult of Human Power* by Travis Hugh Culley. It is the story of Travis' work as a bicycle messenger in Chicago. Why did Travis pick that intersection? Did that just happen to be where he was, or does it have more meaning? Where is Washington and Clark?

Enter "Washington and Clark, Chicago, IL" in the location search box and we see in [Figure 5-1](#) that the intersection is, well, in the middle of a lot of streets. That helps, maybe, a little. But I don't know Chicago, so all it means to me is a lot of streets.

Clicking on Satellite gives us the jackpot of [Figure 5-2](#): the intersection is right smack in the middle of downtown.

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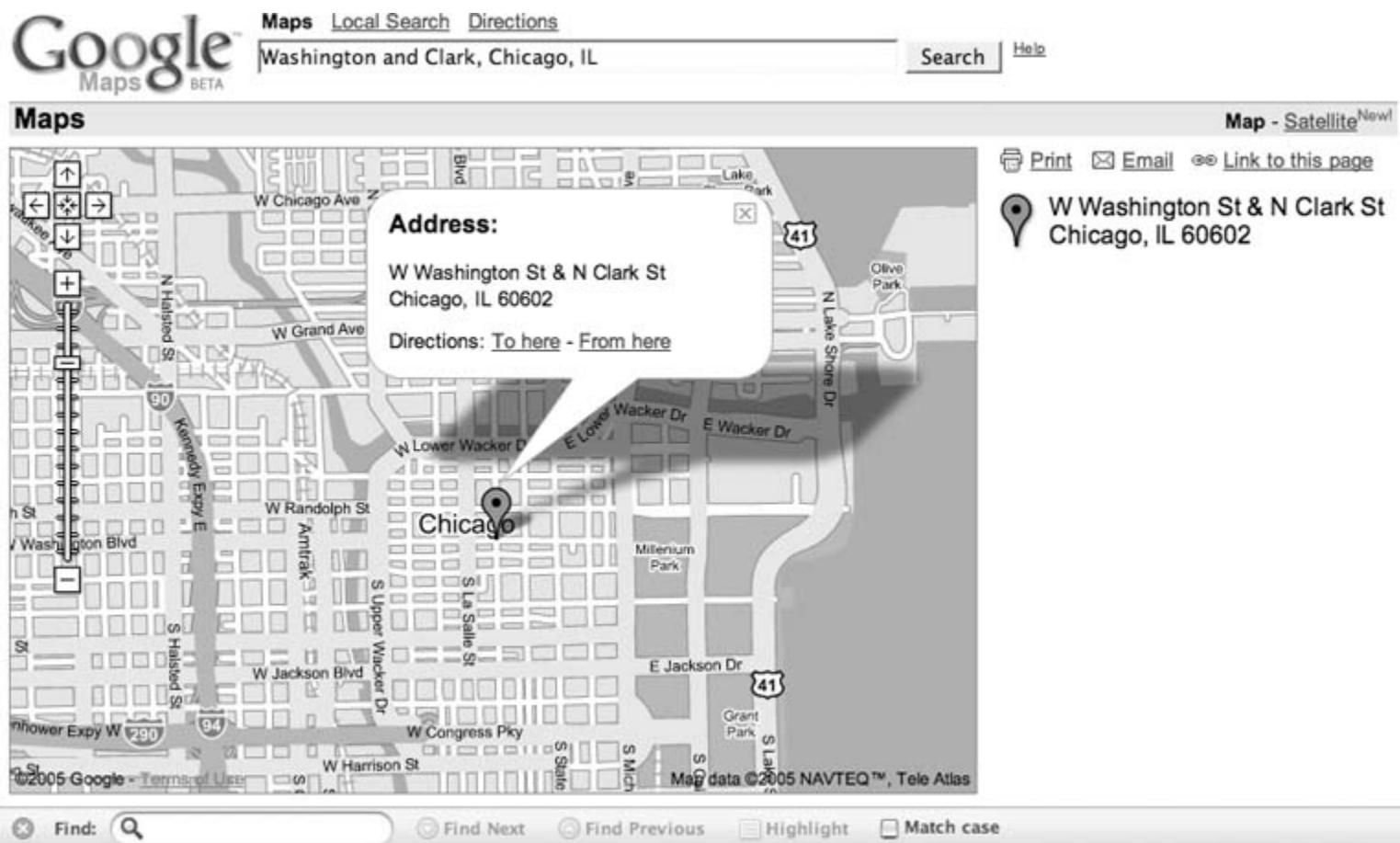
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Figure 5-1. A map of Chicago showing the action in Bike Messengers and the Cult of Human Power



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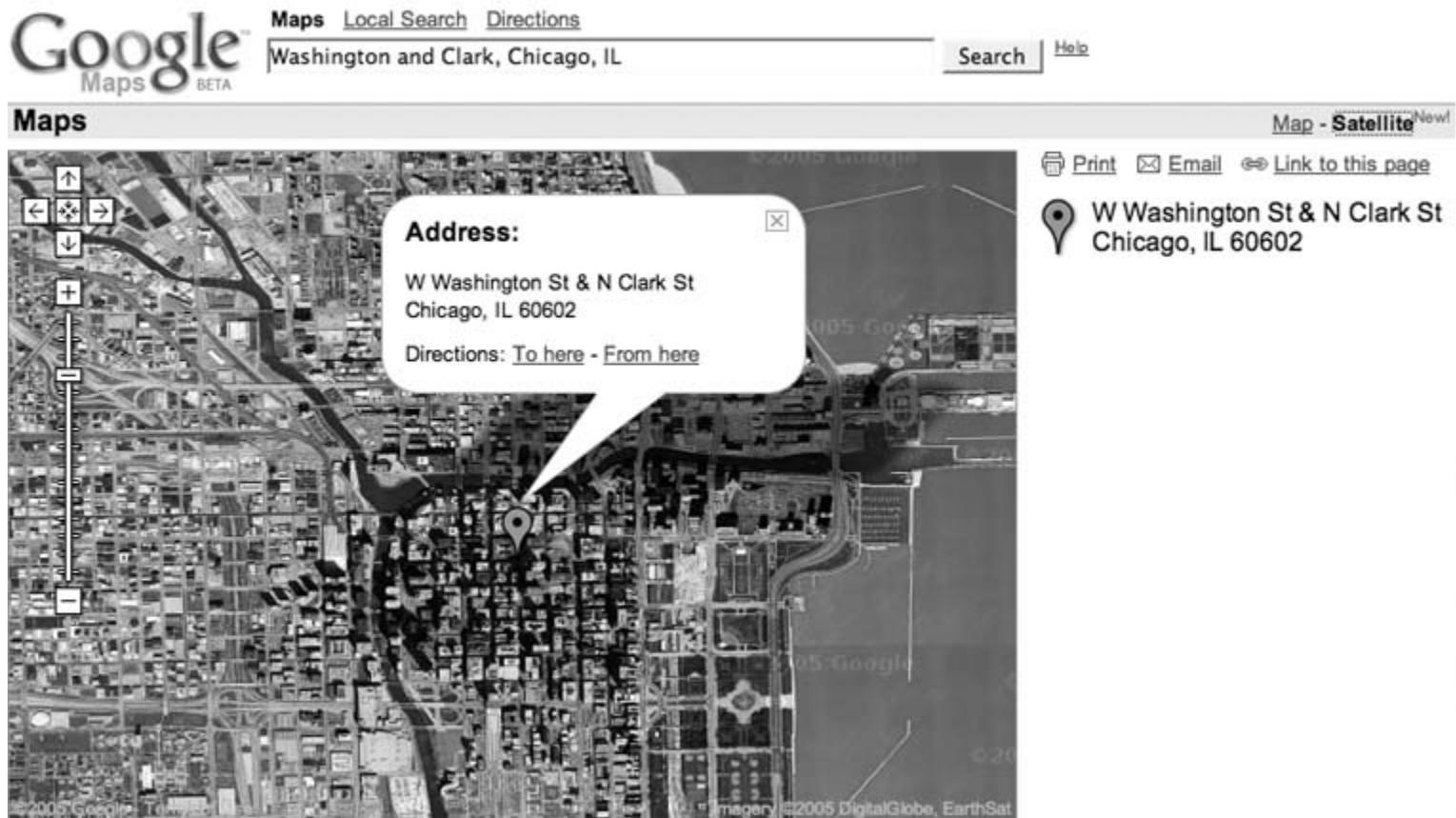
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Figure 5-2. The satellite view gives us the big (or at least elevated) picture



Different zoom levels give us, well, different pictures. Figure 5-2 shows an overview of the whole city, but when we zoom way in as in Figure 5-3, we see a 4-block by 3 1/2-block window of downtown Chicago. Looking at that, I can almost smell the bus fumes.

Caught in the rush of plot, too often I'll let the details slide. Hollywood and Vine? Washington and Clark? Who cares? I just want to see what happens next! But if that is all that matters, why should authors bother with place names? Why not simply write as if everything happened in the same grey protoplasmic sea? Context matters: the places where things happen shape what happens and what we think about what happens. Context feeds the mind.

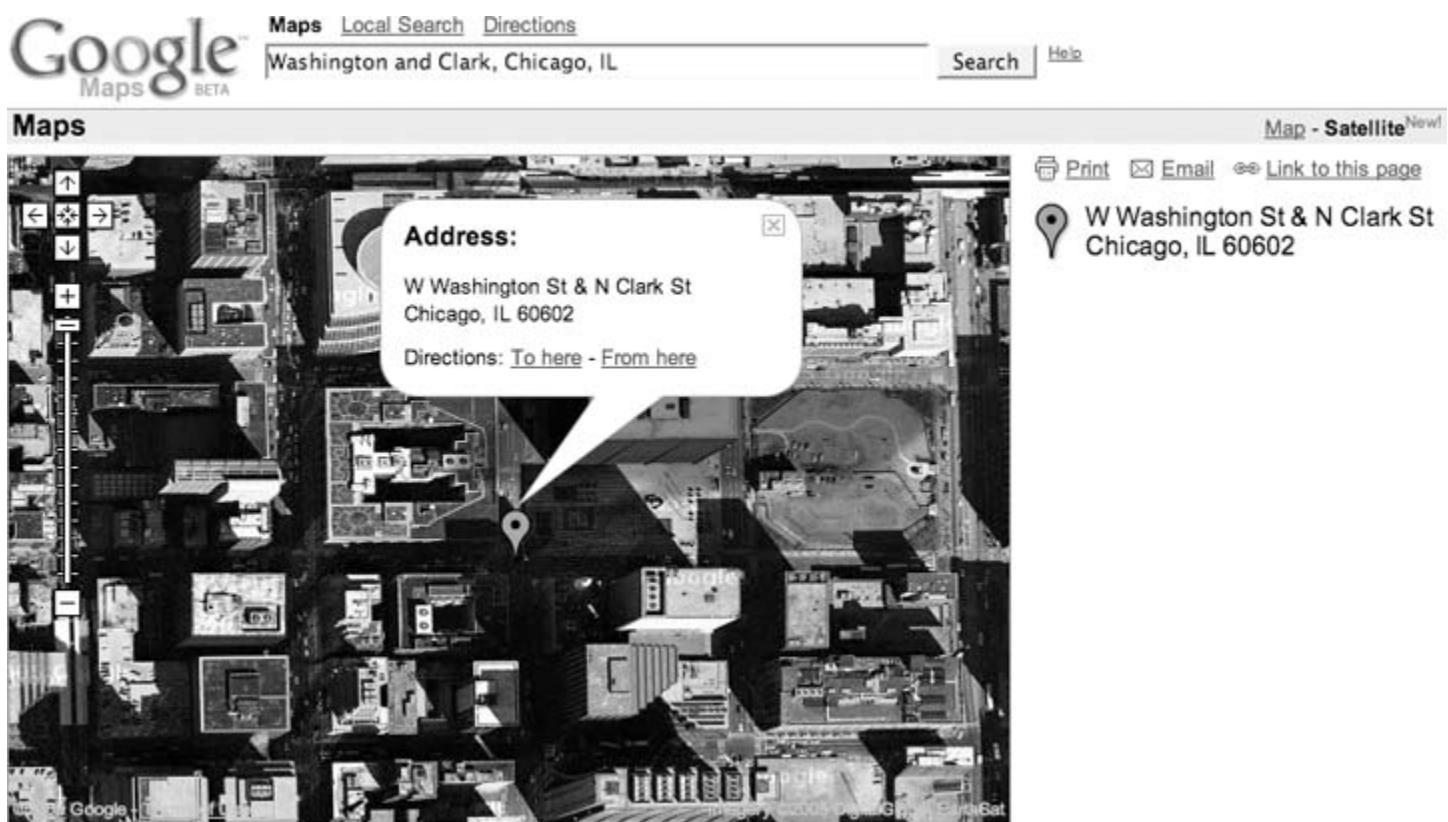
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Figure 5-3. The satellite view tells another story

Hack 43. Don't Believe Everything You Read on a Map



Learn how the selection of imagery can be extremely subjective.

It is easy to assume that maps are somehow true and objective representations of a place. After all, most of our interactions with maps have to do with practical affairs such as navigating the complex layout of a city. The truth, however, is that maps both reflect and create reality. This is most clear in the choices of what is, and is not, put on a map.

For example, chamber of commerce maps typically show lots of green for parks and greenbelts, but somehow neglect to point out the less desirable aspects of a community. Okay, you might say, the maps are subjective, but I can count on the aerial imagery, right? It is just a record of how things were. Alas, even there we have issues. There is a huge possibility for bias in the choices of images that will be displayed.

Figure 5-4 shows part of the Black Rock desert in Nevada, near the town of Gerlach. For most of the year this is an empty expanse where you can either hear yourself think or hear the people cruising about trying to set land-speed records in the armed-and-inebriated SUV-driving category. However, for a week, plus time before and after for set up and clean up, this is Black Rock City, home to the Burning Man festival. This particular image was taken during the setup period for the 2003 event.

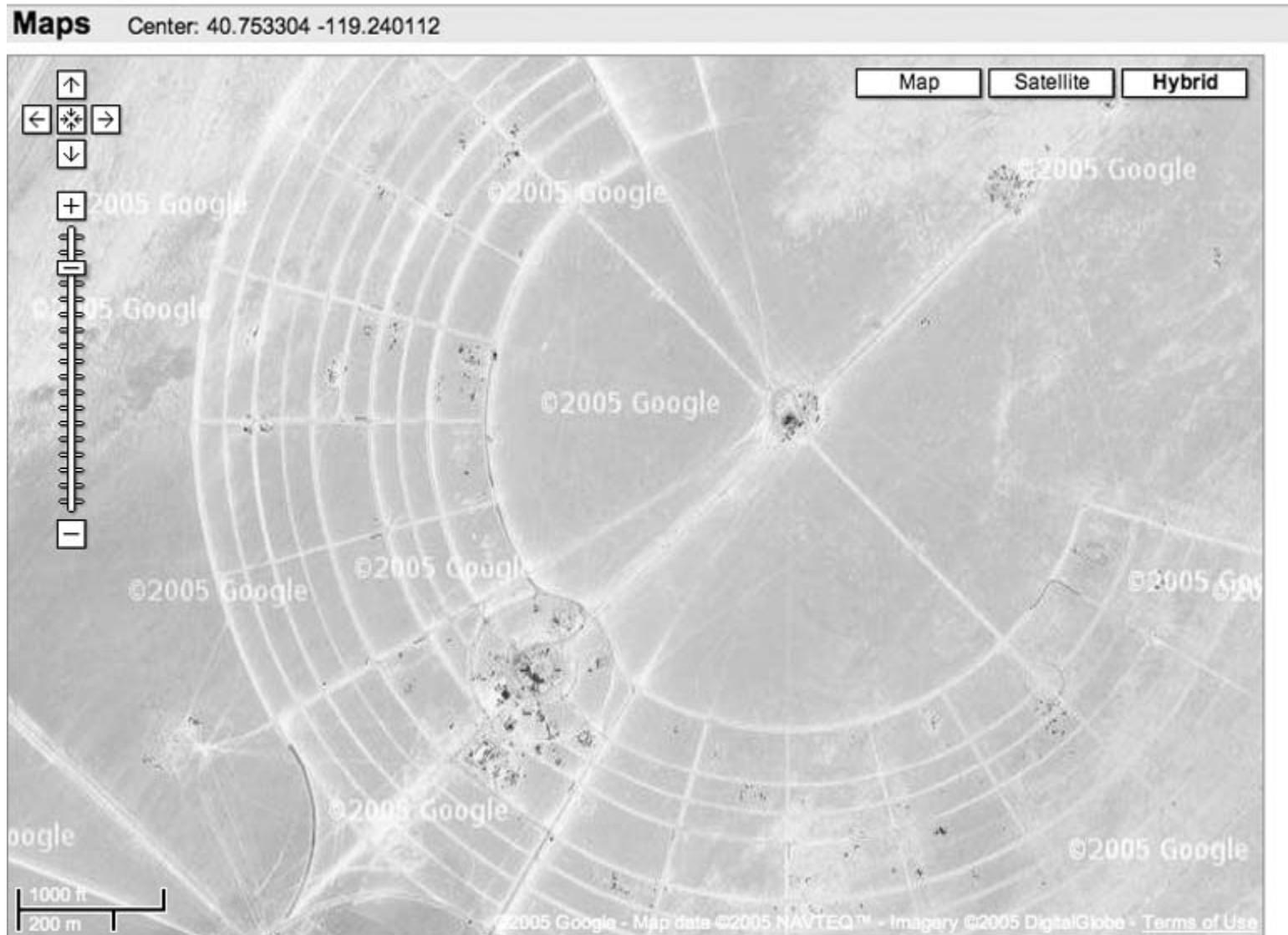
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Figure 5-4. A bit of desert in Nevada, late summer

How did that happen to become the canonical Google representation of an area around 40.7549 N, 119.23608 W? I suspect that it wasn't pure chance! Was it an accident that the aerial photo in [Figure 5-5](#) centered around 37.713532 N, 122.386075 W shows the San Francisco 49ers' football stadium near Candlestick Point State Park in the middle of a game?

On the other hand, the aerial photo in [Figure 5-6](#) centered on 37.751367 N, -122.201239 W shows the nearby home of the Oakland Raiders, another football team, to be empty and configured for a baseball game??

The simplest explanation is that maps tell stories, and so these particular mapmakers configured reality through selection of imagery in order to tell a more entertaining story. After all, according to Muriel Rukeyser, "the universe is made up of stories, not atoms."

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Some of the stories have a chilling message. Take a look at the imagery around 1600 Pennsylvania Avenue, Washington, D.C. You can count the trees on the White House grounds, but roofs are all obscured, as seen in [Figure 5-7](#).

The White House suffers little in comparison to the Capitol. Clearly there is a large blobby thing at that end of the National Mall, but it isn't clear what it is. Congress is apparently more protective of its foliage than is the Executive Branch, as we can see in [Figure 5-8](#).

Figure 5-5. Near Candlestick Point State Park



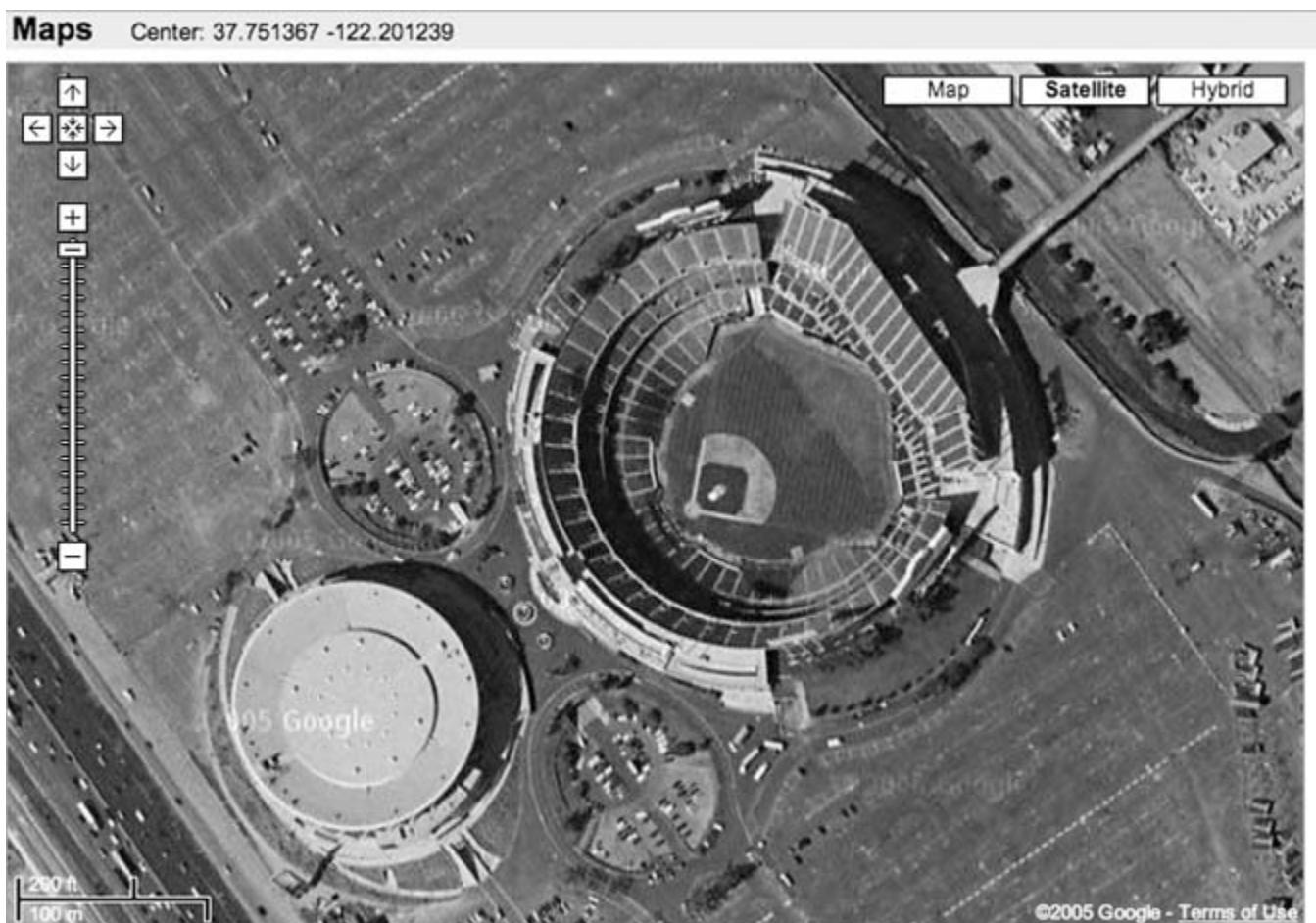
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Figure 5-6. The home of the Raider Nation in Oakland

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Figure 5-7. You can plan an Easter egg hunt, but don't plan to find any on the roof



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Figure 5-8. Congress shall make no law, assuming you can find it



The Pentagon, as shown in Figure 5-9, appears to be the least protective of rooftop assets.

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Figure 5-9. For once, the Pentagon appears to have nothing to hide

In some parts of the country, cornfield artists have expressed their support for the military. There are no obscured roofs in [Figure 5-10](#), and I bet folks in uniform feel welcome in Bellevue, Nebraska. (At least, the ones who fly do!)

I'm tempted to make a comment about real national security versus "security theater," but there are so many strange things happening in the world that I don't understand that I'd best remain silent. At a recent conference, I was introduced to the phrase *kill chain*, as in "you can ignore him, he's not in the kill chain." Since I can't even figure out which Linux desktop is best, I have no chance at an intelligent opinion about national security or the kill chain.

Perhaps I'm better equipped for an appreciation of the two images of 1 Infinite Loop, Cupertino, CA 95014. The first, [Figure 5-11](#), is taken from Google's satellite imagery, and the second, [Figure 5-12](#), from Microsoft's Virtual Earth.

Was Apple bombed to rubble recently? Obviously, as of this writing, Microsoft's Digital Earth is using very old imagery of a small slice of Cupertino. This appears odd, since the imagery for other parts of the Bay Area seems much more current. It's almost as if...Microsoft...wants us to believe...that Apple...simply isn't there....No, in the end, fretting over conspiracy theories about how places are portrayed is unsatisfying.

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Figure 5-10. "We honor those who serve America"



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Figure 5-11. What Google thinks of this particular Infinite Loop



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Figure 5-12. Apple appears to have disappeared

That doesn't make it necessarily wrong, however. After all, we live in a world where a telephone company with broadband business will intentionally block traffic to telecomm workers' union web sites during a strike. Perhaps it is enough to recognize the lesson that reality is a commodity, like any other, and that access to reality is sometimes mediated through more steps than might always be totally healthy for a free and democratic society.

Hack 44. You Got Your A9 Local in My Google Maps!



Use Greasemonkey to inject A9's Local Images into Google's much nicer map interface.

A9.com, Amazon's search company, has special trucks equipped with digital cameras and GPS units that run around selected cities. The trucks take street-level pictures of just about everything and then index that with the GPS and a geocoding application to add photographs to business listings. A9.com "brings Yellow Pages to life." [Figure 5-13](#) shows the A9 Block View of the City Lights bookstore in San Francisco.

A9.com is pretty neat, but the mapping interface is a bit weak. If you have the Greasemonkey extension installed in the Firefox browser, you can install A9+Gmaps, a Greasemonkey user script that will load A9 images on top of your Google Maps.



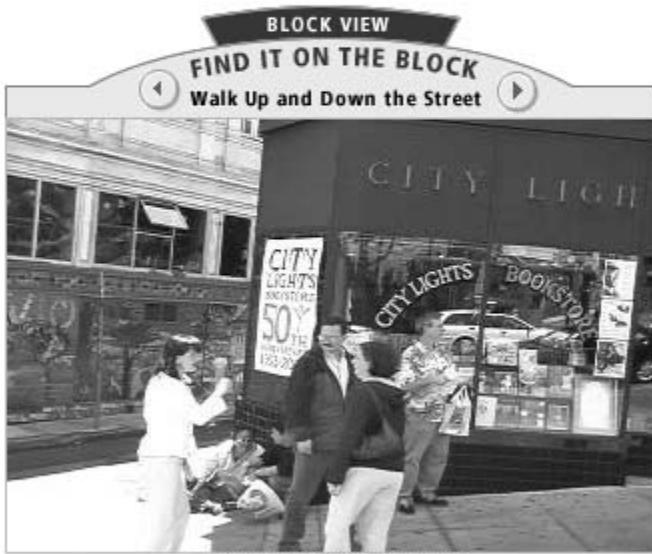
Installing Greasemonkey in Firefox is covered in detail in "Add Google Maps to Any Web Site" [[Hack #27](#)] and "Track Your UPS Packages" [[Hack #25](#)].

Figure 5-13. City Lights bookstore, according to A9.com

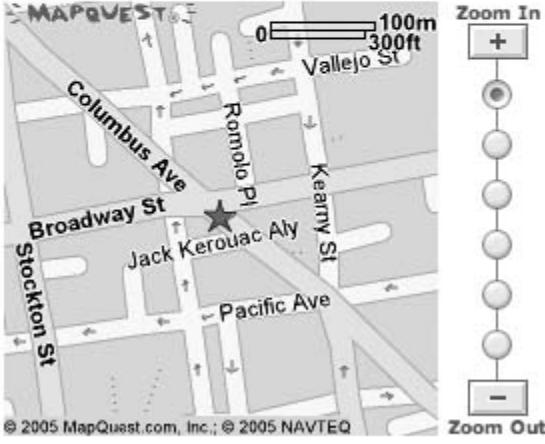
[Shopping > Books, Movies & Music > Books](#)
[Shopping > Apparel & Accessories > All Apparel & Accessories](#)

City Lights Bookstore

[261 Columbus Ave, San Francisco, CA 94133-4519 - Map](#)
[\(415\) 362-8193 - Click to Call](#)



See other businesses along Columbus Ave



[Interactive Map and Directions](#)

Once Greasemonkey has been installed in Firefox, you can get A9+Gmaps from <http://www.kokogiak.com/webtools/greasemonkey/a9imagesingooglemaps.html>. From that page, right-click on the link to a9gmap.user.js and select Install User Script. An installation window will pop up, as depicted in Figure 5-14.

Click on OK, and with a bit of luck you'll get a status window that says "Success! Refresh page to see changes." Now, when you search for a business on the Google Maps web site in an area covered by A9 Local, you'll be able to click on the icon and, a few seconds later, an A9 thumbnail will appear in your info window.

The A9+Gmaps Greasemonkey script is executed whenever a user is on a page in the *maps.google.com* domain. When the user clicks on an icon in the map, the script finds the newly opened info balloon and parses the HTML inside it to find the business name and address, if present. The script then sends that data out to A9.com, behind the scenes. When A9.com responds, the script parses A9's HTML to discover an image

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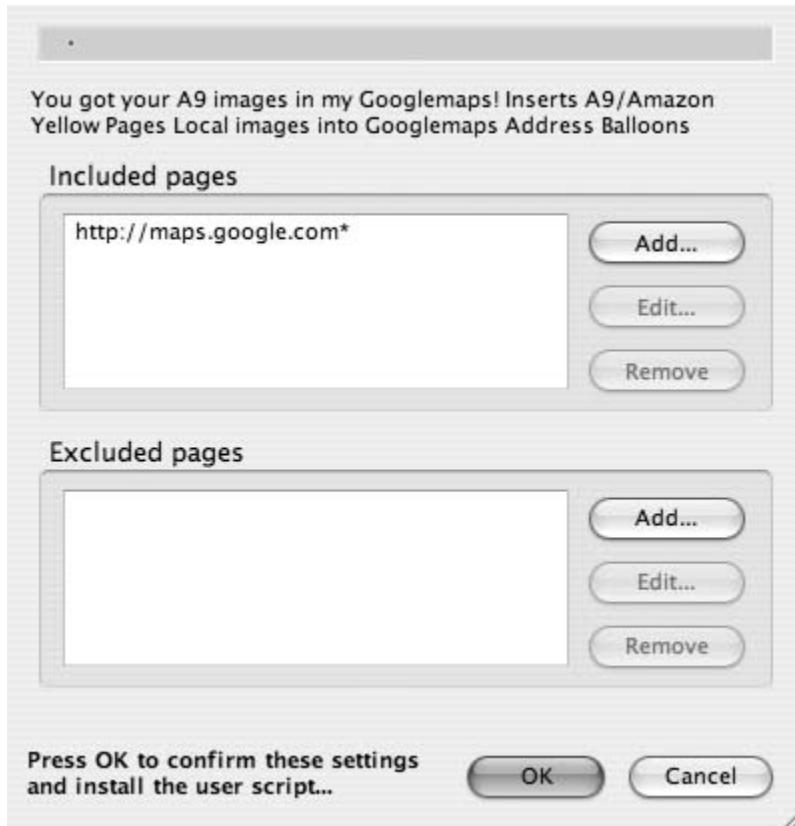
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(if one exists), and gets the location and URL of the A9.com image and page. Finally, the script inserts a thumbnail image of that location into the Google Maps info window.

One caveat: this hack is largely based on screen-scraping and picking apart the respective Document Object Models on both sites. That means it's fragile and easily broken if either A9 or Google alter too much HTML layout. In the meantime, mashing up A9's street level photos with Google's map interface means that finding businesses and other locations is easier than ever.

Figure 5-14. Installing a user script under Greasemonkey



—Alan Taylor

Hack 45. Share Pictures with Your Community



Use Flickreity to set up a collaborative photo map.

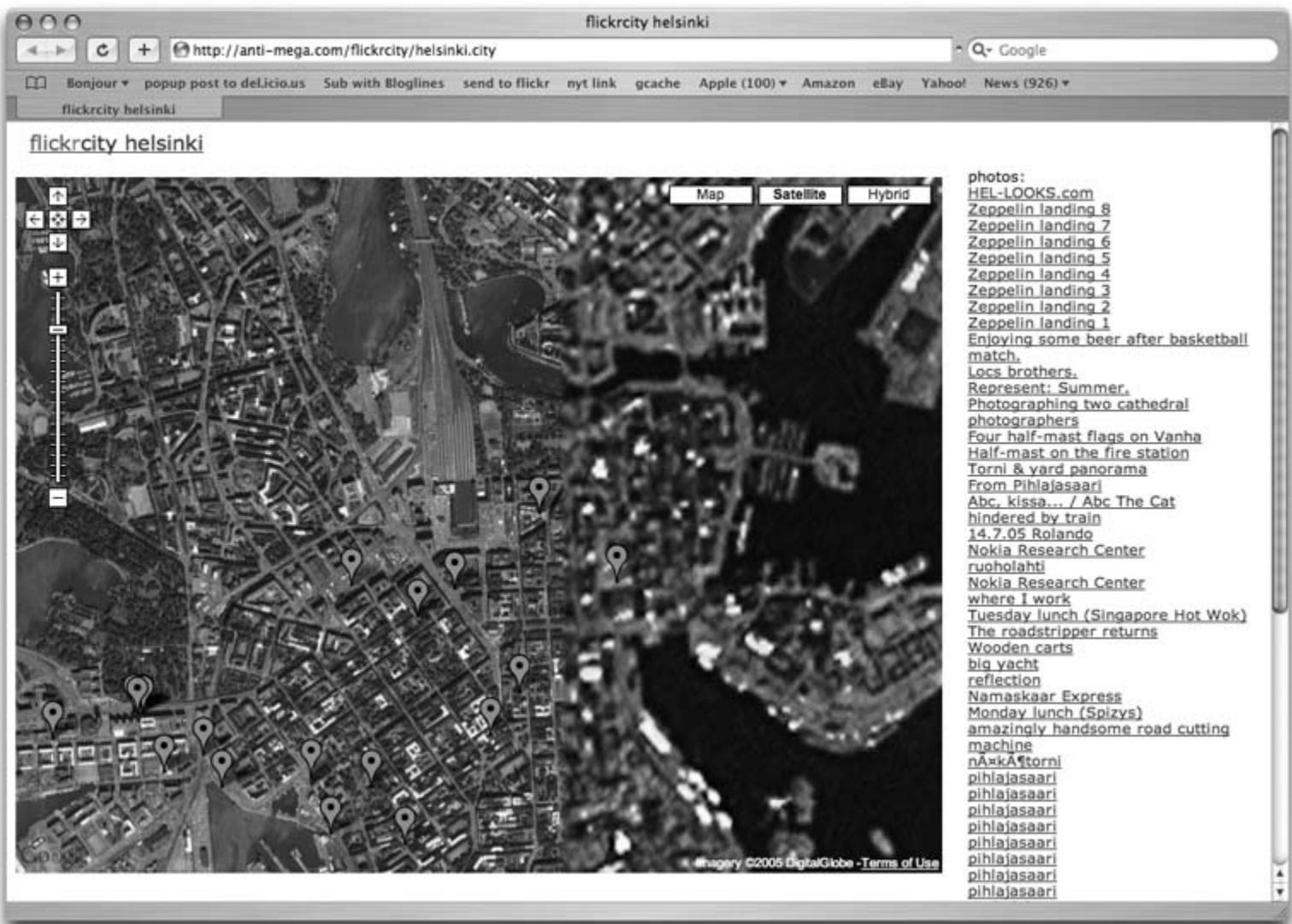
Putting geolocated photos on a map is something geo-hackers have worked on for a long time. Now, using Flickr, Google Maps, and a little piece of glue called FlickrCity (<http://anti-mega.com/flickrcity/>), anyone can do this easily.

I started work on FlickrCity because I wanted to create a restaurant review site for Helsinki that anyone could contribute to. Flickr was the natural place to store photos and information; sites such as Geobloggers (<http://www.geobloggers.com/>) were using Flickr as a data source and had already created a standard for geotagging photos.

FlickrCity automatically filters on a tag of the name of the city and the tag *geotagged*. Using additional tags, or specifying a particular user, you can use FlickrCity for a variety of purposes.

To see all geotagged photos in a city, you can just go to the URL of the FlickrCity installation—e.g., for Helsinki, <http://anti-mega.com/flickrcity/helsinki.city>, as shown in Figure 5-15.

Figure 5-15. Photos geotagged in Helsinki



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If you wanted to set up a collaborative restaurant review site for Helsinki, you would need to tag photos in Flickr with, say, "helsinki," "food," "geotagged," and the two location geotags [\[Hack #46\]](#). Then you would construct a URL that would return these images with this tag query, such as <http://anti-mega.com/flickrcity/helsinki.city?tags=food>. [Figure 5-16](#) shows what this looks like.

If you just wanted to see all of my Helsinki photos, you would use a user query such as <http://anti-mega.com/flickrcity/helsinki.city?user=chrisdodo>, as [Figure 5-17](#) demonstrates.

Of course, you can combine the two, to show just my food photos, as in <http://anti-mega.com/flickrcity/helsinki.city?tags=food&user=chrisdodo>.

If you're using the map for yourself, use a different tag for each project you want to create. If you want to set up a collaborative map, pick a tag name that isn't being used in Flickr and tell all your photographers to add that tag. Of course, others may see it and start using the tag too—FlickrCity gets even better with more geotagged photos.

I've set up FlickrCity installations for a few cities, and others have set up even more, but you can also download the code and set up FlickrCity for wherever you want. To do this, you will need a web server with Perl, some Perl modules (see the installation instructions on the web page for the list), and a little bit of webmaster knowledge.

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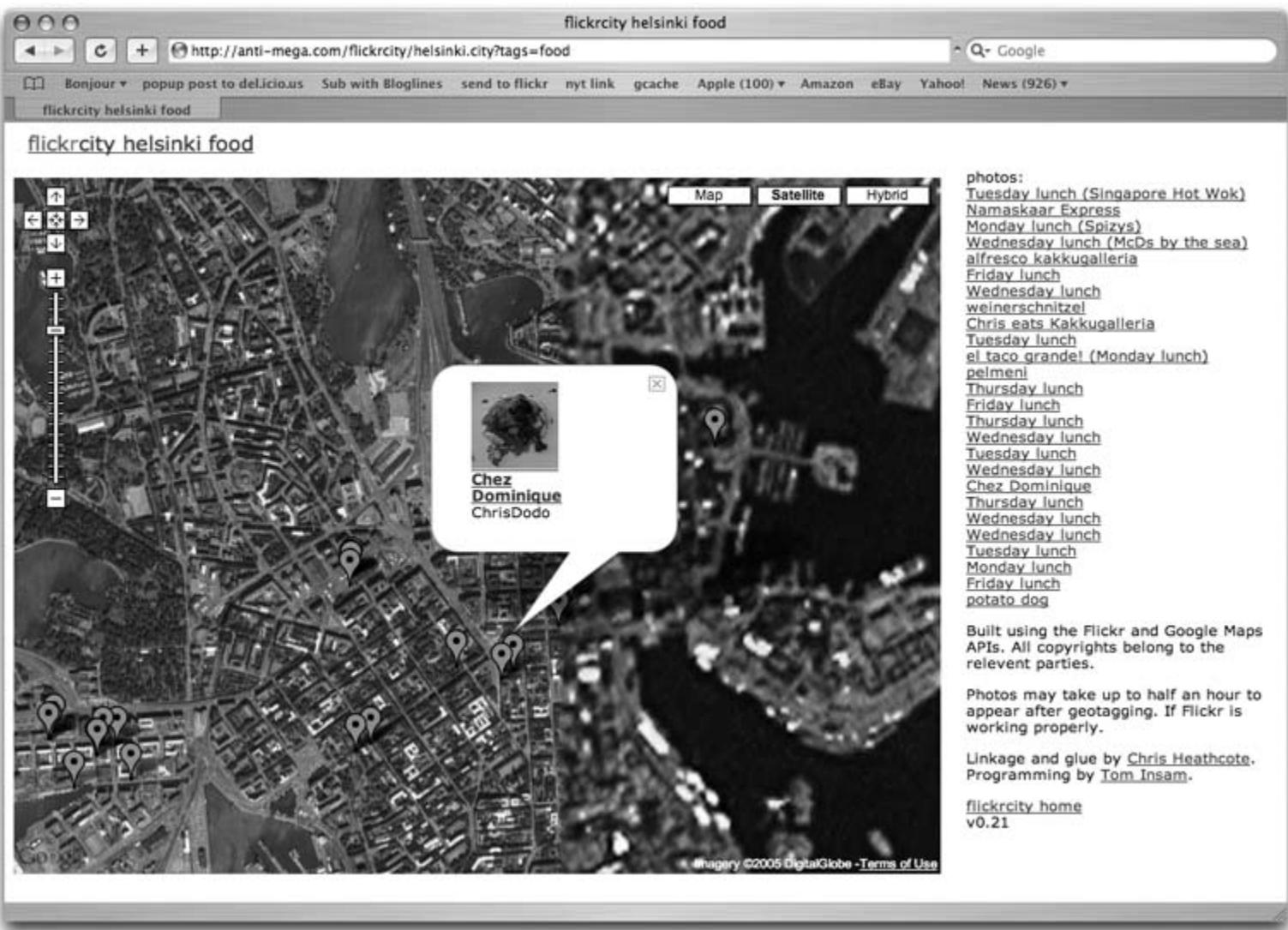
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Figure 5-16. Photos tagged with food in Helsinki



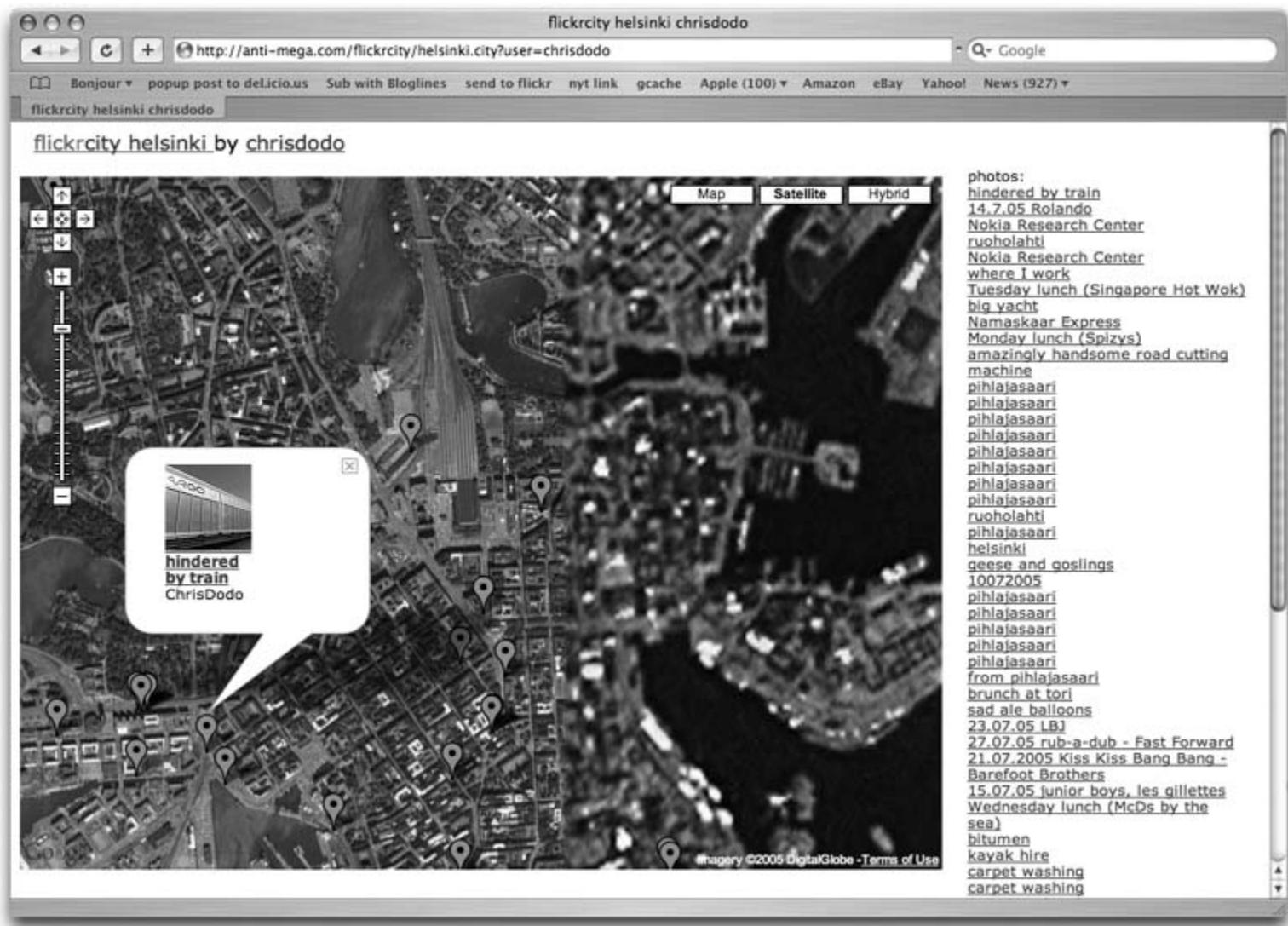
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Figure 5-17. Photos taken by chrisdodo in Helsinki



You will need to change a few things in the script (mainly the name of the city and the default Google map coordinates and zoom level), and a directory on the server to store cache files. Then put the script in a directory on your server suitable for housing CGI scripts, make the script executable, and it should work.

The script relies on the Flickr and Google Maps APIs, and if either service is slow or down, there may be problems. The first time you run the script, it will create a cache of data from Flickr, which will be slow, but it will run more quickly after that.

—Chris Heathcote

Hack 46. Browse Photography by Shooting Location



What a lovely photograph! Where was it taken?

Since the rise of digital photography, more people have been snapping more photos than ever. Web sites such as Flickr have sprung up to help people manage and publish their photos, and Flickr itself has gone one step further and allows its users to "tag" their photographs with keywords that indicate what's being depicted. These tags can help you figure out who and what is being depicted, but wouldn't it be nice sometimes—particularly in the case of those lovely landscape photos—to know where they were taken?

5.6.1. Tag, You're It

Fortunately, Flickr provides an API that allows you to query data from its system, and we can use this to find images that have been geotagged. Geotagged photos on Flickr have three special tags associated with them. First, they're tagged as `geotagged`, which allows us to find them using the Flickr API. Second, they have the tags `geo:lat=...` and `geo:long=...` associated with them, which gives us their geographic coordinates. Figure 5-18 shows one sort of map that can be made by mashing up the Flickr API and the Google Maps API.

In order to make use of the Flickr API, you need to sign up to Flickr, and then get yourself an API key from <http://www.flickr.com/services/api/>. Once you have a key, you can query Flickr using the `flickr.photos.search` call from their REST API, with a URL like:

```
http://www.flickr.com/services/rest/?method=flickr.photos.search&api_
key=[your API key]&tag_mode=all&tags=geotagged&per_page=20
```

This returns an XML document matching the latest photos tagged as geotagged. The XML looks something like the following:

```
<?xml version="1.0" encoding="utf-8" ?>
<rsp stat="ok">
  <photos page="1" pages="8553" perpage="5" total="42761">
    <photo id="30221122" owner="47836075@N00" secret="11f6695a02"
      server="21"
      title="From Camera Server (SlabbersCam) 0000/00/06,15:00:07"
      ispublic="1" isfriend="0" isfamily="0" />
    <photo id="30218138" owner="78211664@N00" secret="5a36fff7b3"
      server="21" title="P8010502" ispublic="1" isfriend="1"
      isfamily="1" />
    <photo id="30218130" owner="78211664@N00" secret="8bda841d8b"
      server="23"
      title="P8010498" ispublic="1" isfriend="1" isfamily="1" />
    <photo id="30211741" owner="59597347@N00" secret="bbadd69e06"
      server="21"
      title="Tiny Sea Cave" ispublic="1" isfriend="0" isfamily="0" />
    <photo id="30197466" owner="47836075@N00" secret="ea66947548"
      server="22"
      title="From Camera Server (SlabbersCam) 0000/00/06,13:00:07"
      ispublic="1" isfriend="0" isfamily="0" />
  </photos>
</rsp>
```

Figure 5-18. A map of recent geotagged photos from Flickr



By querying the API for each particular photo, we can get the detailed tags for each one. For example, this URL returns the details of the "Tiny Sea Cave" photo above:

```
http://www.flickr.com/services/rest/?method=flickr.photos.getInfo&photo_id
=30211741&api_key=[your API key]
```

The returned XML looks something like the following, which we've excerpted for brevity:

```
<?xml version="1.0" encoding="utf-8" ?>
<rsp stat="ok">
  <photo id="30211741" secret="bbadd69e06" server="21"
    dateuploaded="1122879388" isfavorite="0" license="2" rotation="0">
    <title>Tiny Sea Cave</title>
    <description>More of a hole worn in the rock, with lots of little
      seashells washed inside.</description>
    <tags>
      <tag id="100601461" author="59597347@N00"
        raw="carmel">carmel</tag>
      <tag id="100601464" author="59597347@N00" raw="sand">sand</tag>
      <tag id="100601465" author="59597347@N00"
        raw="shells">shells</tag>
      <tag id="100601940" author="59597347@N00"
        raw="geo:lat=36.5443288">geolat365443288</tag>
      <tag id="100602480" author="59597347@N00"
        raw="geo:lon=-121.933093">geolon121933093</tag>
      <tag id="100602494" author="59597347@N00"
        raw="geotagged">geotagged</tag>
    </tags>
  </photo>
</rsp>
```

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Google Maps Hacks By Schuyler Erle, Rich Gibson

ISBN: 0596101619 Publisher: O'Reilly Print Publication Date: 1/1/2006

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As you can see, we have all the info we need to locate this photo on a map. All we need to do is search for photos with the geotagged tag, loop over each photo, and request the full information from Flickr. Once we have that, we can use the Google Maps API to generate the map itself and throw down some markers.

5.6.2. The Catch

It sounds easy, but there is one small catch: you're going to be running your photo map page on your server, and you want to get the XML from a different server. For security reasons, most modern browsers, particularly Firefox and Safari, won't allow you to do this. Unless your web page is sitting on Flickr's web site, you can't load the Flickr XML directly into your JavaScript.

What you can do, however, is run a *proxy* on your own server, which will call Flickr's API for you and pass the results back to your browser. Since the domain of your map page and your XML proxy will be the same, you won't trip any browser's security features. You'll need a web server somewhere that runs some form of server-side code. Within the JavaScript on the map page, we'll pass the URL of the XML you want to retrieve and the JavaScript function you want to handle the XML to the proxy script, and then the proxy will return a bit of executable JavaScript to your calling page.

Here's some PHP, which I put in a file called *passThru.php* on my web server, that does the trick:

```
<?php
$page = '';
$fh = fopen($_GET['sURL'], 'r') or die($php_errormsg);
while (!feof($fh)) {
$page .= fread($fh, 1048576);
}
fclose($fh);

$page = str_replace("\r\n", ' ', $page);
$page = str_replace("\n\r", ' ', $page);
$page = str_replace("\n", ' ', $page);
$page = str_replace("\r", ' ', $page);
$page = str_replace("'", '&lsquo;', $page);
$functionName = $_GET['sFunction'];
header('Content-Type: text/JavaScript');
print "thisXML = '$page';";
print "$functionName;";
?>
```

Here's a snippet of JavaScript code that shows how we use the XML proxy to get Flickr metadata into our page:

```
1  var thisXML;
2  var sFlickrAPIKey = "[your API key ]";
3  var sFlickrURL = 'http://www.flickr.com/services/rest/?method=flickr.photos.
   search'
4  + '&tag_mode=all&tags=geotagged&per_page=20&api_key=' + sFlickrAPIKey;
5  var sPassThruURL = 'http://www.geobloggers.com/googleMapHacks/passThru.cfm';
6
7  var newJSElement = document.createElement("script");
8  newJSElement.src = sPassThruURL + '?sURL=' + escape(sFlickrURL)
9  + '&sFunction=fnHandleFlickr( )';
10 newJSElement.type = "text/JavaScript";
11
12 document.getElementsByTagName("head")[0].appendChild(newJSElement);
```

Here's what's going on. In lines 1 through 5, we define `thisXML` as a global variable, set up our API key, set the URL we actually want the data from, and then set the URL where our XML proxy sits. Line 7 sets up a new HTML `script` element, and line 8 sets its `src` attribute, passing the URL we want to get, and the function we want to handle it when it comes back. In line 9, we set the `type` attribute of the new `script` element, so that the browser knows it's JavaScript. Line 10 sets everything in motion by attaching our JavaScript to the document's head element, causing the browser to fetch and execute the code via our XML proxy.

The function that gets called needs to convert the string representation of the XML into an actual XML document, so the function starts out like this:

```
function fnHandleFlickr() {
    try {
        var xmlDoc = xmlParser.parseFromString(thisXML, "application/xml");
    } catch(er) {
        alert("Sorry, couldn't parse the XML returned by Flickr!");
    }
}
```

So why are we doing it this way, instead of, say, using `XMLHttpRequest()`? The main advantage of getting XML by constructing a new `<script>` element and then populating it from a proxy is that, by using a standard browser feature, we circumvent the security limitations of better-known ways of fetching XML into a browser.

If you were to use such a proxy to return the XML directly to an `XMLHttpRequest()` call, it would still have to run on the same server as the HTML page. By contrast, with our method, the page on which we are running our Google Maps hack and our XML proxy can be on completely different servers on different domains across the Internet.



If you decide to set up a proxy script like the one described here, you will *definitely* want to hardcode part of the address that you're getting the XML from in the server script or do some kind of checking on the URL that's passed in, so that you're not setting up an HTTP proxy that's wide open to the entire Internet. You should *not* run the proxy server code as is.

5.6.3. The Code

The code for this hack runs to about 150 lines, so we'll just review the highlights here. You can see it in action at <http://mappinghacks.com/projects/gmaps/flickr.html>. See the code itself by selecting View Source in your browser. In essence, the JavaScript does exactly as we've described above, using the script insertion maneuver to first fetch a list of geocoded photos from Flickr. Next, it takes the first photo found and asks Flickr for its details. The `fnHandlePhoto()` function is called by the JavaScript returned by the proxy, and this function extracts the specific `geo:lat` and `geo:long` tags from each image:

```
function fnHandlePhoto() {
    var bDidItWork = true;
    var fGeoLat, fGeoLong;

    try {
        var xmlDoc = xmlParser.parseFromString(thisXML, "application/xml");
        // Note, it's possible geo:long could also be called geo:lon,
        // so we'll look for both versions.
        var aTags = xmlDoc.documentElement.getElementsByTagName("tag");
        for (i = 0; i < aTags.length; i++) {
            if (aTags[i].attributes['raw'].value.length > 7) {
                var sTag = aTags[i].attributes['raw'].value;
```

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ISBN: 0596101619 Publisher: O'Reilly Print Publication Date: 1/1/2006

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```

        if (sTag.substr(0,7).toLowerCase() == 'geo:lat')
            fGeoLat = parseFloat(
                aTags[i].attributes['raw'].value.split('=')[1] );
        if (sTag.substr(0,7).toLowerCase() == 'geo:lon')
            fGeoLong = parseFloat(
                aTags[i].attributes['raw'].value.split('=')[1] );
    }
}
} catch(er) {
}

```

In the above code fragment, which has been edited a bit for readability, the XML stored by the proxy in `thisXML` is parsed, and then the resulting document object is scanned for `tag` elements. The highlighted code examines each `tag` element to see if they are prefixed with `geo:lat=` or `geo:long=` and, if so, extracts the coordinates from them as floating point values.

Next, assuming that the coordinates were extracted properly, the `fnHandlePhoto()` function creates a new `GMarker` object using the Google Maps API, and uses other information from Flickr about the photo to generate an HTML info window that pops up when the marker is clicked. This popup will include a thumbnail of the photo, the title, the owner's screen name, and a link to the photo's Flickr page.

```

if (!isNaN(fGeoLat) && !isNaN(fGeoLong)) {
    var point = new GPoint(fGeoLong,fGeoLat);
    var marker = new GMarker(point);
    var sHTML = "";

    var xmlDoc = xmlDoc.documentElement.
    getElementsByTagName("photo");
    var xmlTitle = xmlDoc.documentElement.getElementsByTagName("title");
    var xmlOwner = xmlDoc.documentElement.getElementsByTagName("owner");

    sHTML += '<strong>' +
        + xmlTitle[0].firstChild.nodeValue + '</strong><br />';
    sHTML += xmlOwner[0].attributes['username'].value + '<br />';
    sHTML += '<a href="http://www.flickr.com/photos/' +
        + xmlOwner[0].attributes['username'].value + '/' +
        + xmlDoc[0].attributes['id'].value + "/" target="_blank">' +
        + '</a>';

    GEvent.addListener(marker, "click", function() {
        marker.openInfoWindowHtml(sHTML);
    });
}

map.addOverlay(marker);

```

The highlighted lines above construct the HTML for the image thumbnail, which as you can see is a bit complex. After displaying the marker on the map, the code then continues to see if there are any photos left to be processed from the original query, and, if there are, it picks the next one, and repeats until they're all shown on the map.

This is all well and good, but it is quite slow, because the browser has to ask the proxy to look up each and every photo in Flickr one at a time. One advantage of this approach, however, is that you can customize the query using the intersection of multiple tags. Near the top of the JavaScript section in `flickr.html`, you'll see a line that reads as follows:

```
var lstTags = 'geotagged';
```

If you're feeling creative, you can alter this to show geotagged photos of specific things or places:

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ISBN: 0596101619 Publisher: O'Reilly Print Publication Date: 1/1/2006

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```
var lstTags = 'geotagged,flower'; //get geotagged flowers
var lstTags = 'geotagged,flower,london'; //get geotagged london flowers
```

5.6.4. Hacking the Hack

In practice, all those API calls to the Flickr server do take up quite a bit of the user's time, waiting for each photo to show up on the map. Using your Flickr API key, you could set up a system to collect the photos you're interested in, and put them into your own data store, from which you can quickly generate the maps you want to see. Alternatively, you can use an *aggregator*, such as Geobloggers (<http://geobloggers.com/>), which polls Flickr periodically for new geocoded photos, and then offers an API to fetch metadata about them based on location. The Geobloggers API is documented at <http://www.geobloggers.com/services/>.

Our Geobloggers API example, which you can find at <http://mappinghacks.com/projects/gmaps/geobloggers.html>, calls in Flickr image data from Geobloggers, using the bounding area of the map as a guide as to what to load in. One choice bit of code from that file, edited for readability, looks like this:

```
// Get rid of any old pins
map.clearOverlays();

// Get the map's bounding box from the Google Maps API
var sNewBounds = map.getBoundsLatLang();

// Build up the new URL based on the view window we are looking at.
var newGeoBloggersURL =
    'http://www.geobloggers.com/fullscreenBackend/dataFeed.cfm?'
    + 'iMaxRecords=' + iMaxRecords + '&sSearchType=newest'
    + '&minLon=' + sNewBounds.minX + '&maxLon=' + sNewBounds.maxX
    + '&minLat=' + sNewBounds.minY + '&maxLat=' + sNewBounds.maxY;
```

The URL assembled in newGeoBloggersURL is then passed to our XML proxy. When it comes back, it's passed to another function that generates the markers:

```
pins = xmlDoc.documentElement.getElementsByTagName("pin");
for (var i = 0; i < pins.length; i++) {
var point = new GPoint(
    parseFloat(pins[i].getAttribute("lng")),
    parseFloat(pins[i].getAttribute("lat")));

var html = '<strong>' + pins[i].getAttribute("title") +
    '</strong><br />';
html = html + '';

var marker = createMarker(point,html,pins[i].getAttribute("icon"));
map.addOverlay(marker);
...
}
```

What's particularly cute about this method is that Geobloggers actually creates small thumbnails of each photo to use as markers on the map, in place of the usual Google Maps markers, as you can see in [Figure 5-19](#).

Figure 5-19. A map of local photos from Flickr, via the Geobloggers API

Additionally, since the Geobloggers API is location-centric, when you zoom or re-center the map, a click to the Refetch Data button causes the map to update with new photos, based on the location of the map. Modifying this code to do this automatically, using the GEvent object from the Google Maps API, is left as an exercise for the reader—see "Make Things Happen When the Map Moves" [[Hack #60](#)] for more details.

—Dan Catt

Hack 47. Geotag Your Own Photos on Flickr



Maps and pictures go together like a horse and buggy.

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Google Maps Hacks By Schuyler Erle, Rich Gibson

ISBN: 0596101619 Publisher: O'Reilly Print Publication Date: 1/1/2006

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Ever since Flickr started cataloguing people's digital photography, many have been clamouring to be able to geolocate photos. The idea of geotags was proposed by Dan Catt. As described in "Browse Photography by Shooting Location" [[Hack #46](#)], Dan created a service called Geobloggers (<http://www.geobloggers.com>) to aggregate the geotagged photos.

One of Flickr's key features is that it allows you to add *tags* to your photos. A tag can be a word or group of words, such as "vacation" or "my kids." There are three tags you need to add to photos to be able to geolocate them: geo: lat=xx.xxxx, geo.lon=yy.yyyy, and geotagged.

The latitude and longitude are expressed in decimal degrees. Latitudes south of the equator and longitudes west of Greenwich are negative. As different latitudes and longitudes appear to be different tags to Flickr, the geotagged tag is necessary to let you search for geotagged photos. There are two ways to geotag photos: manually and using Google Maps.

If you have a GPS, use it to record the latitude and longitude as you take photos by taking a photo of the GPS. You can set the GPS to display in decimal degrees (which may be represented as *hddd.dddddd°* in the GPS settings), however, GPSes often display in degrees and minutes, as shown in [Figure 5-20](#), or degrees, minutes, and seconds.

Figure 5-20. Take a photo of the GPS to make geotagging easy



If you have GPS coordinates in degrees, minutes, and seconds, try the FCC's converter at <http://www.fcc.gov/mb/audio/bickel/DDDMMS-decimal.html>.

In Flickr, add the three tags to each photo, which is represented by that latitude and longitude. Taking the location in the photo as an example, the tags I would add to the photo are:

```
geo:lat=71.171067  
geo:lon=25.783050  
geotagged
```

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ISBN: 0596101619 Publisher: O'Reilly Print Publication Date: 1/1/2006

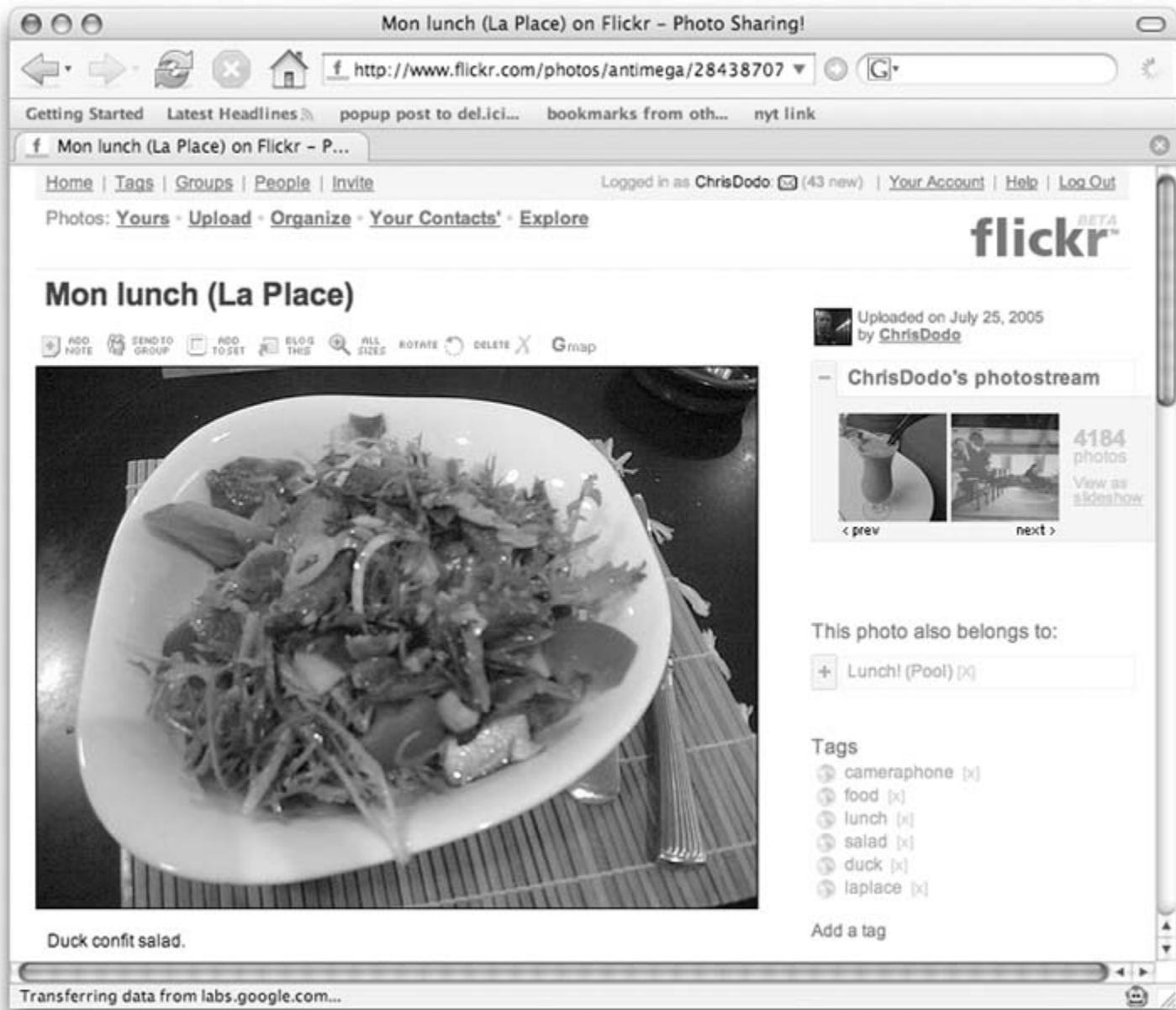
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There is, thankfully, an easier way. We can use Google Maps and a nifty Greasemonkey script to do all the heavy lifting for us.

The hard bit is setting up. You need to install Firefox (<http://www.mozilla.org/products/firefox/>), and then Greasemonkey (<http://greasemonkey.mozdev.org/>). Flickr user CK has written a Greasemonkey script called *GmiF*. Version 2.3 of *GmiF* can be found at <http://www.flickr.com/photos/ckyuan/30014875/>. In Firefox, right-click on the *flickr.gmap.user.js* link, and select "Install user script." Then click OK in the dialog box. Now when you go to a Flickr photo page, there will be an extra icon on the photo toolbar, as shown in Figure 5-21.

Figure 5-21. A Flickr photo page, with extra GMaps button



Clicking the GMaps button adds a Google Map into the page, along with several choices as shown in Figure 5-22.

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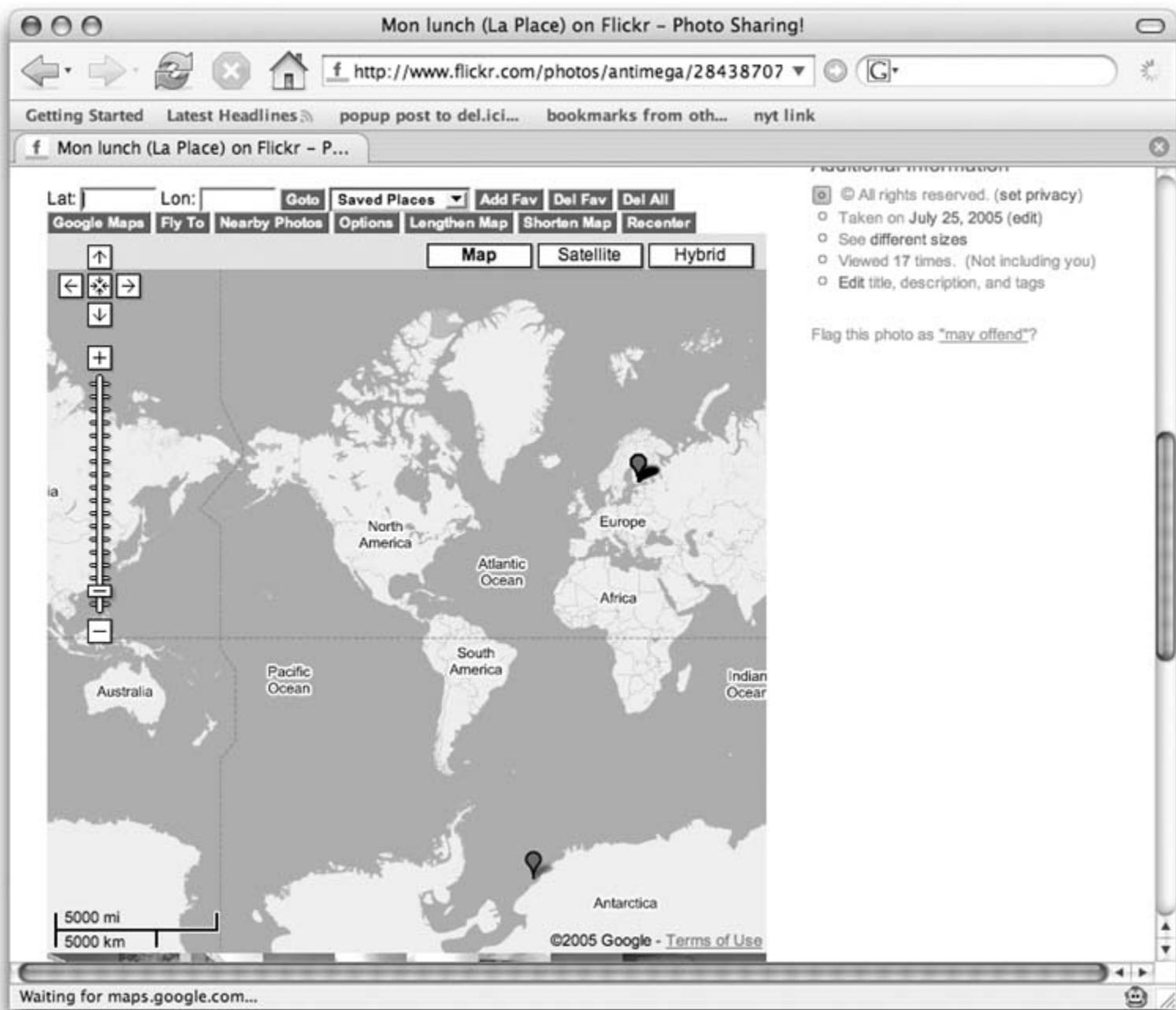
Google Maps Hacks By Schuyler Erle, Rich Gibson

ISBN: 0596101619 Publisher: O'Reilly Print Publication Date: 1/1/2006

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Figure 5-22. A map embedded in the photo page



Drag and zoom the map to find the point where the photo was taken. You may have to switch to satellite mode to see where you are at higher zooms. Then click on the map in the exact place where you took the photo, and a red pointer will be displayed, as in Figure 5-23.

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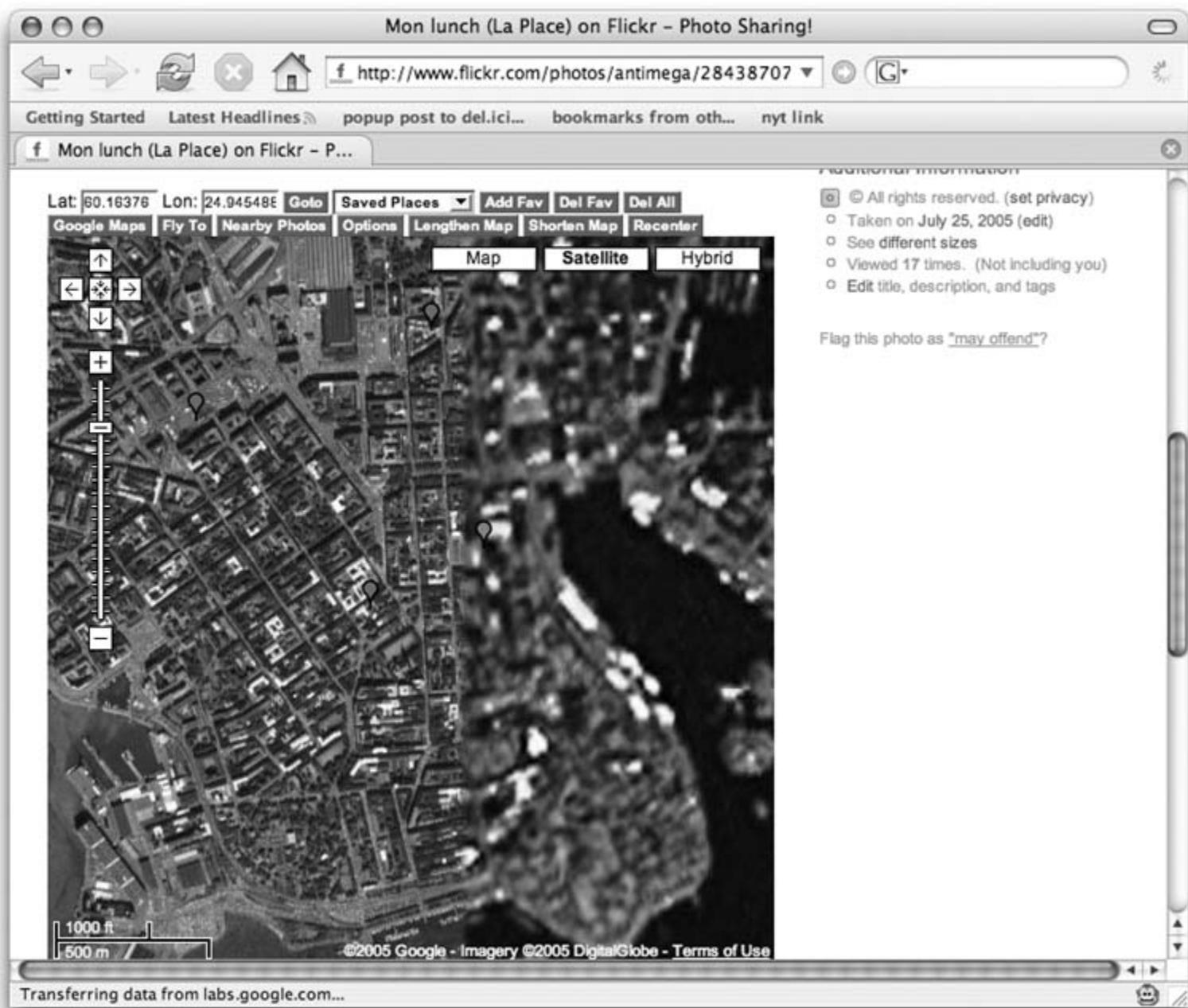
Google Maps Hacks By Schuyler Erle, Rich Gibson

ISBN: 0596101619 Publisher: O'Reilly Print Publication Date: 1/1/2006

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Figure 5-23. A red geolocation pointer appears



Click the red pointer, and a bubble will display a thumbnail of the photo, location, and more actions, as shown in Figure 5-24.

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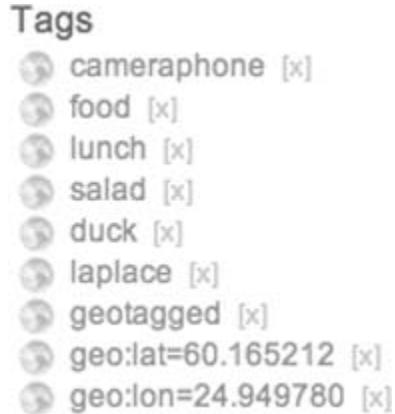
ISBN: 0596101619 Publisher: O'Reilly Print Publication Date: 1/1/2006

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Figure 5-24. A geotagging bubble

Finally, select the "Add geo tags" link. This adds the required tags to the photo, as shown in Figure 5-25.

Figure 5-25. The final set of tags, including geotags

The photo is now geotagged; you can submit it to Geobloggers or wait for them to find it with the automatic search of photos tagged geotagged. Once you've picked up the process, geotags can be added quickly to sets of photos.

—Chris Heathcote

Hack 48. Tell Your Community's Story



Give a guided tour of your community with photos and a Google Map.

We've all been there before; huddled around a computer, looking at photo after photo of a friend or family member standing in front of one tourist attraction after another. I don't know about you, but after the third picture I start to fade fast. It's not that the pictures are necessarily boring (although they very well might be); they're just so repetitive.

The laws of physics require that a photo be a representation of a physical place, but we so rarely display photos within any context of physical location. Google maps provides just such a context, and the effect of placing photos on a map at the location they were taken adds an extra dimension of information to the photo. I'm not suggesting that your slideshow of Hawaii with eight photos of you on the shores of a beautiful beach will become the most enthralling presentation ever, but you might hold people's attention for six photos rather than three.

5.8.1. The Hack

Community Walk (<http://www.communitywalk.com/>) attempts to facilitate the process of placing photos on a map showing where they were taken. The intent of it was, surprisingly enough, not to simply alleviate the boredom of vacation slideshows, but rather to allow people to share their communities. I roughly define a community as a group of things that share some commonality in the mind of some person or group of people. Although a community does not necessarily have to exist in a physical area, it does have to involve something that exists in a physical location, even if that is just the people that are involved in the community.

Many communities may exist in the same physical area as well. It all depends on the perspective of the people involved. A baseball fan may see SBC Park in San Francisco as one of the many ballparks in the United States, as shown in [Figure 5-26](#).

The manager of a hotel may see the ballpark as a highlight of the area around the hotel, as in [Figure 5-27](#).

With Community Walk, I wanted to give people a way to share these different perspectives, providing different ways to organize and display the various things in a community on a map. I also wanted to allow the creator of the map to configure the map to behave exactly as desired. The hotel manager may not want anyone else to be able to edit the map of the hotel or write comments on the various locations on the map, while the ballpark aficionado may want to allow certain people to edit the map and everyone to add comments about the various ballparks and baseball teams that play in those parks. Community Walk allows for all this and then some.

5.8.2. Getting Started

To get started with Community Walk, go to <http://www.communitywalk.com> and enter the street address or latitude and longitude of your location. This will create the initial map and pop up a window to enter in necessary information about the location. If the location is close to where you want it to be, but not exactly right, you can move it after you save it by clicking Move on the window that pops up when you click Save.

Figure 5-26. A fan's-eye view



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Google Maps Hacks By Schuyler Erle, Rich Gibson

ISBN: 0596101619 Publisher: O'Reilly Print Publication Date: 1/1/2006

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Figure 5-27. The hotelier's perspective



You will initially have the option of choosing from ten categories that describe the location. The default options for the category are Business, Education, Entertainment, General, Hotels, Parks, Residence, Restaurants, Shopping, and Transportation, but these can be changed. In order to change them, though, you'll need to create a user account. You can do this by clicking the Login link under the righthand panel. You can also log in directly from <http://www.communitywalk.com>.

Once logged in you will be able to configure everything about the map, including which categories are available, which tabs are available to organize the locations on the map, who can edit the map, whether or not users can make comments on the locations on the map, and so on. Right after you log in, you will be brought to a page that lists all of your maps, allowing you to configure, view, or edit each map, and if you started creating a map before logging in, that map will be available for configuration automatically. You can also access this screen by clicking Configure Map on the bottom of the map.

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ISBN: 0596101619 Publisher: O'Reilly Print Publication Date: 1/1/2006

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5.8.3. Adding Your Own Locations

Now comes the fun part: adding locations to the map. You can do this by clicking Add Markers at the bottom of the map. This presents you with three options: By Click, By Address, and By Lat/Long. Each of these offers a different way to put a location on the map, although my preferred manner is By Click, as it allows me to quickly add locations directly onto the map exactly where I want them to be.

Once a location is added, you will be presented with the same pop-up window that you saw when you first created the map. Now you will be able to choose from the categories you designated when you configured the map, as well as enter the rest of the information for the location. When entering the description, you also have the option of using some special wiki-like commands that allow you to format the text in the description and include links to external web sites as well as links that change the state of the map without leaving it. At the time of this writing, the available commands were as shown in [Table 5-1](#).

Table 5-1. Community Walk's wiki-like commands

Command	Resulting text
<code>bold("sample text")</code>	sample text
<code>italic("sample text")</code>	<i>sample text</i>
<code>link("http://www.communitywalk.com", "Community Walk")</code>	CommunityWalk
<code>internal_link("3wx82-0\$j.>23jWK15%", "Madrid Hotel")</code>	Madrid Hotel

In the `internal_link` command, the first parameter `3wx82-0$j.>23jWK15%` is a set of directions for the map, telling it where to center, what location to show, what picture to show, and so on. This value can be determined by putting the map in the state, panning and zooming to the view that you want to see, with the pictures you want to see on it, and then selecting all of the text after the `#` sign in the URL. If the URL in the address bar were [http://www.communitywalk.com/group?id=328#3wx82-0\\$j.>23jWK15%](http://www.communitywalk.com/group?id=328#3wx82-0$j.>23jWK15%), the `internal_link` state parameter for that view of the map would be `3wx82-0$j.>23jWK15%`.

At any point you can go back and edit the information for any location by simply selecting that location and clicking Edit in the window that pops up. You can also move the location or delete it by clicking Move or Delete, respectively. These links will not be available when someone is simply viewing the map.

5.8.4. Adding Photos to the Map

Once the location has been created, you can add photos to the location by clicking Add Photos from the window that pops up when you select the location (a user viewing the map will see a link for "No Photos"). This will open a window that will allow you to upload photos. The photos will be automatically resized if they are too big and will be displayed in the order they were uploaded. You can change the order by clicking Reorder after the photos are displayed and dragging them into their new order. For each photo, you can enter a title and short description. The description can also contain the same commands described for the main description.

Personally, I usually don't have my photos named very well on my computer. So I prefer to simply organize the photos that I want to use for a specific location into a folder on my computer, upload all the photos in the folder, disregarding the order, and then reorder the photos and enter the title and description from the resulting view, where I can see which photo I am dealing with.

Each location that has photos uploaded to it will have a small camera icon next to it on the righthand panel. Additionally, if the map is configured to allow comments then the righthand panel will have a comments icon that will change color depending on how long ago a comment was added to the location.

Lastly, in addition to allowing for comments to be left on a map, Community Walk allows people to share each location they create with the community (or keep them private), is fully integrated with <http://del.icio.us/>, and will soon have an API for accessing all of the shared location information.

The goal of Community Walk is really to bring people within a community together in a space that lets them share their experiences. As enabling as the Internet is, it almost seems to be pulling us away from the physical world around us. Hopefully, by adding a dimension of the physical world to the Internet, Community Walk will allow people to better interact with the communities around them, bringing us back into that physical world just a bit.

—Jared Cosulich

Hack 49. Generate Geocoded RSS from Any Google Map



Don't tell anyone, but the Semantic Web really is cool.

One thing that bugs me about Google Maps is that, since the API is entirely JavaScript, the annotation layer in a hack is only available visually and is not machine parseable. It's understandable that Google didn't push any particular geodata file format, as these will emerge, but it's frustrating that right now so much cool data is being created as lone silos, in an inaccessible and un-remixable way.

Yet the data is there, in the JavaScript and Document Object Model objects created by the Google Maps API. It should be possible to muck around in there and rescue that data from its lonely and isolated existence. This hack describes a Firefox JavaScript Bookmarklet that pulls point annotation information from many Google Map hacks and produces geocoded RSS.

5.9.1. The Hack

The first step is to find the `GMap` object in memory, which is the key to the Google Maps object structure. Every page that shows a Google Map (under the official API) must have a line that looks like this:

```
var map = new GMap(document.getElementById("map"));
```

The bookmarklet assumes the `GMap` object is a global variable. If the page creates the `GMap` object within a function, the bookmark will fail. User-created global variables and methods can be accessed by iterating through the global object `this`. Without a JavaScript function to query an object for its user created class, the bookmarklet calls `getCenterLatLng()` on each global object within a `try/catch` block. If this call does not generate an error, the `GMap` object has been found and things can move forward. The other assumption is that overlays are `GMarker` objects that respond to click events by calling `openInfoWindowHtml()`. This is probably the most common way of constructing a Google Map.

Since there is no API method to list overlays, a JavaScript Data Dumper, such as the one at <http://www.mattkruse.com/JavaScript/datadumper/>, can be very useful to investigate the structure of the `GMap` object and find the overlays, without following through the API's

Chapter 5. Google Maps in Words and Pictures

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ISBN: 0596101619 Publisher: O'Reilly Print Publication Date: 1/1/2006

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obfuscated code. We can start by creating a basic Google Map with overlays and info windows, according to the documentation. Next, we load in *datadumper.js*, set DumperMaxDepth=2, and call DumperPopup(*map*). Setting DumperMaxDepth to a small value is crucial, since the GMaps object has self references and will send the Dumper into an infinite loop. The dump reveals an array within the GMap object called *overlays*. Calling DumperPopup(*map*["*overlays*"]) shows a list of objects, each containing a *point* property. Each GPoint object has an *x* and *y* value, which on inspection are the lat/long location of the overlay. Rockin'!

But what about the overlay content? That HTML exists within an anonymous function passed to the GEvent.addListener method. That function is placed in the *_e__click* array and is already compiled. The only way to get at that content is to call the function. The trick is to capture the call to *openInfoWindowHtml* by copying the existing method at GMarker.prototype.openInfoWindowHtml and replacing it with our own function, which captures the HTML argument when requested, and otherwise calls the original backed-up method.

Finally, the RSS is produced by iterating through the *overlays* array, grabbing the *x* and *y* from the *point*, executing *call()* on the *_e__click* function, and wrapping it up within an RSS item element. The geocoded RSS is then written to a new window.

5.9.2. The Code

The HTML below (and online at <http://brainoff.com/gmaps/gmaps.bklet.html>) produces a bookmarklet from this script, which can be copied to your Firefox toolbar. When viewing a Google Map, click the bookmarklet, and if the map has been produced according to the assumptions, RSS will be generated. It's not possible to change the content type of a document from JavaScript, so Firefox will render the RSS as HTML. View the source to see the XML.

```
<html>
<head>
<script language="Javascript">
gmapref = false;

/* Search through Global Objects for the GMap*/
for (objName in this) {
    obj = this[objName];
    try {
        obj.getCenterLatLng();
        gmapref = obj;
        break;
    } catch (e) {}
}

if (gmapref) {

    /* Capture calls to openInfoWindowHtml, and grab the marker html */
    GMarker.prototype._openInfoWindowHtml=GMarker.prototype.
    openInfoWindowHtml;
    GMarker.prototype.openInfoWindowHtml=function(a) {
        if (document.capture) { document.desc = a; }
        else { this._openInfoWindowHtml(a); }
    };

    /* Generate RSS by iterating through overlays, looking for points, and
    capturing info window HTML */
    var rss='<?xml version=\''1.0\'?>\n<rss version=\''2.0\' xmlns:geo
    ='http://www.w3.org/2003/01/geo/wgs84_pos#\''>\n<channel>\n';
    var i;
    for (i=0; i<map['overlays'].length; i++) {
        try {
            item = '\t<item>\n\t\t<geo:lat>' + map['overlays'][i]['point'].y
            + '</geo:lat><geo:long>' + map['overlays'][i]['point'].x
            + '</geo:long>\n\t</item>';
            rss += item;
        }
    }
}
```

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```

+ '</geo:long>\n\t\t<description><![CDATA[';
document.capture = true;
document.desc = '';
map['overlays'][i]['_e__click'][0].call( );
item = item + document.desc;
document.capture = false;
item = item + ']]></description>\n\t</item>\n';
rss = rss + item;
} catch(e) { document.capture = false; }
}
rss = rss + '</channel></rss>';

/* Write out RSS to a new window */
var w = window.open('about:blank');
w.document.open( );
w.document.writeln(rss);
w.document.close( );
}
void(0);
</script>
<script>
function buildbookmarklet( ) {
    var s = document.getElementsByTagName("script");
    var script = s[0].innerHTML;
    script = script.replace(/\n/g, "");
    var b = document.getElementById("bookmarklet");
    b.innerHTML = "<a href=\"JavaScript:" + script + "\">GMaps2RSS</a>";
}
</script>
</head>
<body onLoad="buildbookmarklet( )">
<div id="bookmarklet">
</div>
</body>
</html>

```

—Mikel Maron

Hack 50. Geoblog with Google Maps in Thingster



Share your favorite places with friends.

In this hack, I discuss our Thingster Geoblogging service and some of the details of how I integrated Google Maps. We provide Thingster free of charge at <http://www.thingster.org/>, and it is open source and open data licensed as well. You're welcome to log in, create an account, and play with it; you're also welcome to run your own copy or just take any ideas you like and build your own equivalent.

My own interest in place-tagging came from a very simple desire: I wanted to be able to share information about my favorite places with my friends. The fact that there are not 10,000 companies already doing this has always completely mystified me. It seemed like a perfectly logical business plan if you were so minded—certainly better than, say, "pets.com."

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It is pretty obvious that the blogging paradigm is the right way to hang Post-It notes in space. People already use blogs in almost exactly this way: you own your own blog, you publish in a formal publishing framework, and blogs export this wonderful RSS format that is machine-readable. Blogs have already been extended to blog pictures, songs, and even video: blogging by location is the next logical step.

The challenge in blogging about places is that our blogging tools or content management systems need to support some kind of satisfying, fast, and compelling map interface. These tools need to be as easy to use as ordinary blogging tools. A clever novice should be able to walk up to a mapping service, create an account, and post her first geotagged post in under a minute.

5.10.1. Enter Thingster

In 2004, Ben Russell and I first conceived Thingster as an "anything tool," where one could blog about any kind of thing. Maps were the first clear interest and my good friends Tom Longson and Brad Degraf quickly jumped on board to help play with the idea. We thought that if community driven maps existed, then we could start to share information about our communities more intelligently, and that this might even change the way we engage and interact as citizens. This is the sort of big *if* that always seems to be a warning of several months of sleepless nights hacking.

Let me point out that those of you who haven't had to suffer in the dark ages before Google Maps simply have no appreciation of how hard it was to build a compelling web mapping service. It was uphill with snowstorms both ways and we had to arrive before we left. We had tried several other mapping solutions that were available in the open source community and I even personally did try to build my own mapserver (which is available at <http://maps.civicactions.net>). The labour, time, and ultimate performance of rolling our own is completely humbling. We recognized just how high the bar is set in what users expect from a web mapping service.

Today Google Maps provides us with that last missing piece, and not only is Thingster finally able to articulate its vision, but several other exciting projects, such as <http://ning.com>, <http://platial.com>, and <http://tagzania.com> are also rapidly beginning to explore the possibilities of easy access to a compelling web mapping service.

5.10.2. Adding Maps to Blogs

In the development of my own approach it became obvious that there are several key things that map-based content management systems should do:

1. They should use tags in a way similar to the notable <http://del.icio.us> project. Organizing place information seems to be so difficult otherwise.
2. "Post to Map" is crucial. People want to interact with a map when they make a post, not try to enter a street address or a longitude/latitude pair by hand.
3. There should be an opportunity to post a comment with regards to a previously placed post. Rather than ending up with a cloud of posts around a restaurant or a swimming hole, it is important to let people use discovery first to prevent clutter.
4. There must be extensive pivots. One should be able to examine a location and see all the comments about that place. Or to then look at an author of a particular comment and see other posts that author might have made about other locations. Mapping seems to often imply relationships to the other people who have that same interest; it makes sense to find ways to create synergy.
5. The mapping service has to be fast and lightweight overall. Google Maps more than delivers on this.

5.10.3. Practice

Connecting Google Maps to a blogging tool requires connecting both an input side and an output side. You want to both capture Google Maps position information for new posts, and you want to plot posts to Google Maps when you are viewing the blog.

On the input side, I connected the Google Maps navigation to the form input box. As you drag Google Maps around, it instantly updates the user input form box so that when the user finally submits the post, the post has the map location that they have suggested. This code was quite a small bit of JavaScript, and it looked something like this:

```
var map = null;
map = new GMap(mapdiv);
map.addControl(new GSmallMapControl());
map.centerAndZoom(new GPoint(-123,45), 6);

// REGISTER CHANGES INTO FORM IF FORM EXISTS

GEvent.addListener(map, "moveend", function() {
    var center = map.getCenterLatLng();
    var latLngStr = center.y + ' ' + center.x;
    if( parent.document.form && parent.document.form.locationinput ) {
        parent.document.form.locationinput.value = latLngStr;
    }
});
```

On the output side, when I want to plot the points in my content management system to Google Maps, I request an RSS feed of the particular channel that the user wants to plot and simply plot those points. That code is slightly larger because it has to fetch an XML document from the server (the RSS feed), walk through it, and post those posts into Google Maps. You can use the `GXmlHttp` class from the Google Maps API as a means of fetching this data on the fly, without having to worry about browser compatibility issues.

Once I have one of my RSS feeds with some geo-data in it, I instruct Google Maps to plot each of the points:

```
// ITERATE ITEMS - BUILD MAP WHEN NEEDED

var latmin = 0;
var latmax = 0;
var lonmin = 0;
var lonmax = 0;
var visited = 0;

for(var content = data.firstChild; content != null; content =
    content.nextSibling) {

    if( content.nodeName != 'item' ) {
        continue;
    }

    // get some stuff
    var title = getField(content,"dc:title");
    var link = getField(content,"dc:link");
    var description = getField(content,"dc:description");
    var location = getField(content,"th:location");
    if(!location || location.length < 2) {
        continue;
    }

    var strs = location.split(" ");
    var a = strs[0];
```

Chapter 5. Google Maps in Words and Pictures

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ISBN: 0596101619 Publisher: O'Reilly Print Publication Date: 1/1/2006

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```

var b = strs[1];
if( a.indexOf('(')>=0) {
    continue;
}

var lat = 0;
var lon = 0;
try {
    lat = parseFloat( a );
    lon = parseFloat( b );
} catch(e) {
    continue;
}
a = "" + lat;
b = "" + lon;
if( a == 'undefined' || a == "NaN" ) continue;
if( b == 'undefined' || b == "NaN" ) continue;
if( lon == 0 && lat == 0 ) {
    continue;
}
a = 1234;

// bounds builder
if( visited == 0 ) {
    latmin = latmax = lat;
    lonmin = lonmax = lon;
} else {
    if( latmin > lat ) latmin = lat;
    if( latmax < lat ) latmax = lat;
    if( lonmin > lon ) lonmin = lon;
    if( lonmax < lon ) lonmax = lon;
}
var point = new GPoint(lon,lat);
var marker = new GMarker(point);
var html = title;
GEvent.addListener(marker,"click",function() {
    marker.openInfoWindowHtml(html);
} );
map.addOverlay(marker);
visited++;
}
var latc = latmin + (latmax - latmin) / 2;
var lonc = lonmin + (lonmax - lonmin) / 2;
// should pick zoom better some year
map.centerAndZoom(new GPoint(lonc,latc), 13);
}

```

5.10.4. How Do You Actually Use Thingster?

In Thingster, you first create an account and log in using the register page at <http://thingster.org/register>. Once you are in your home page, you can select "post" to create a new post. The post form allows image upload and has an integrated map, as shown in [Figure 5-28](#).

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Figure 5-28. Thingster image upload with integrated map

The screenshot shows a Microsoft Internet Explorer window displaying the Thingster website at <http://thingster.org/anselm?post>. The page title is "thingster - Microsoft Internet Explorer". The navigation bar includes links for File, Edit, View, Favorites, Tools, Help, Links, and post to del.icio.us. The address bar shows the URL. Below the address bar is a toolbar with Back, Forward, Stop, Home, Search, Favorites, Stop, Mail, Print, and other icons. The main content area starts with a welcome message "Welcome back anselm." followed by the Thingster logo and a small globe icon.

The central part of the page is a form for editing a post:

- Title:** Another day hanging out on the houseboat
- Link:** (empty input field)
- Description:** Here we are on the houseboat at Sophie's Island not far from the beach. The currents here are a bit dangerous for swimming but you can't beat an old a-frame and a freshwater sandy beach for a great place to hang out.
- Tags:** houseboat oregon scappoose tristan elizabeth anselm duke
- Location:** A map of the Scappoose area, showing Scappoose, McNary Lake, and various smaller lakes like Martin Lake, Mud Lake, Steelman Lake, Wagonwheel Hole, Surgeon Lake, and Johnson Lake. A road labeled "30" is also visible. The map is powered by Google and includes a copyright notice for NAVTEQ and a license link.

At the bottom of the page, there is a file upload section:

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please direct any bugs or suggestions to anselm@hook.org

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When you are done posting, return to your home page, where you can see a compilation of your posts and pictures on a map, as depicted in Figure 5-29.

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Figure 5-29. Thingster's compilation of your posts and pictures on a map

thingster - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://thingster.org/anselm/scappoose?posts=true&googlemaps=true

Getting Started Latest Headlines post to del.icio.us Delicious Map View

/ | People | Home | Posts | Post | Map | All | Logout | About

Welcome back anselm.

thingster social place tagging

duke elizabeth first fun houseboat oregon outdoors post river

scappoose tristan water

Powered by Google

2005-08-11T09:22:Z
Another day hanging out on the houseboat
by anselm
tagged houseboat oregon scappoose tristan elizabeth anselm duke

'Here we are on the houseboat at Sophie's Island not far from the beach. The currents here are a bit dangerous for swimming but you can't beat an old a-frame and a freshwater sandy beach for a great place to hang out.'

[modify](#) [delete](#)

2005-08-06T09:10:Z
The Beast
by anselm
tagged duke river scappoose water

'Duke is such a beast; this is an animal that simply loves the wet. He can wear me out just swimming around beside me in the river.'

[modify](#) [delete](#)

2005-08-06T09:07:Z
Beach Run
by anselm
tagged duke tristan beach fun outdoors scappoose oregon coastline

'My dog duke, my son Tristan and I would often just blow off an entire day and just go to the beach and play; we'd run in the sand and just have a lot of fun.'

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Having Google Maps in Thingster lets us explore a number of tasty implications we originally thought might exist. Better maps affect what we see, the choices we make, the repercussions of those decisions, and perhaps even the shape of our societies. Our goal in providing this service is to explore such ideas.

—*Anselm Hook*

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