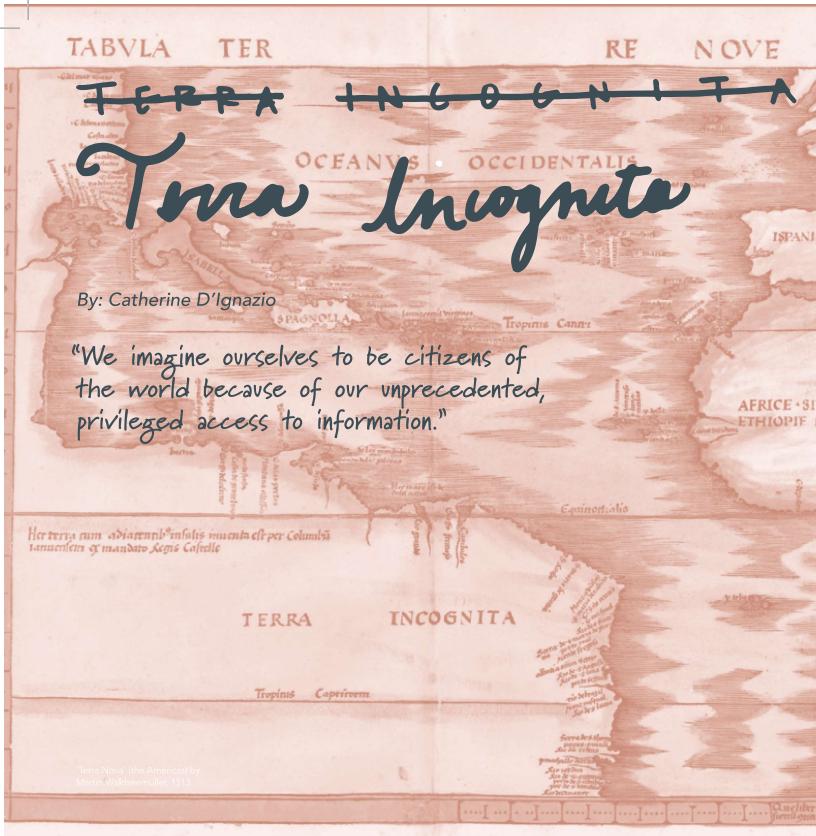


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erra Incognita was a Latin term used on maps from the Age of Discovery to denote unexplored territories. It's a perspectival term. Because, of course, there were people like the Tupinambá actually living in those seemingly unexplored lands on Martin Waldseemüller's map. The places the Tupinambá knew intimately - where they fished or hunted or celebrated or slept — were not Terra Incognita to them. But to the Europeans embarking on their voyages each new cove and settlement was a curve or mark to be made on a map. It was a matter of perspective. A matter of technology. Some small matter of hubris.

It remains a question of all of these things in the Information Age. The optimism and hubris of Big Data appear to be unrivaled - What don't we know in the age of Big Data? By tapping mystic rhythms with our fingers and staring into squares of light we traverse great oceans of distance. As we zoom around global networks on a variety of devices, there is the common perception that we could go anywhere, learn about anything, connect with anyone.

Except we don't.

AR:

Ethan Zuckerman calls this "Imaginary Cosmopolitanism". We imagine ourselves to be citizens of the world because of our unprecedented, privileged access to information. But there are a couple of things working against our cosmopolitanism. The foremost is our very human impulse towards

"homophily". Social scientists like Zuckerman, Fiore and Donath, and McPherson, Smith-Lovin and Cook show us how homophily — the tendency for us to group ourselves with those most like us — is as alive and well on the World Wide Web as it is in physical space.

Google search, 2014.

The other half of the Imaginary Cosmopolitanism equation is technological. The technologies that most enable our informational selves (powerful search algorithms like Google, social sharing sites like Facebook and recommendation systems like Amazon) are the ones that reinforce our homophily by giving us what we want, what our friends want, and what people like us want. From a design perspective these information systems follow consumer logic which is based on criteria of similarity and promotion of the popular.

This works great most of the time. I want something. I tell Google. Google gives me the thing.



What this does not work well for is the discovery of difference, the surfacing of minority opinion, and the engagement of perspectives other than our own. We might imagine ourselves to be citizens of the world but in fact live in informational gated communities talking only to our little pockets of humanity.



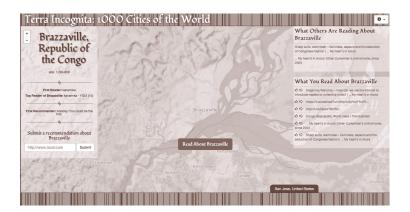
Imaginary cosmopolitanism and informational gated communities.

## Civic Logic vs. Consumer Logic in online information systems

- · Posit and enact alternate relationship between individual and collective
- · Experience challenges notions of self
- Productive disorientation
- Experience promotes "engagement" behaviors" like reflection, exploration, openmindedness to new ideas
- Surfaces dissent, minority opinion
- Challenges stereotypes
- · Measure of success is behavior shift, attitude shift or engagement shift
- · The individual is the base unit of experience; Attention is the base unit of economics and value
- Experience is targeted towards preferences & tastes
- · Experience reinforces notions of self as a unique autonomous "free" individual
- · Experiences designed to extract maximum data from individual
- · Attention/popularity maximising
- Surfaces trends, popular, sensational
- · Measure of success is clicks, views, eyeballs

## Civic Logic: Information Design for **Encountering Difference**

How can we engineer information discovery systems for openness, risk-taking and exploration? What would it mean to emphasize civic logic rather than consumer logic as a design criteria for information systems?



Terra Incognita: 1000 Cities of the World, screenshot, Users arrive at an unexplored city in Terra Incognita each time they open a new Tab in their browser.

## Terra Incognita: An Experiment in Cosmopolitanism

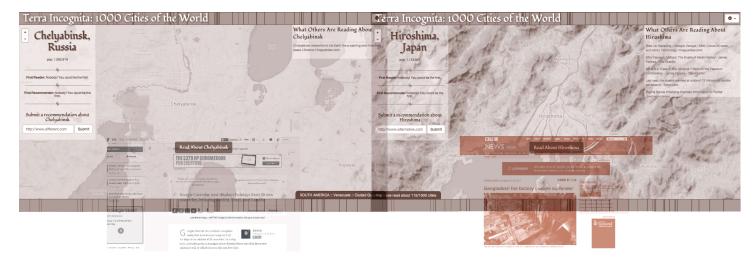
What might civic logic look like in action? Together with Ethan Zuckerman and Matt Stempeck at the MIT Center for Civic Media, I have been building an information discovery system with civic logic in mind. In our case, we are particularly interested in the dimension of geography. What cities and countries in the world do we read about? Which do we systematically ignore? When we do read about faraway places - like Syria - mainstream news coverage tends to be oriented towards conflict and violence. How can we surface interesting, stereotype-busting information about remote geographies? How can we connect people to parts of the world where they never previously had interest?

Terra Incognita: 1000 Cities of the World, screenshot. Users arrive at an unexplored city in Terra Incognita each time they open a new Tab in their browser.

Terra Incognita: 1000 Cities of the World is a global news recommendation system and game. It has three goals: 1) To provoke reflection on the geographic dimensions of your Internet browsing in relation to others'. 2) To seduce you into an explorational mindset and privilege exploration over "what you want". 3) To encourage the discovery of geographically diverse information on the Internet.

The main user experience of Terra Incognita is an intervention into your Internet browsing experience. Technically, it is an extension for the Chrome browser, a liminal space for software operation where you have options which are not typically available to regular websites. Each time you open a new Tab, Terra Incognita shows you a city that you have not yet read about and gives you options for reading about it. Chelyabinsk (Russia), Hiroshima (Japan), Hagatña (Guam) and Dhaka (Bangladesh) are a few of the places where you might end up. continued on page 36

Four places you might end up in Terra Incognita upon creating a new Tab.



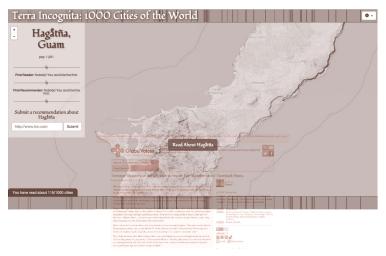
Four places you might end up in  $\ensuremath{\textit{Terra Incognita}}$  upon creating a new Tab.

From a city like Dhaka, there are several options to pique the user's interest and intrigue them enough to distract them from their previous task at hand. If other users in the system have read about that city, a scrolling list of those stories shows in the top right corner of the screen. For the bold and adventurous, there is a large red button "Read about Dhaka" in the center of the screen. This functions akin to Google's "I'm feeling lucky" button to take them to a single news story recommendation about Dhaka.

Figuring out how to collect high-quality, stereotype-busting recommendations about the top 1000 cities in the world was no small problem. Our upcoming user study will inform us as to how well we have solved this problem. Using our ideas around civic logic as our guide we chose to follow a criteria of multiplicity, transparency, potential for reflection and prioritisation of alternative voices.

The recommendations are delivered through many multiple sources: 1) stories that other users read or recommended in the *Terra Incognita* system 2) stories about that city that are being shared across the Internet but giving priority to

Four "Read about Dhaka" recommendations for Dhaka, Bangladesh: An announcement about Bengali holidays in Google calendar, a BBC article about the owners of the Bangladesh fire factory, a Global Voices story about the arrest of teenage bloggers in Dhaka, and a photo slideshow from the Huffington Post about the Red Glass festival celebration in Dhaka on April 13th.





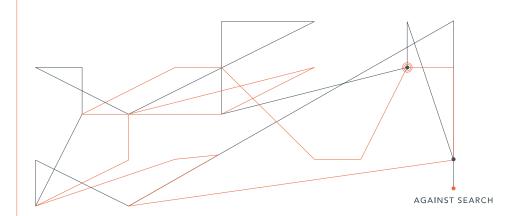
participatory media sites like Global Voices 3) stories that we crowdsourced through an open call 4) stories that people had originally saved through the Instapaper service and 5) stories curated in partnership with with editors from Global Voices. Even with these multiple sources of recommendations there were many blank spots in our recommendation system that we had to address. For example, China accounts for about 20% or 200 cities in *Terra Incognita*, but there was very little information in English about many medium-sized Chinese cities available through our recommendation channels. In this case, we worked with a media scholar from China to manually compile a list of English-language news sources by city.

While designing Terra Incognita: 1000 Cities of the World with civic logic in mind, numerous other questions came to mind. We hope to answer some of these through the user study but we need more brains working on these questions. How do you make algorithms, whose work happens behind the scenes, transparent and public? What kind of online reading leads to increased reflection? How do you balance civic goals with maintaining user interest and engagement? How can information systems engender productive disorientation — an encounter with difference that unseats the user, however briefly, and invites them to recalibrate their worldview? •

## Next Intersection

Read about similar themes in Against Search on page 76.

"Given the size of many digital media collections, simply seeing what's inside them is impossible (even before we begin formulating questions and hypotheses and selecting samples for closer analysis). Although it may appear that the reasons for this are the limitations of human vision and human information processing, I think that it is actually the fault of current interface designs."



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