URBAN

MAGAZINE

IN THIS ISSUE

Letter from the Editors

URBAN has always been an accessible forum for student voices. Over the years, it has evolved from a newsletter for the urban planning department into its current form as a magazine. In taking on its production this semester, we chose to take advantage of the freedom inherent in the magazine format and explore. That's why, in this second issue of Volume 16, we were simply hoping to create a platform for diverse GSAPP students to express themselves and their interests in urban issues. We are excited to have been able to include planners, architects, and urban designers in this issue and that their contributions are representative of so many perspectives within the student body.

As social, cultural, and ethnic diversity in our programs increases, sharing and understanding the personal experiences of others becomes vital. In this issue are pieces about planning in China, reflecting the increasing importance of Chinese planning students to our school. We have also curated several testimonial pieces about the personal experiences of planning students in cities around the world. The theme of diversity explicitly came into question in a critique of a recent conference at the Harvard Graduate School of Design, and was addressed head-on in a report about a New Jersey community's attempt to address racial segregation.

Having investigated social questions, students are clearly eager for creative and active engagement with urban problems. The E-Cube-Librium project is an innovative tool to visualize and better understand global issues (without the use of pie charts!) In "Making Economic Opportunity: Makerspaces in Detroit," community spaces which nurture and foster creative development and provide tools necessary for a community to tap into its entrepreneurial spirit are celebrated as critical to the revival of a declining city. To turn to the more playful side of planning, we've even reviewed the newest addition to the SimCity franchise which, according to satirist Stephen Colbert, has inspired children everywhere to take up urban planning.

With this publication, we hope we have collectively used this forum for a refreshing discourse on a few of the many challenges that planners and designers face daily. It has been an inspirational experience and we believe that we Urbanists have the potential to step it up a notch and truly experiment with next semester's URBAN issue! Until Then!

Your appreciative editorial board,

Matthew, Sarah, and Ellis

Future Planners of China
A Review of Columbia University's China Symposium

LINGHONG ZOU, LINGJUN BU, AND NANNAN XU

In recent years, the number of Chinese planning students in US planning schools has experienced dramatic growth. This trend coincides with China's rapid urbanization; during the past 40 years, the urban population in China has increased from 100 million to nearly 700 million, which is not only half the population of the country, but ten percent of the population of the entire world.

Dating back to the early twentieth century, Chinese students graduating from western institutions went back to China and built up the first generation of Chinese modern architecture and planning professionals and academics. The impact of the US on China's planning is especially critical. For example, the concept of zoning was first introduced in China by a group of American visiting scholars in 1980. Based on this concept, the Regulatory Detailed Plan was developed and incorporated in the National Law of Urban and Rural Planning in China, which greatly changed the course of urban development in the country during the following decades.

After the 1950s, urban planning and planning education in China were suspended due to political changes, ideological disputes, and growing political interference. During the ten years of the Proletariat Cultural Revolution, only two universities persisted in educating Chinese planners. Since the 1990s, China's urban planning has been much more open and reformed, but still widely troubled due to a strong monopoly in the planning consulting industry, authoritarian government administration, and jeopardized planning legitimacy. Today, with the significant wave of planning students trained in the US going back to China, China's planning industry and academics have been promised a different future.

The symposium, titled "Lecture and Discussion on Planning for China," held on February 22nd at Columbia University, opened a dialogue to discuss the shared responsibilities of Chinese planning students in dealing with the country's fast urbanization. The panel discussion titled "Where are we heading? Chinese planning students after graduation" focused on topics from how students carry out their work in China after being educated in a completely different planning context, to how they might bring new possibilities to China's urbanization as the new generation of planners. Most of the panelists were students from the New York area planning schools including Pratt Institute, Rutgers University, Columbia University and New York University. "Taking classes is far from enough to understand planning in this country. For us, working experiences are as important as education", said one of the panelists. In fact, as shown in the discussion, many plan to stay in the United States to work for international organizations for some years before returning to China and making their contributions. Some have already begun to take actions: Shuang, a first year student at Cornell University, is using her gap year to complete an internship with the United Nations.

Most Chinese planning students intend to work in the US for a couple of years after graduation, though they are aware of the dual challenges they will face: first, adapting a Chinese mindset to embrace US planning concepts such as democracy and public engagement and second, critically applying what they have learned in US planning schools back into China's unique working environment. Out of a myriad of uncertainties, it is certain that the ways Chinese planning students are going to execute their practice will significantly shape the future of their country. ◻

Virtual Planning
A review of the new SimCity

MATTHEW MUELLER

MEASURING AGAINST NOSTALGIA

I was first introduced to the SimCity franchise in the 1990's when I received a copy of SimCity 2000. At the time, it was the most addicting game I had played and I spent hours creating cities before unleashing disasters upon them. Now, two decades later, with the release of a new version SimCity, I was quick to buy myself a copy for my collection to gauge how it measures up to its predecessors. With the newest SimCity, the creators are attempting to renew the franchise by building upon the nostalgia of the original games while updating the graphics and gameplay for modern gamers. The game is intended to be collaborative and dynamic, with the introduction of city specializations and new challenges for players through the limitation of natural resources.

There are numerous new building typologies and urban options which allow players to move beyond the basic commercial, industrial, and residential zoning to manage several new aspects of the city. Despite all of the improvements, however, the creators failed to address several glaring problems. Users are not able to develop mixed use neighborhoods, the cities tend to look very similar without regional vernacular difference, and, in the designers' attempt to bring players closer to the role of a land-use planner, the newest version has introduced additional problems in the methods used to simulate cities. Yet, even with its flaws, the new version does a good job of recreating the nostalgia of the originals.

PATIENTLY UPLOADING BEAUTIFUL GRAPHICS

While the game itself is fun to play, it is not built for infrequent players or people who want to play for a short time. Because the game is online, players will find they are spending a significant amount of time waiting for the game to update and then download their cities from the servers before they play. SimCity has also imposed a copyright protection system which requires that it is always connected to the Internet with no offline mode for single player and limits the portability of the game. This game takes a lot of patience.

Once it's uploaded and running, though, the game's graphic renderings are smooth and scalable, with all of the buildings modeling in high quality and an unparalleled ability to zoom into the street level. I struggled to find any graphic glitches or flaws in the game with only a single comical instance when the game incorrectly built a house above my town hall because the neighboring residential lot it was intended for was too small. Overall the landscape, buildings, vehicles, and pedestrians all look amazing.

My favorite change in the game is the incorporation of modular design in all of the government buildings, allowing players to customize both how the buildings look and how they function. For example, when building a hospital, one can add different hospital wings and services, either freestanding or attached.

AM I A PLANNER NOW?

When Maxis recreated the SimCity game, they focused on intercity cooperation and regionalism features nonexistent in previous versions. Gone are the days when you could build a sprawling megacity by itself; in the new SimCity, players are limited by smaller city plot sizes so that, within a few hours of starting your city, you will be bumping up against the new boundaries and running out of space. Now, building a world class city requires a regional approach with multiple small cities cooperating and sharing both services and residents between cities, oftentimes with the fringe areas serving as garbage dumps, power plant zones, and other unsavory uses. Building a large city requires players to micromanage dozens of plots or to work with other players, each of whom controls an area. Because the cities are limited in size, it is impossible to fit all of the buildings, services and features necessary to become even a moderate city within the physical boundaries.

Players can, however, expand by taking on the role of City Manager to specialize their cities and manage the urban affairs and trade agreements. In the game, players control the fire department, police department, hospitals, schools, waterworks, roads, railways, ports, transit systems and more. This interesting layering of systems keeps players engaged, but creates a precarious balance where a small change can have an immense effect. When my city reached a population of about 8,000 residents, I experienced a small crime spree which caused my population to start a rapid downward cycle, decimating my city's economy in minutes. My population quickly dropped to 2,000 residents and three quarters of my city lay abandoned, all because small problems can impact multiple game systems at once, creating a feedback loop accelerated by other in-game systems.

Where the nuance of layered systems is wanting, however, is in the relationship between wider roads and larger buildings. Even when improving single family neighborhoods with amenities, it is impossible to get the Sims to upgrade their housing unless you widen or upgrade their roads. Improving transit or neighborhood access through other means doesn't allow for increased neighborhood density and streetcars are only an option on the widest boulevards. Upgrading neighborhoods in the game can be done with a simple checklist: widen roads, add a park, build a school or a school bus stop, and provide basic municipal services. To increase housing density, one merely has to make sure the city has large city blocks and follow the checklist, and everyone will upgrade their houses.

Overall, the game's relevance to planning has increased with the expanded gameplay, yet the game has been executed in such a way that the gameplay leaves much to be desired. If you are looking for a fun, easy to play game, save your money and try any of the older SimCity games. If you have patience and want something which allows you to more closely emulate the role of a city manager, then this is the best game for you. ◻

Tourism, Art & Poverty
Juxtaposed Realities in La Boca Barrio

ALLEY LYLES

La Boca, a barrio on the edge of downtown Buenos Aires, is a popular destination frequented by visitors (typically tourists) eager for a glimpse of the vibrant colors and culture for which the neighborhood is famous. The neighborhood is a tour bus stop where guides introduce people to the brightly colored homes, local cuisine, and the art of the tango. What's particularly striking, though, is the juxtaposition of eager tourism against the neighborhood's socioeconomic state – La Boca is one of the poorest and most dangerous neighborhoods in the entire city.

For tourists, La Boca is an art museum where the multi-colored homes are the main attraction. The use of bright visual materials comes from the area's history of immigration from Genova. Upon arrival, immigrants built homes out of materials that could be found at the docks and fields of nearby factories.

Photos by Lori Martinez Bottom right photo by Alley Lyles

Because there was not enough of any one type of material, the houses were constructed with mixed mediums. Shortly after the building process finished, a local artist painted the neighborhood with the bright blues, reds and yellows that were readily available, creating deconstructed works of art.

I left this fantastic art museum when I strayed off the beaten path into an (unbeknownst to me) unsafe territory. While snapping pictures of parks and murals with a friend, I was stopped by the local police and escorted back to the main (read: touristy) section of La Boca. Recent child abductions, robberies and drug trafficking made the area dangerous even for locals, not to mention for lone foreign wanderers. In these pockets of the neighborhood where tourists are less likely to frequent, signs of poverty are as loud and clear as the brightly colored houses. Just one block

from where tourists spend money on souvenirs, the homeless sleep on benches with their dogs.

Expressions of hope can be found, though, outside the main section on the walls of the buildings that line the periphery of La Boca. Murals as bright as the neighborhood's homes adorn abandoned buildings. Some murals feature whimsical clowns while others depict the people who are proud to call La Boca home. Neighborhood organizations, such as Fundación PROA, support the creative scene by providing space for artists, hosting skill development workshops and organizing community support events. Additionally, PROA features many exhibitions by contemporary artists.

Soon, La Boca will undergo a deeper transformation. An Argentine architecture firm, PALO Arquiteca Urbana, will revamp the neighborhood's spotty transportation infrastructure. The unreliable transportation is believed to be the main obstacle hindering the growth of the area. In addition, the firm aims to design a people-friendly waterfront and improve bike lane promenades in La Boca. PALO surmises that a more viable infrastructure will bring more locals to the area, as opposed to only tourists, and provide them with a more sustainable way of life. ◻
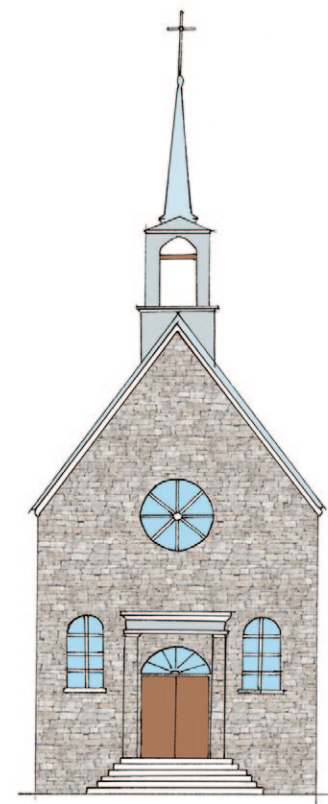
Sacred Ruins

The Abandoned Church's Saving Grace in Brooklyn

GREG MIRZA-AVAKYAN

Spend a day walking around Brooklyn and you will easily understand why it is commonly referred to as the "Borough of Churches." Brooklyn's remarkable collection of historic houses of worship reflects the declining tradition of outstanding architectural ingenuity and craftsmanship of distinct communities over two hundred years of neighborhood diversity. Despite a twofold increase in the number of congregations in the last half century, today there are 31% fewer Christian adherents in Brooklyn than in 1952. As congregations shrink, large churches see Sunday Mass attendance go from hundreds of worshipers to a few dozen. Many of these shrinking congregations are struggling to maintain their grand buildings. Often, the continued use of such large structures is questioned. Some congregations merge with others or move to a smaller, more affordable storefront location and eventually sell their church. So, what happens to those valuable, historic structures after they are no longer used as churches?

Churches are significant because they represent the values and identities of their communities. Churches were the social and often physical centers of new neighborhoods as communities formed. Many historical churches in Brooklyn are exceptionally striking in their grandeur and possess an intangible quality one may call the "spirit" of the neighborhood. Demolishing an old church means erasing its history, destroying its beauty, and turning back on the hard work of the groups that built and established it. In addition to preserving the building itself, the adaptive reuse of these obsolete religious structures helps maintain a neighborhood's vitality and historic value and invites tourism. Like old factories, armories, movie palaces, and railway depots, churches can be repurposed for housing, community spaces, performance venues, and social service centers. The danger is always that, as with an untreated disease that deteriorates the body until nothing can be done, abandonment quickly causes irreversible damage to buildings; timely adaptive reuse is thus one of the only paths for preservation.

Fortunately, the practice of saving old churches through adaptive reuse is catching on in Brooklyn. The Arches in Cobble Hill, 360 Court Street in Carroll Gardens, and The Sanctuary in Fort Greene were all historic churches converted to high-end housing in the last decade. Other churches are not as fortunate; The Church of St. Edward the Confessor in Fort Greene, St. Mark Evangelical Lutheran Church in Bushwick, and St. Elias Church in Greenpoint still sit vacant, with uncertain fates. Local communities' interest in using these lonely buildings persists, though, even after their closure. St. Elias has been rented to musician Pat Metheny to record the Orchestrion Project in 2010 and St. Mark has been used for film screenings, most recently showing Rosemary's Baby. These churches still possess the power to draw people, but need to be rehabilitated to remain permanent neighborhood attractions.

Their disadvantage and barrier to their redevelopment is location. Since many churches have retained historical features and are built from durable and expensive materials, they are attractive to developers who repurpose them as luxury homes and buyers who are looking for a unique

and extravagant dwelling. Because the reuse of such structures as housing can be lucrative, the typical Brooklyn church is adapted precisely for this use – most often in the wealthier parts of the borough. Is this commodification of formerly sacred sites appropriate for buildings which represent community and collective experiences? What will happen to churches in less affluent areas, where reuse as luxury housing isn't as feasible? Whether as planners, public servants, preservationists, or neighborhood activists, we must strive to bring community development functions to the adaptive reuse of churches in all parts of Brooklyn.

Last spring, as I was surveying the Ocean Hill section of Brownsville, I saw a church that looked like it had been abandoned for years. It was a large, imposing structure in the Renaissance Revival style. Its doors were fenced off, there was garbage on the main steps, and the façade was covered in decades-old dirt. This melancholic image haunted me, so I investigated further. To my surprise, this church, called Our Lady of Loreto, had been vacant for only two years. The Italian-American community that had formed the congregation of the church could no longer afford its maintenance and was forced to merge with another congregation.

Our Lady of Loreto is located in an impoverished neighborhood and is therefore unlikely to be reused as high-end housing. Though the Catholic Diocese of Brooklyn originally planned to demolish the church to make way for affordable housing, it has since reexamined that approach thanks to the efforts of numerous community groups including the Italian

Americans for Preservation and Community, the Brownsville Heritage Center, the New York Landmarks Conservancy, and the North East Brooklyn Housing Development Corporation. The Catholic Charities of Brooklyn and Queens, which is the real estate arm of the Diocese of Brooklyn and Queens, has already built affordable housing on the site of the rectory surrounding the church but the costs of making basic repairs to the main church building currently exceed $3 million. A Request for Proposals went out in March, calling for the conversion of the church to community use. Unless someone takes on the project, the church could very well be demolished. Perhaps, if community groups and preservationists can garner enough funds and support, they could save Our Lady of Loreto and thereby save a little part of Brooklyn.

While the preservation of buildings and history is deeply rooted in New York City's culture, many important buildings continue to be lost and, time and again, communities lose important symbols of their history. Too often, buildings are preserved only when there is money to be made. Churches are particularly vulnerable because they are deemed obsolete structures once they are abandoned and deconsecrated and are rarely used as churches again. Unless their locations allow for conversion to expensive housing, they are often left neglected. As many churches continue to shutter their doors in Brooklyn, it is crucial to recognize the significance of these historic buildings and to conceive of new ways to keep them central to Brooklyn's ever-evolving neighborhoods. ◻

Illustration by Jimmy Lu

Demanding Habitat
Community Mobilization in Medellín, Colombia

ELLIS CALVIN, ANNE KRASSNER, & NATALIE QUINN

In Medellin, Colombia, the neighborhood of Comuna 8 assembles around the eminent threat to their community posed by the city's proposal for a Green Belt to manage growth. Their banner reads: "Mr. Mayor, developing a project is not building with the community. We demand respect."

The procession begins, complete with chants and music to spread awareness and drum up excitement.
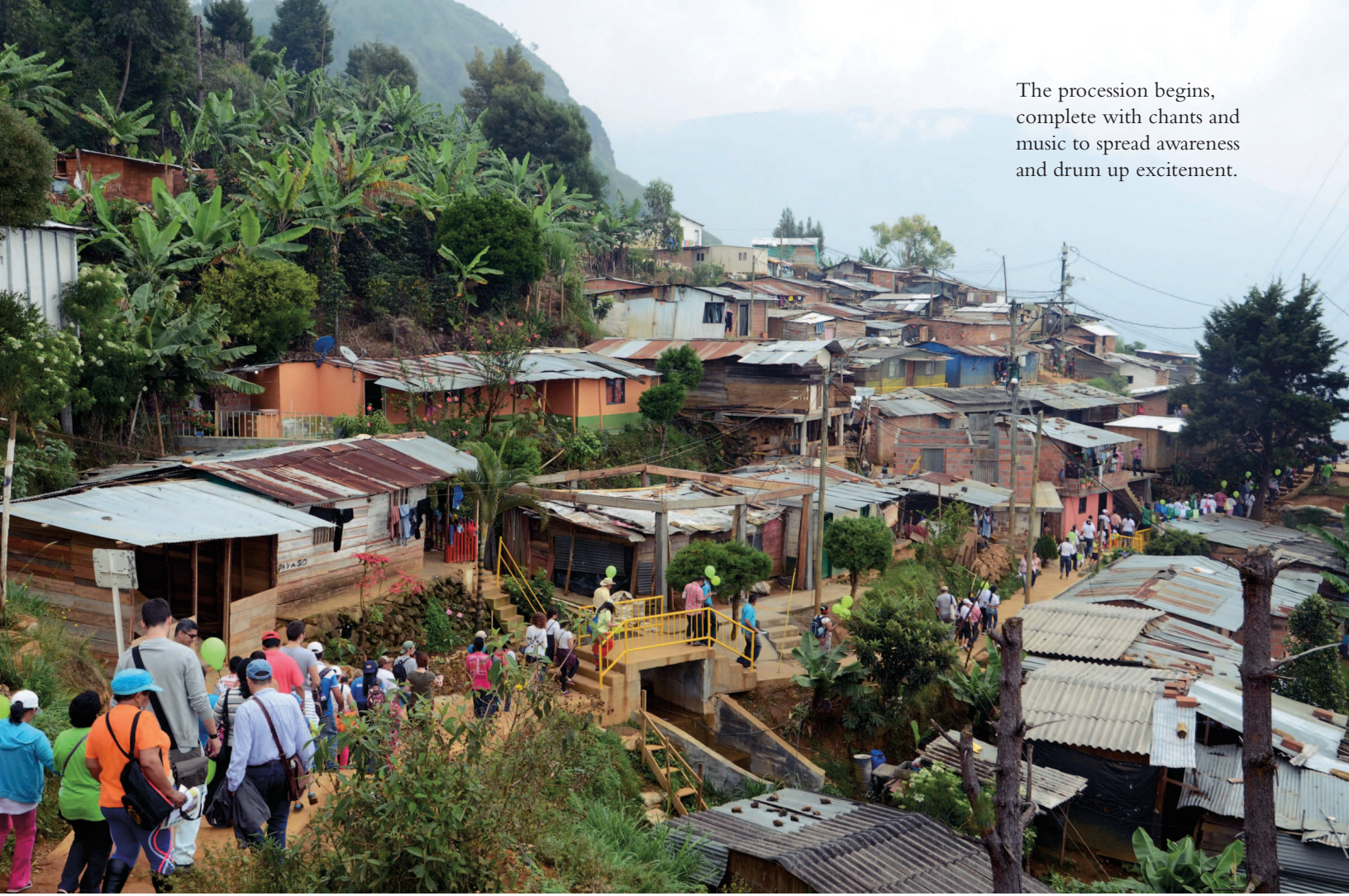
Comuna 8's demands include housing and permanence...

...and the development of their small community gardens into an agricultural program that will ensure everyone has access to food.

Above photo by Natalie Quinn

As the parade weaves through the neighbor-hood, more people join in. Everyone gets excited about the community's future.

The day culminates in
a shared meal, where
community leaders galva-
nize people of all ages to
become more engaged
and fight for the right to
remain in Comuna 8. ◘

Next Step, Kunafa

A Search for the Arab Diaspora in the United States

SARAH ALMUKHTAR & LISSA BARROWS

How can the Arab diaspora in America be characterized demographically and economically? Will this data help people find the best *kunafa* outside of the Middle East? The answer to the latter is no, not yet! However, we recognize the increasing socioeconomic and political relevance of the Arab-American diaspora and these maps are a start on the path to better understand this vibrant community.

Metropolitan areas are home to 94% of Arab Americans and the top five concentrations are located in Los Angeles, Detroit, New York/NJ, Chicago, and Washington, D.C. Lebanese Americans are the largest Arab American population in most states. However, the Egyptian American population is the largest Arab community in Georgia, New Jersey, and Tennessee.

TOTAL ARAB DIASPORA POPULATION IN THE CONTINENTAL UNITED STATES_2010
Total Arab Population: 1,517,664

TOP POPULATIONS

NEW YORK, NY	177,283
DETROIT, MI	123,292
LOS ANGELES, CA	97,976
CHICAGO, IL	64,429
WASHINGTON, DC	49,001

Sources: American Community Survey 2006-2010, ESRI
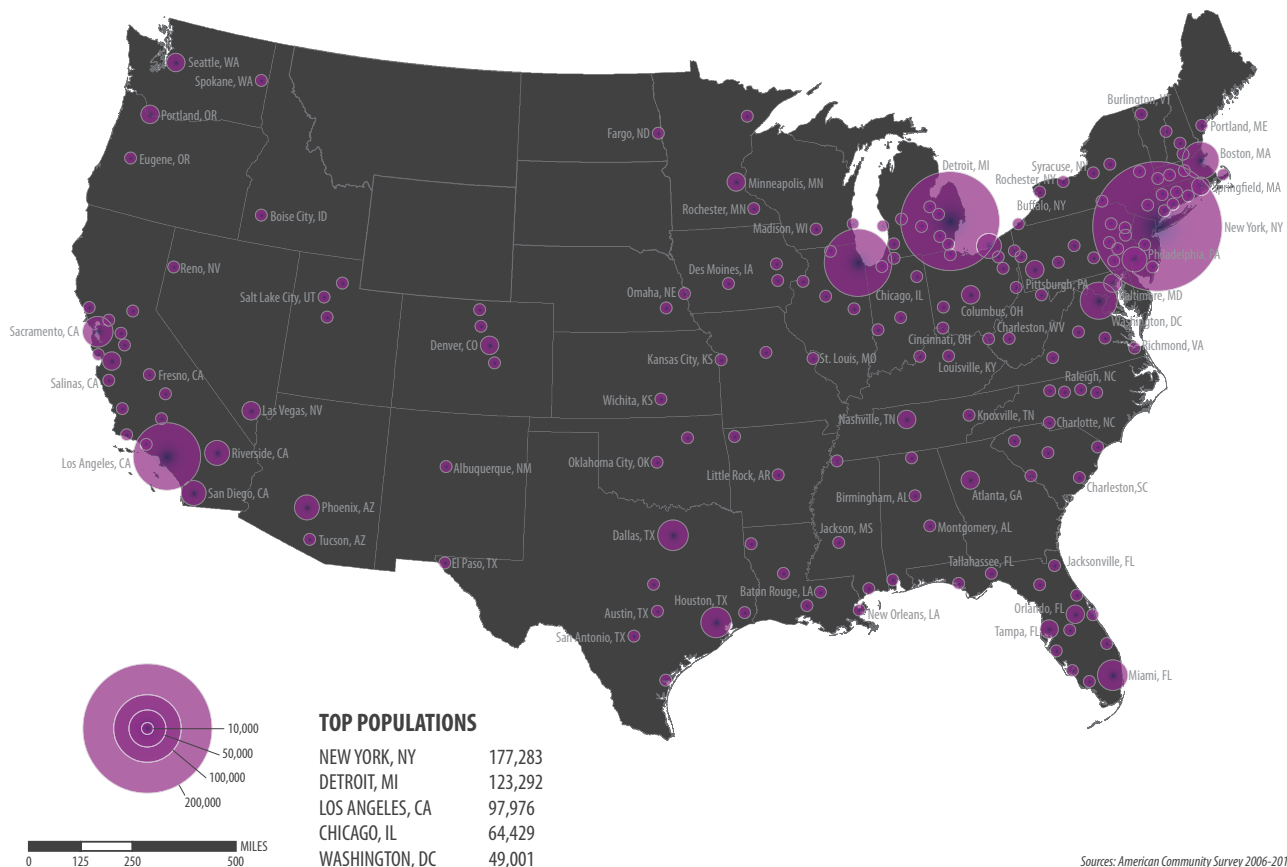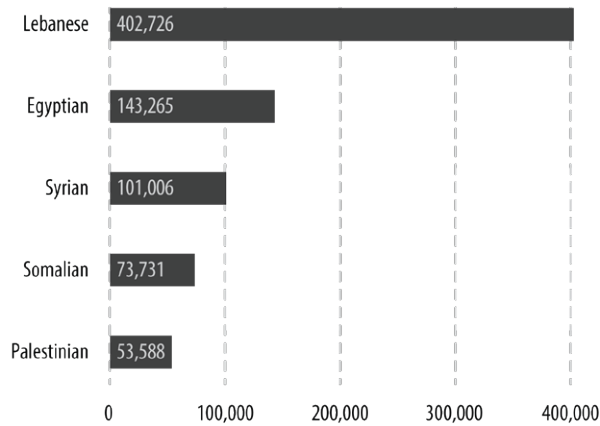
TOP 5 ARAB DIASPORA POPULATIONS IN THE UNITED STATES

Source: American Community Survey 2006–2010

In "Immigrants from the Middle East: A Profile of the Foreign–born Population from Pakistan to Morocco," Steven A. Camarota discusses an analysis of immigrants from the Middle East done by th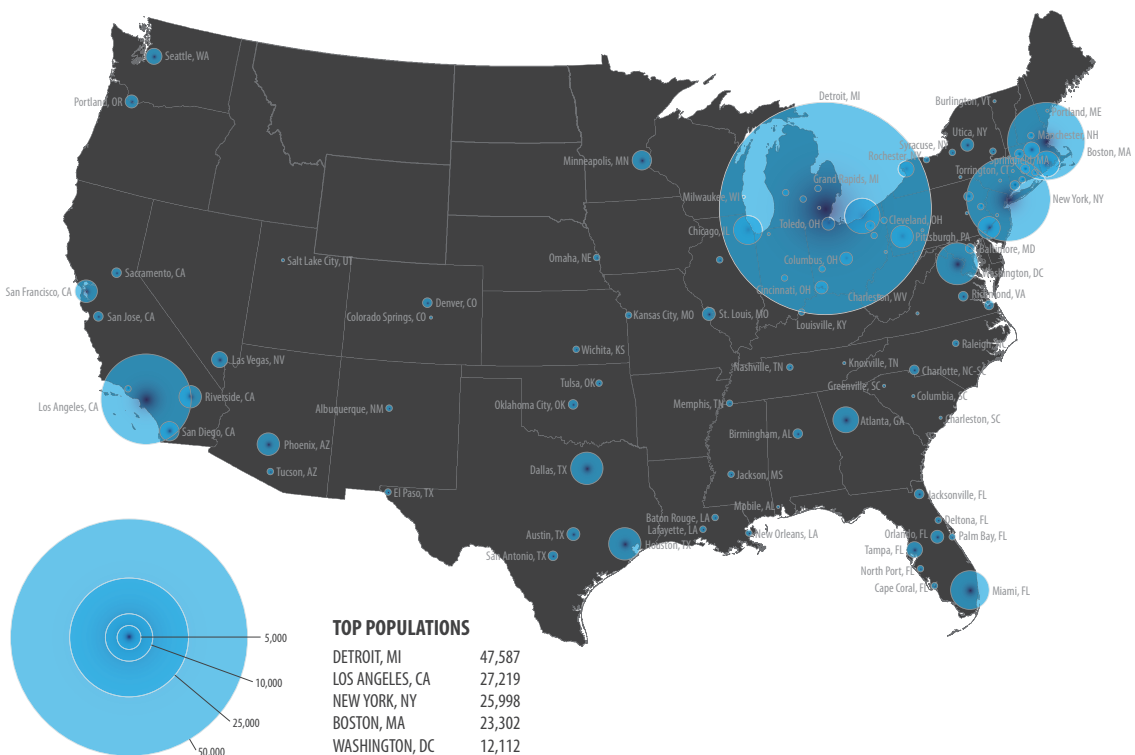e Center for Immigration Studies. The report found that people of Middle Eastern origin are one of the fastest growing immigrant groups in the US and are some of the most educated of immigrants with high citizen rates, affluence, and a naturally strong interest regard–ing Middle Eastern politics. American policy cannot ignore this increasingly significant urban population and its political and economic interests and impacts.

The analysis has economic, political, and social implications both at the level of each metro region as well as nationally. New perspectives include an understanding of the presence of Arabs in the US as a factor in the consideration of their roles and interests within metropolitan regions. Understanding the Arab diaspora demographically can also provide a base from which new research can be conducted. Our research may help others in the field or the general public to identify large Arab migrant groups in communities for analysis and public policy recommendations. ◪

LEBANESE DIASPORA POPULATION IN THE CONTINENTAL UNITED STATES

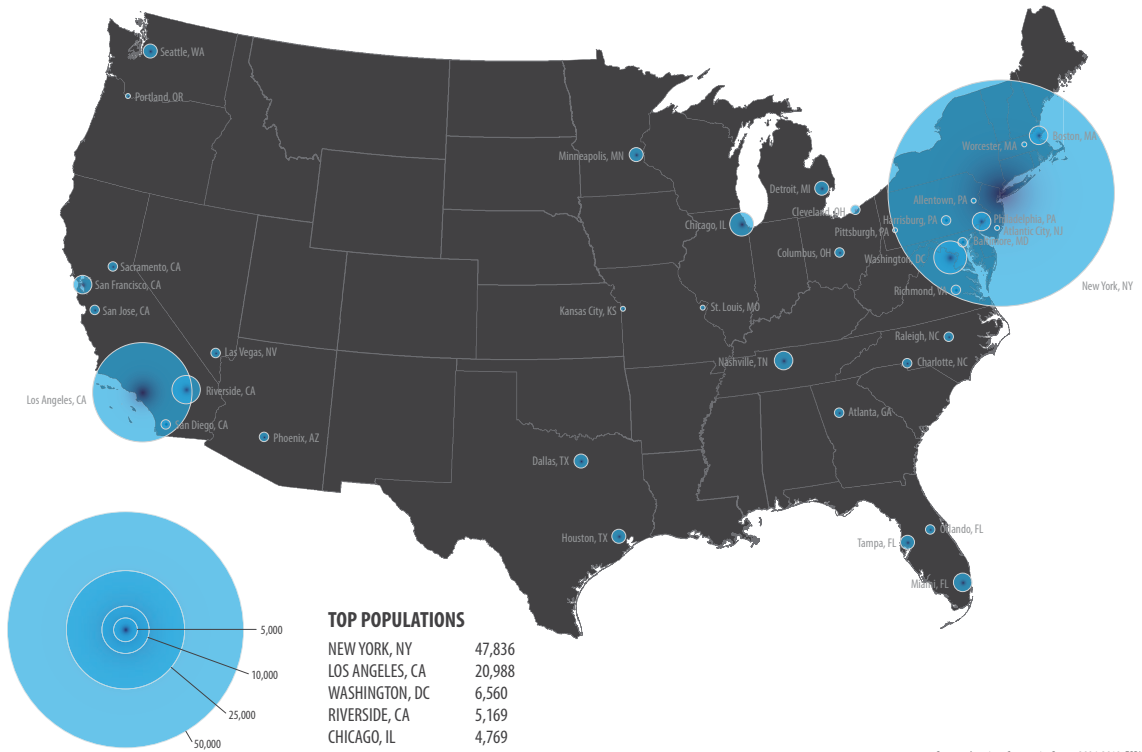Total Lebanese Population: 402,726

TOP POPULATIONS

DETROIT, MI	47,587
LOS ANGELES, CA	27,219
NEW YORK, NY	25,998
BOSTON, MA	23,302
WASHINGTON, DC	12,112

Sources: American Community Survey 2006–2010, ESRI

EGYPTIAN DIASPORA POPULATION IN THE CONTINENTAL UNITED STATES

Total Egyptian Population: 143,265

Seattle, WA
Portland, OR
Minneapolis, MN
Detroit, MI
Cleveland, OH
Chicago, IL
Columbus, OH
Sacramento, CA
San Francisco, CA
San Jose, CA
Kansas City, KS
St. Louis, MO
Las Vegas, NV
Riverside, CA
Los Angeles, CA
San Diego, CA
Phoenix, AZ
Dallas, TX
Nashville, TN
Houston, TX
Worcester, MA
Boston, MA
Allentown, PA
Harrisburg, PA
Philadelphia, PA
Pittsburgh, PA
Atlantic City, NJ
Baltimore, MD
Washington, DC
Richmond, VA
New York, NY
Raleigh, NC
Charlotte, NC
Atlanta, GA
Orlando, FL
Tampa, FL
Miami, FL

TOP POPULATIONS

NEW YORK, NY	47,836
LOS ANGELES, CA	20,988
WASHINGTON, DC	6,560
RIVERSIDE, CA	5,169
CHICAGO, IL	4,769

5,000
10,000
25,000
50,000

Sources: American Community Survey 2006-2010, ESRI

SYRIAN DIASPORA POPULATION IN THE CONTINENTAL UNITED STATES

Total Syrian Population: 101,006

Seattle, WA
Portland, OR
Minneapolis, MN
Grand Rapids, MI
Detroit, MI
Utica, NY
Rochester, NY
Worcester, MA
Boston, MA
Scranton, PA
San Francisco, CA
Chicago, IL
Toledo, OH
Cleveland, OH
Pittsburgh, PA
Columbus, OH
Baltimore, MD
Washington, DC
Indianapolis, IN
New York, NY
Denver, CO
Las Vegas, NV
Riverside, CA
Los Angeles, CA
San Diego, CA
Phoenix, AZ
Atlanta, GA
Dallas, TX
Jacksonville, FL
Houston, TX
Orlando, FL
Tampa, FL
Miami, FL

TOP POPULATIONS

NEW YORK, NY	22,159
LOS ANGELES, CA	10,073
DETROIT	5,366
ALLENTOWN, PA	4,943
BOSTON	4,801

5,000
10,000
25,000
50,000

Sources: American Community Survey 2006-2010, ESRI

Fueling China's Growth
Local Financing for Public Infrastructure

NANNAN XU

The largest high-speed rail and highway network, the longest subway system, and thousands of public utilities have been built in China seemingly overnight. While the central Chinese government plays a powerful role in economic growth compared to China's free market competitors, infrastructure financing, construction and operation is primarily the job of local government units. At the local level, the local financing platform, *Difang Rongzi Pingtai* (DRP), has been the most utilized financing tool local governments employ for rapid infrastructure development. This article will explore the central government's response to the debt acquisition and risk generated by rapid development.

To understand why DRP's have become such a popular financing tool, one first has to understand the Chinese government structure as well as the local context. The 1982 National Constitution of China defined local governments in three levels: provincial, county, and township. Additionally, 283 municipalities contain another level of sub-districts between the province and county.

Existing at all levels of the government are the People's Congresses, which serve as legislative bodies that are empowered to pass laws only at the provincial level and in select counties and townships. Instead,

the Communist Party of China (CPC) committees are the unofficial decision-making bodies with higher-level CPC committees that nominate lower level leaders such as the chief of the CPC committee, provincial governors, and municipality, county and township mayors.

Before the Reform and Opening of the 1980s, it was illegal for local governments to obtain loans. Infrastructure planning was done as a "state-level key project" or "provincial-level key project," and was funded by the corresponding government level. Until recently, local governments were not allowed by law to float bonds to finance projects and powerless to guarantee loans for institutions, thereby restricting the local government's fiscal capabilities.

However, because all land in China is owned by the states (except in rural village groups where the village owns its own land and urban areas where the local government has de facto ownership) local governments have large assets which they could capitalize. A booming real estate market allows local governments to gain tremendous revenue through the sale of use rights of state owned urban lands. According to the Ministry of Land Resources, revenue for land sale for all local governments in 2009 was 1.59

trillion Yuan, accounting for 25 percent of local governments' overall revenue.

The booming growth of urban construction investment companies, development companies and construction asset management companies in the 1980s reflects local governments' interest in establishing companies for the finance and construction of infrastructure. The Difang Rongzi Pingtai is defined by the Ministry of Finance as "local government owned companies that aim at infrastructure investment, construction and operation." Four identifying features of DRP's are that they are founded and controlled by the local government, the loans are guaranteed by the local government, public funds and land sales are given as capital, and they are primarily invested in infrastructure construction.

Currently, one of the largest lenders for DRP, the China Development Bank (CDB), owns 2.37 trillion Yuan worth of outstanding loans from DRP, or 26 percent of all DRP loans in the market. In 1998, the CDB started the earliest DRP for Wuhu, a *Diji Shi* or sub-district in the Anhui province, with the mission of paving roads, constructing a water supply system and building a landfill. Their innovation involved the bundling of prime and sub-prime infrastructure projects together to raise loans using a model which increased the speed of infrastructure development and construction for the City of Wuhu.

In 2008, the central government released their economic stimulus plan, which committed four trillion Yuan for investment over three years. Numerous infrastructure projects were promised from public housing to power grid improvements, new highways, high-speed rail lines, airports, public hospitals, schools, water treatment plants and landfills. However, only one quarter of the investment necessary for the projects was from the central government. Following the plan, the central bank and national banking regulatory body passed the PBC & CBRC Document No. 92 of 2009, which encouraged commercial and policy banks to invest in DRP's that are established by local governments. This served to legitimize DRP's as a tool for financing projects and caused the number of DRP's to grow.

In June 2009, there were 8,221 DRP's around the country with 4,907 owned by county-level governments. Each county-level government has an average of 1.7 DRP's. According to a survey done in 2011 by the National Audit Office (NAO) on local government debts, debt grew 61.92 percent in 2009. Another report by the China International Capital Corporation found that 51 percent of the 7.2 trillion Yuan of DRP loan debt in 2009 was borrowed.

Worried about repayment risk and economic overheating, the State Council released State Council Document No. 19 of 2010, which required almost all of the DRP's to stop taking loans and shut down once existing loans were paid off. Additionally, it required DRP's to diversify ownership and introduced private investing.

This was a turning point in the development of DRP's; the attempt to slow the speed of DRP growth and control loan risk seriously damaged the DRP's credit ratings and caused a capital chain rupture. According to a report by the NAO in May 2011, seven provincial, 40 municipal and 107 county-level governments were near bankruptcy.

Since the release of Document No. 19, there has been a 20 percent decrease in the number of DRP's nationwide, yet 73 percent of all loans to finance civil infrastructure, transportation, cost of land acquisition, and construction of public housing and public schools are still utilizing DRP's, as local governments have no alternatives for infrastructure development funding.

Since DRP's rely on selling land use rights as guarantee for loan repayment, the repayment ability of DRP loans is tied to the real estate market. Among local government debt in 2010, 71.9 percent is not due until after 2016. Additionally, 78 municipal-level governments and 99 county-level governments had a debt ratio in excess of one hundred percent, which causes significant risks.

If ten percent of the DRP loans at the end of 2009 were non-performing, China's commercial banks' average non-performing loan ratio would grow from 1.58 percent to 3.92 percent. If 20 percent of the DRP loans were non-performing, China's average non-performing loan ratio would be 6.27 percent. This could seriously deteriorate the asset quality of commercial banks.

Generally speaking, Difang Rongzi Pingtai has helped to mitigate the impact of the global economic crisis while also increasing the rate of infrastructure development. This has enabled China's rapid urbanization and helped economic development for future decades. However, while DRP's are companies, they are also a de facto government authority controlled by local Communist Party officials. GDP-based official evaluation-promotion systems, huge out-of-budget land sale revenue, and lack of legislative supervision have contributed to the DRP's over-response to growing infrastructure demand while increasing investment risk.

The central government, being aware of the potential risk, has initiated an experiment to enable select localities to float local bonds. Shanghai, Zhejiang province, Guangdong province and Shenzhen are among the selected localities where this new funding mechanism is being tested. An amendment to the Budget Law is still being drafted but, in its preliminary phases, it shows that all government revenue and expenditures will be required to be listed in their fiscal budget report and be submitted for the local legislative body's approval. With diversified financing tools and more powerful supervision by the legislative body, local investment decision-making processes will be more democratic and comprehensive, while the speed of financial decision-making will slow down. ◘

Rights in Public Space
The Cost of Happiness in Bryant Park

AMY YANG

I love Bryant Park. It has trees that provide the perfect sun-to-shade ratio, lots of perfectly maintained green grass, coffee, seats and chairs one can move around to one's heart's content, the Reading Room, ping pong, more coffee, and a view of the gorgeous New York City Public Library – not to mention proximity to many popular Midtown amenities. I can always find a quiet spot for myself without losing the excitement of the big city buzz.

But just as I've thought I've found my perfect future life partner only to discover skeletons in the closet, there are a few skeletons in Bryant Park's closet. Bryant Park used to be a hub for the homeless. Then in 1988, things started to change: the creation of private security staff and renovation of the park effectively shooed the undesirables away while the establishment of the Bryant Park Corporation and 34th Street Partnership made sure it stayed that way, transforming it into the "heaven" it is today.

But do the ends justify the means?

First, let's contextualize these terms. The end is a beautiful, enjoyable park. The means are to evict undesirable users and keep them out in what might be understood as a violation of human rights. Now that I've opened that can of worms, let's scale up the conversation. It's written in our Declaration of Independence that we should be allowed the pursuit of happiness. The United Nations' Universal Declaration of Human Rights says, "Everyone has the right to life, liberty, and security of person." People fight for their basic rights, their human rights, with the assumption that these rights are guaranteed at any cost – and rightly so.

In my own personal pursuit of happiness, I find that parks are essential. The more awesome the space, the happier I am; therefore access to awesome public spaces is my right. What makes a space awesome? I'll start a list: cleanliness, places to sit, people to watch, close proximity to food (or coffee), green grass, leafy trees, perhaps a pop-up market in the corner and an open field where kids and adults do their respective sunny-day activities. This, of course, sounds a lot like Bryant Park.

Illustration by Jimmy Lu

But what are the costs to guarantee my right to this public space?

If something has a cost, then someone has to pay for it. Surely in these hard economic times, the government cannot afford such luxuries. So, to bring all of these lovely things into a public space, private money is called upon. Private money could be in the form of a BID, or perhaps a corporation wanted to build the highest skyscraper in New York and got the FAR approved by agreeing to provide some public open space near its building. My favorite park in New York City, Bryant Park, is supported by a BID. That's the only way they can afford to keep the space clean and well programmed.

However, not all payment comes in the form of money. Before all that money was invested into Bryant Park, it was not pretty. Holly Whyte wrote in 1979, "If you went out and hired the dope dealers, you couldn't get a more villainous crew to show the urgency of the [present Bryant Park] situation." Included with these drug dealers were the homeless. While different people may have different opinions of these groups, people are people. Once the park began improving and the area began gentrifying, the "villainous crew" was pushed out and swept into another shadowy corner of the city. The reality, though, is that the "villainous crew" is made of fellow American citizens (for the most part), but even more importantly, fellow human beings. Again, people are people.

The UN Declaration of Human Rights would argue that the villainous crew and I are both entitled to particular unalienable human rights. I am lucky that the things I want in a public space happen to align with the Bryant Park Corporation's objectives. However, they are completely opposite to what the villainous crew would need in a public space. So to get what I want, I have to allow the villains to be swept away. The price paid for my happiness could be someone else's livelihood.

For better or worse, just because Bryant Park has skeletons doesn't mean I'll fall out of love with it. Perhaps this is why the villains remain unrepresented in the shadows. ◘
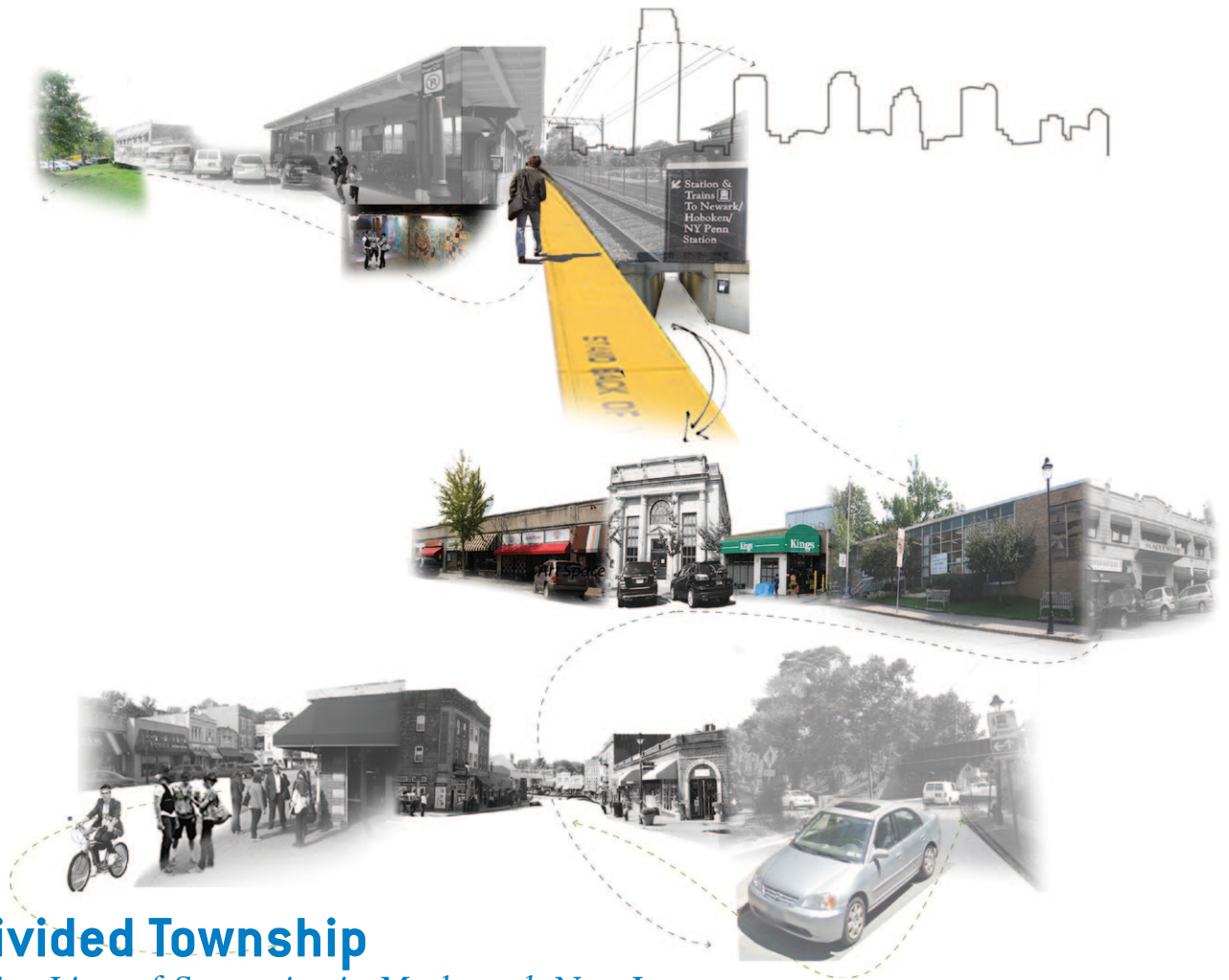
A Divided Township
Blurring Lines of Segregation in Maplewood, New Jersey

ANKITA CHACHRA

With new challenges and changes in ecological cycles, and the threat of climate change and economic fluctuations, there is a need for more cohesive communities. Spatial segregation of class and race impacts the sense of community and leaves communities vulnerable. It has thus become more important for communities to become integrated and remove segregation based on race and social class. Maplewood, a township in New Jersey has an interesting pattern of spatial segregation where a shift in demographics, income levels and housing stock and value clearly based on the divide of one major avenue – Springfield Avenue. While the township's leaders have sought to blur this demarcation, the separation manifests in the daily life of Maplewood residents.

SOCIAL SEGREGATION

For the township, one of the primary concerns is its lack of growth. Although it is not significantly shrinking, the township hopes to grow by encouraging integrated development. Ethnically, Maplewood's population is predominantly White at 58.7 percent, seconded by Black at 29.7 percent and Hispanic, Asian and others constituting the remaining 11.6 percent. It is evident from demographic maps that ethnicities are

Illustration by
Vanessa Espaillat

grouped following a pattern of separation at Springfield and Boyden Avenues.

This demographic divide can be observed in the public schools as well. Even though the township shares its school district with neighboring South Orange, Maplewood houses six schools out of the total of nine. The grouping of similar ethnic groups in schools is clear, with the exception being Maplewood Middle School. For example, Tuscan Elementary school has the highest number of White students, while Columbia High School and Seth Boyden Elementary School have higher percentages of Black students.

Ethnic separation in Maplewood can be traced back to the early 1980's when the township began to diversify. In May 1990 the New York Times highlighted a significant racially-charged incident that took place in 1985 and the residents' reaction that followed:

> ..Several neat middle-class homes were defaced by racial epithets. Tires were slashed and fingers heatedly pointed. Spray painters left their marks, indicating that black families were not wanted in this town of 23,000 right next to Newark. 'Go back to Newark where you belong,'

they had scrawled…residents decided to talk about what happened rather than try to sweep it under the rug…

The Maplewood community leaders subsequently came together to condemn the violent and unethical act. The reaction culminated in the Harmony Day celebration at Memorial Park, across from Maplewood's township hall. A plaque was bolted to a 70-foot-high elm stating, ''This tall elm tree witnessed the May 18, 1986 Harmony Day Celebration in which thousands of citizens bore witness to this area's rich tradition of racial and ethnic diversity, its sturdy roots and soaring branches typify the unity of our citizens expressed that day.''

Furthermore, the Township of Maplewood and the Township of South Orange established a common platform named the South Orange/Maplewood Community Coalition on Race in 1996 to encourage dialogue and develop constructive solutions to address stagnant property values, perceived white flight and a belief that the quality of their school system was in decline. The mission of the coalition is to achieve and sustain the benefits of a thriving, racially integrated and truly inclusive community which serves as a model for the nation. It holds events that encourage interactions between different races such as Achievement Gap Study Series & Workshops, Community Building and Integration Through the Arts, Conversations on Race, Community Support Interfaith Dialogues, Strong Neighborhoods & Schools, and more. It has also been recruiting diverse volunteers as a resource for all local organizations developed and administered by the Neighborhood Associations & Civic Life Committee.

To deal with residential segregation, the South Orange/Maplewood Community Coalition on Race provides free tours for prospective homebuyers by trained volunteers from the Touring Committee. It also advertises through local and national media, highlighting the quality of life in an integrated community. Information sessions for realtors, in accordance with the Fair Housing Act, are held to help them market the township and to ensure that prospective homebuyers of all races are shown available homes and are welcomed in every part of the two townships. The Community Coalition also provides financial incentives to encourage homebuyers to make pro-integrative purchasing decisions.
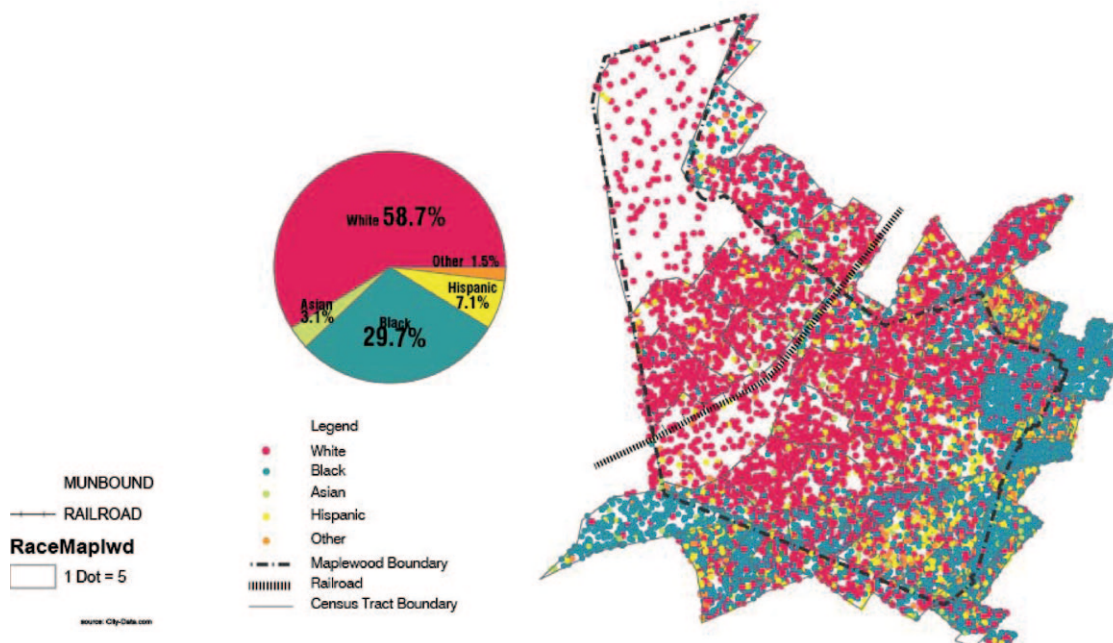
ECONOMIC SEGREGATION

Springfield Avenue and the Maplewood Village district are both designated as commercial, yet the type of commercial activity supported by each is very different.

Maplewood Village is considered the central business district of the township. It is designated a Retail Business zone and it is intended to promote a walkable mixed-use environment typically found in an established suburban central business district. Maplewood Village has an eclectic collection of restaurants and boutique shops. It also hosts the township's movie theatre, a Kings Supermarket and the post office. The Village caters to affluent users and strives to attract customers from nearby towns like Millburn and South Orange. It accommodates the most celebrated events in the township, contrasting those held at Springfield Avenue, including the Chocolate Walk, Restaurant Week, Holiday Open House Girls' Night Out, Summer Sidewalk Sale, Moonlight Fridays, Customer Appreciation Day, Halloween Parade, and Dickens Village. The mayor describes Maplewood Village as an asset to the township in the 2012 State of the Township address:

…There is nothing that compares to Maplewood Village, our quaint, vibrant downtown

RACES IN MAPLEWOOD
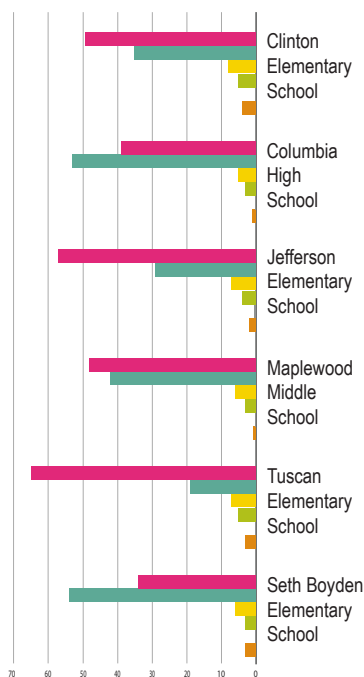

Legend
- White
- Black
- Asian
- Hispanic
- Other
- — ·· — Maplewood Boundary
- Railroad
- Census Tract Boundary

MUNBOUND
RAILROAD
RaceMaplwd
1 Dot = 5

source: City-Data.com

White 58.7%
Other 1.5%
Hispanic 7.1%
Asian 3.1%
Black 29.7%

shopping district. You can easily stage an "Around the World" progressive dinner there with all the different food establishments we now have. Here's the list: Italian, French, Mexican, Chinese, Indian, Thai, Middle Eastern, Greek, Japanese, Irish and American. You can also get ice cream, frozen yogurt, a slice of pizza and a cup of coffee. Oh, and don't forget cupcakes and cookies.

The commercial area on Springfield Avenue, on the other hand, is zoned as Highway Business and permits a wide variety of commercial uses including automotive industries such as car dealerships and repair facilities. Until recently it was a declining commercial strip of mostly small auto shops and little diversity of use. It had a poor image, lacked visual appeal and amenities, and an aging building stock, a shortage of parking and a property base composed mainly of small and shallow lots. Recently, Springfield Avenue has been redeveloped and revitalized with better roads, pedestrian sidewalks, on street parking, and street lights as well as a new Walgreens convenience store. The deteriorating condition of Springfield Avenue was the consequence of residential segregation, corresponding to a lack of investment in the lower income part of the township. In comparison to Maplewood Village, Springfield Avenue only hosts three events – Black History Day, Classic Car Show and Taste for the Cure Event. The recent investments made towards Springfield Avenue have been partially successful in remaking its image, though it still lacks commercial diversity. The mayor describes the investment in Springfield Avenue in the 2012 State of the Township address thus:

…Speaking of Springfield Avenue, in November we finished ten years of work on the roadway, creating a place to go rather than just to pass through…Without any action, we would have a declining commercial strip, producing less and less taxes and becoming more of a dividing line, separating parts of town based on race and economic status. We now have an Avenue whose vitality is growing and boosting property values in adjacent residential neighborhoods.

CONCLUSION

Maplewood is one of the few townships that have made a conscience attempt to deal with segregation. Whether it is through groups like Community Coalition on Race, deliberate investment at areas that demarcate segregation, or simple efforts to promote integration, these attempts are not observed in factual data analysis like the racial diversity map or the school charts. This issue is present in many towns that have historically faced the wrath of racialism and economic disparity. It is a topic of discussion that is haunting and hardly ever discussed openly. While at a few meetings with the Mayor of the township and his team, each time the topic was brought up it was discussed meekly only to make way for 'more important' issues like the re-development of Maplewood Village. As designers, planners, and policy makers, we need to account for these predicaments in our communities. Decades of disparity have led to a scenario which may take years to undo, yet it is time we acknowledge this and take another step towards integration. ◼

E-cube-librium

Visualizing Global Issues

DAMON LAU, CHENG LEE, REBECCA MARRIOTT, & KIMBERLY NGUYEN

E-cube-librium is a new interactive tool for visualizing and evaluating imbalanced world development. It was the winning project at the global 2011 Visualizing Marathon, a competition held by *visualizing.org* to challenge students to design innovative tools that use data to address global issues. By configuring social, economic, and environmental data, the cube represents a country's growth in a visualization inspired by the Rubiks puzzle. The 3D extrusion on each cube face is a sustainability indicator, showing volumes where data increases or decreases. We are able thus to quickly

KEEPING E[CUBE]LIBRIUM

RELATED ECONOMIC INDICATORS ARE SET ON OPPOSITE FACES OF THE CUBE AND AS ONE SIDE EXPANDS, THE OTHER MUST EITHER SHRINK AND LOOSE EQUILIBRIUM OR BREAK FROM CURRENT MODELS OF DEVELOPMENT

EQUILIBRIUM

GDP PER CAPITA PPP

URBANIZATION

CO₂ EMISSIONS

HEALTH EXPENDATURE

LIFE EXPECTANCY /UNDERNOURISHMENT

WATER ACCESS

INCOME INEQUALITY

UNEMPLOYMENT

TECH WEB+CELL

DEFORESTATION
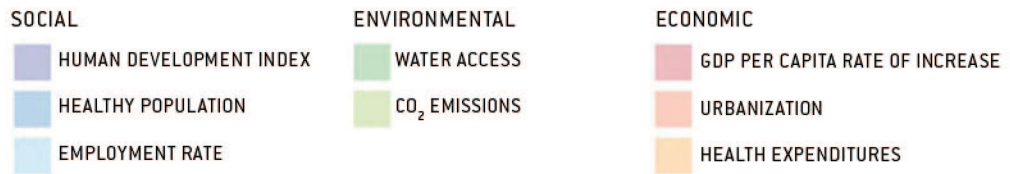
HUMAN DEVEL-OPMENT INDEX

draw connections and visually identify how each factor affects the equilibrium of the entire system. In general, outward protrusions are positive indicators of growth, and vice versa. Our "world database" (accessible at www.visualizing.org/visualizations/e-cube-librium) allows us to compare countries to one another and understand how each country's e-cube-librium changes over time.

Our code itself is flexible, parametric, and has the potential to be adapted as an interactive tool for a range of users who wish to visualize the relationship between metrics and indices. Since winning the grant, we have continued to develop our tool by analyzing data at the scale of the city. Specifically, we have been testing E-cube-librium on New York City neighborhood data and attempting to visualize the balance between metrics, which contributes to economic, social, and environmental sustainability.

We are also currently designing a human-scale interactive public installation based on the E-cube-librium concept. The goal of the installation is to turn typically abstract and vast data into something tangible and, in the process, raise awareness of global socioeconomic conditions. We are using the Maker-bot in order to three-dimensionally print and display the data as an experience. ◨

SOCIAL
- HUMAN DEVELOPMENT INDEX
- HEALTHY POPULATION
- EMPLOYMENT RATE

ENVIRONMENTAL
- WATER ACCESS
- CO_2 EMISSIONS

ECONOMIC
- GDP PER CAPITA RATE OF INCREASE
- URBANIZATION
- HEALTH EXPENDITURES

BRAZIL

1990 - 1995   1995 - 2000   2000 - 2005   2005 - 2010

CHAD

1990 - 1995   1995 - 2000   2000 - 2005   2005 - 2010

CHINA

1990 - 1995   1995 - 2000   2000 - 2005   2005 - 2010

HAITI

1990 - 1995   1995 - 2000   2000 - 2005   2005 - 2010

INDIA

1990 - 1995   1995 - 2000   2000 - 2005   2005 - 2010

ITALY

1990 - 1995   1995 - 2000   2000 - 2005   2005 - 2010

LUXEMBOURG

1990 - 1995   1995 - 2000   2000 - 2005   2005 - 2010

PHILLIPPINES
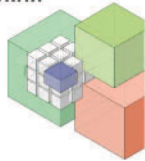
1990 – 1995   1995 – 2000   2000 – 2005   2005 – 2010

QATAR

1990 – 1995   1995 – 2000   2000 – 2005   2005 – 2010

RWANDA

1990 – 1995   1995 – 2000   2000 – 2005   2005 – 2010

SRI LANKA

1990 – 1995   1995 – 2000   2000 – 2005   2005 – 2010

USA

1990 – 1995   1995 – 2000   2000 – 2005   2005 – 2010

Making Economic Opportunity
Makerspaces in Detroit

SEAN ANSANELLI

During the mid-1980s, spaces began to emerge across Europe where computer hackers could convene for mutual support and camaraderie.   In the past few years, the idea of fostering such shared, physical spaces has been rapidly adapted by the diverse and growing community of "makers", who seek to apply the idea of "hacking" to physical objects, processes, or anything else that can be deciphered and improved upon. Some 1,100 hackerspaces have now been established globally.

A hackerspace is described by *hackerspaces.org* as a "community-operated physical space where people with common interests, often in computers, technol-ogy, science, digital art or electronic art, can meet, socialize, and/or collaborate." Such spaces can vary in size, available technology, and membership structure (some being completely open), but generally share community-oriented characteristics. Indeed, while the term "hacker" can sometimes have negative connota-tions, modern hackerspaces thrive off of community, openness, and assimilating diverse viewpoints – these often being the only guiding principles in otherwise informal organizational structures.

In recent years, the city of Detroit has emerged as a hotbed for hackerspaces and other DIY ("Do-It-Yourself") experiments. Several hackerspaces can already be found throughout the city and several more are currently in formation.[1] Of course, Detroit's attractiveness for such projects can be partially attributed to cheap real estate, which allows aspiring hackers to acquire ample space for experi-mentation. Some observers have also described this kind of making and tinkering as embedded in the DNA of Detroit's residents, who are able to harness substantial intergenerational knowledge and attract like-minded individuals.

Hackerspaces (or "makerspaces") can be found in more commercial forms, but the vast majority of spaces are self-organized and not-for-profit. For

Photos by Brad McMahon (Flikr)

[1]While not all are listed online, hackerspace can be found via word of mouth, and new spaces are emerging to fill a variety of local needs – from music produc-tion to cultural empowerment.

example, the OmniCorp hackerspace operates off member fees to cover rent and new equipment, from laser cutters to welding tools. OmniCorp also hosts an "open hack night" every Thursday in which the space is open to the general public. Potential members are required to attend at least one open hack night prior to a consensus vote by the existing members for admittance; no prospective members have yet been denied.

A visit to one of OmniCorp's open hack nights reveals the vast variety of activity and energy existing in the space. In the main common room alone, activities range from experimenting with sound installations and learning to program Arduino boards to building speculative "oloid" shapes - all just for the sake of it. With a general atmosphere of mutual support, participants in the space are continually encouraged to help others.

One of the most active community-focused initiatives in the city is the Mt. Elliot Makerspace. Jeff Sturges, former MIT Media Lab Fellow and Co-Founder of OmniCorp, started the Mt. Elliot project with the aim of replicating MIT's Fab Lab model on a smaller, cheaper scale in Detroit. "Fab Labs" are production facilities that consist of a small collection of flexible computer controlled tools that cover several different scales and various materials, with the aim to make "almost anything" (including other machines).[2] The Mt. Elliot Makerspace now offers youth-based skill development programs in eight areas: Transportation, Electronics, Digital Tools, Wearables, Design and Fabrication, Food and Music, and Arts. The range of activities is meant to provide not only something for everyone, but a well-rounded base knowledge of making to all participants.

While the center receives some foundational support, the space also derives significant support from the local community. The location, for example, is in a church basement provided by an enthusiastic minister who has embraced the novel approach to youth engagement offered through making. The space has also attracted a more diverse crowd than just young hobbyists, with retirees being heavily involved in mentoring and overall operations. For example, one retired machinist took it upon himself to build the entire woodshop.

Sturges emphasizes that tapping into existing or emerging community energy is essential for such a place to thrive. This strategy makes outreach more effective and allows the project to dovetail existing support networks with positivity. In the two years since the Makerspace was founded, Sturges estimates that around 10,000 Detroit kids have been exposed to the possibilities embedded in technology and entrepreneurship by means of the Makerspace itself, open hack nights, and a stand set up weekly at the city's Eastern Market. Sturges sees this as just the beginning. He is working with Blair Evans, a local superintendent and director of a new community Fab Lab called "Incite Focus," to finalize plans which will create additional

[2]*Key items in a fab lab include: a laser cutter/ plasma cutter/water jet cutter, 3-axis CNC machines, Rapid Prototyper (3D printer), and Printed circuit board milling. As Gershenfeld explains, "Just as a mini-computer combined components – the processor, the tape drive, the keypunch, and so forth – that were originally housed in separate cabinets, a fab lab is a collection of commercially available machines and parts linked by software and processes we developed for making things."*

makerspaces throughout the city and connect the space's youth-based programming directly to school curriculums.

FUTURE POSSIBILITIES

The growing interest in and development of hacker/makerspaces has been explained, in part, as a result of the growing maker movement. Through the combination of cultural norms and communication channels from open source production as well as increasingly available technologies for physical production, amateur maker communities have developed in virtual and physical spaces.

Publications such as *Wired* are noticing the transformative potential of this emerging movement and have sought to devote significant attention to its development. Chief editor Chris Anderson recently published a book entitled *Makers*, in which he proclaims that the movement will become the next Industrial Revolution. Anderson argues such developments will allow for a new wave of business opportunities by providing mass-customization rather than mass-production.

My contention, therefore, is not that the transformative potential of these trends goes beyond new business opportunities or that it has the ability to gain a competitive edge for economic growth. Rather, these trends demonstrate the potential to actually transform economic development models entirely.

1. NEW FORMS OF COMMUNITY ENGAGEMENT

Apparent throughout the literature on the maker movement and noticeable during any visit to a maker lab is the profound personal development that occurs when people begin to figure out and create things themselves. First, going beyond pre-made solutions encourages creative problem solving. Second, by embracing collaborative processes, makers also become much more accustomed to working with others, even drawing mutual support and inspiration from one another.

Projects like the Mt. Elliot Makerspace represent shifting perceptions of learning. Arguing that our current education system is overly top-down and geared toward narrow specialization, many maker advocates emphasize that a more well-rounded and participatory experience is an appropriate approach for human development. As Neil Gershenfeld, creator of MIT's Center for Bits and Atoms, explains,

> The common understanding of 'literacy' has [been] narrowed down to reading and writing, but when the term emerged in the Renaissance it had a much broader meaning as a mastery of the available means of expression…Such a future really represents a return to our industrial roots, before art was separated from artisans, when production was done for individuals rather than masses.

Enabling such forms of production provides an interesting alternative to the division of labor doctrine espoused by Adam Smith. With excessive division of labor, individuals stand to lose comprehension for more complex systems and large segments of the population are confined to repetitive tasks rather than having the ability to create. Perhaps most significantly, a shift to a maker-oriented society could offer a cultural counter point to the reigning power of consumerism. Rather than choosing from pre-packaged forms or finding identity through the things we own, becoming more active producers could enable new perceptions of agency and aspiration.

2. A RECONCEPTUALIZATION OF HOW THINGS ARE MADE

Open-source inspired practices and modes of commons-based peer production can now be seen in a wide range of areas, from scientific research and innovation platforms to crowd funding mechanisms and financial management. The potential exists for open collaboration to be harnessed to complete all phases of complex projects including input, design, evaluation, marketing and more. The culture of making represents the adoption of these practices in physical production.

In this process, the designs for physical objects are widely shared through online networks and open for all to download, collaborate from, and improve upon. Through these processes, rates of innovation increase dramatically and products can be quickly altered to meet different needs or local conditions.

These innovative modes of production are not only becoming enabled by new practices and norms, but also by emerging technologies. While many spaces continue to utilize conventional tools, more advanced technologies are becoming increasingly affordable and user-friendly. Three-dimensional printers, which produce physical objects by layering materials such as plastic, ceramic or even tissue, perhaps most vividly demonstrate the potential of increasingly widely used technologies. While originally thought to be a breakthrough for rapid prototyping of products, 3-D printers have quickly advanced to create complex objects such as an ultra-efficient vehicle in forty parts rather than thousands, or semiconductor chips a hundred times faster than the previous state of the art technology. Experts proclaim that such technologies will eventually be on every individual's desktop, but shared use from a community could be even more immediately attainable (and arguably more appropriate).

The most equipped spaces can be described as Fab Labs, where technologies of fabrication are becoming increasingly accessible as interfaces are evolving to include a broader user-base and start-up costs continue to decline. Fab Labs hold tremendous potential for enabling new community development strategies. Again, as Gershenfeld describes, "for all the attention to the 'digital divide' in access to computers between developed and developing countries… there is an even more significant divide in access to tools for fabrication and instrumentation."
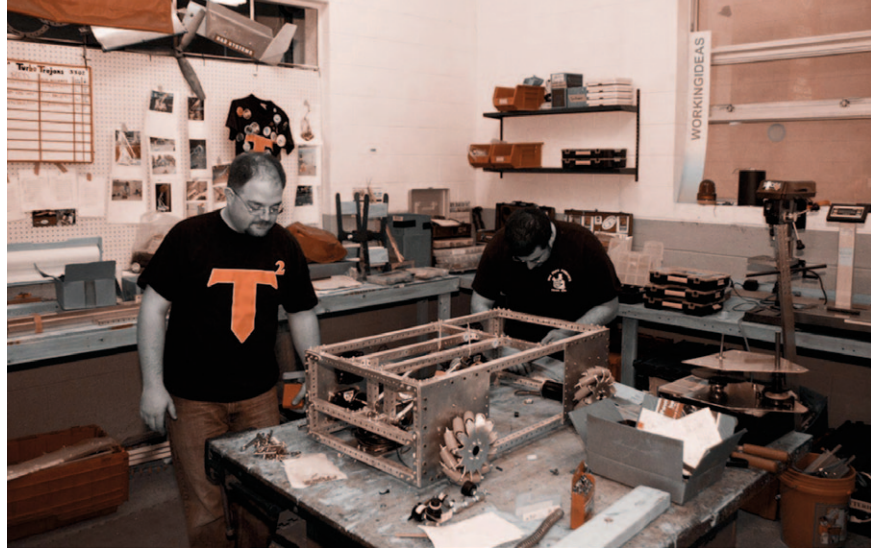

3. POTENTIALS FOR COMMUNITY SCALE PRODUCTION

With such rapid user-adoption and increasing availability of technology-enabled products that are generally perceived to be limited to the context of mass production, it is worth considering how the maker culture might actually impact community economic development. Could the increased access, flexibility, and participation of these practices make economies of scale and global supply chains less relevant?

While these considerations are still somewhat speculative, planners could play a key role in preparing for and even enabling these possibilities. Many parallels can be drawn to the recent embrace and support for local agriculture initiatives as both movements stand to generate similar benefits through greater sustainability, community-building and local economic development. Like urban agriculture, makerspaces and open-technology forums often stand at odds with current market logic, but look to transform how we think about production and consumption altogether. By advocating for greater support and facilitating coordination, planners could help reach transformative potentials.

FURTHER POSSIBILITIES IN DETROIT

In collaboration with Incite Focus, the Boggs Center, and a range of other community organizations, Jeff Sturges is seeking to create a "resilient network" similar in nature, he explained, to the wireless mesh networks the Detroit Digital Justice Coalition is seeking to create in low-income Detroit neighborhoods. Makerspaces could thus serve as key community infrastructure. Sturges emphasizes that makerspaces are a way to concentrate public and private resources to make Detroit a fertile ground for bringing up the next generation of innovators.

Through the "resilient network" described by Sturges, ordinary people could gain access to the different technologies at each site and circulate ideas throughout the city. With such potential, planners could serve a key role in facilitating collaboration with other community development practitioners, thereby helping to establish communication channels between these spaces and the general public. ◻
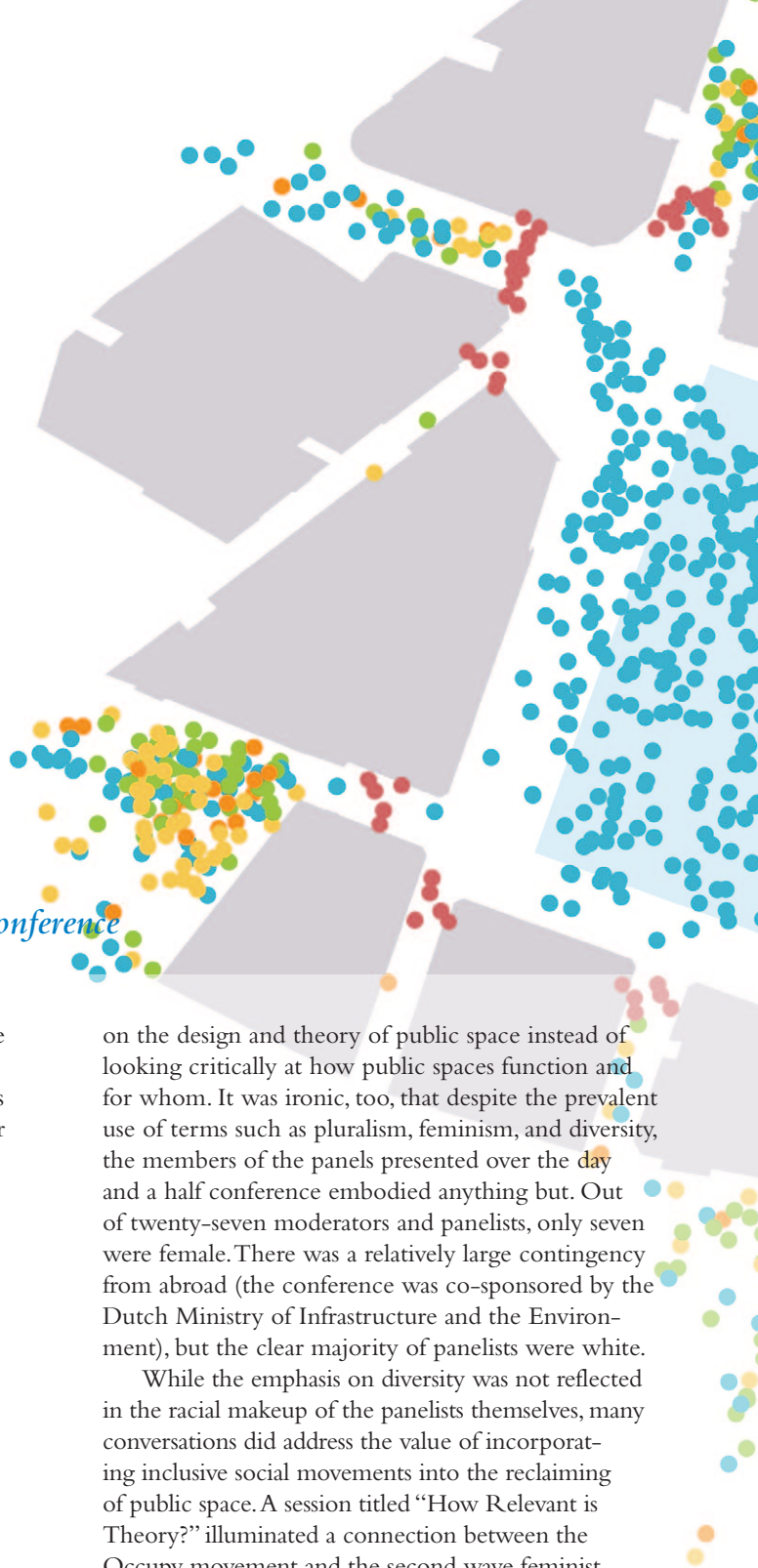
Diversity in Public Space

GSD's "Putting Public Space in its Place" Conference

STEPHANIE SHELLOOE

How do we define public space? Iris Marion Young, the late Professor of Political Science at the University of Chicago, posited, "[in] open and accessible public spaces and forums… one should expect to encounter and hear from those who are different, whose social perspectives, experience and affiliations are different." Perhaps this is too idealistic a definition, but its emphasis on diversity, which makes city life so invigorating, is important and often discussed but rarely represented in planning.

A recent conference at the Harvard Graduate School of Design, organized by Professor Jerold S. Kayden and titled "Putting Public Space in its Place," attempted to explore the current perspectives in the theory, design, and advocacy of public space both from academics and practitioners. The description of the conference states that "in a digital age, people will reflect upon 2011 as the year in which physical public space reclaimed its lofty status in the public sphere," citing protests and revolutions like Occupy Wall Street and Tahrir Square that were rooted in public space as evidence that place still matters. Much of the response to the Occupy Wall Street movement in the realm of planning academia has centered not on how to reform the massive structural income inequality in our country, but rather the ways in which people can and can't use public space and, in particular, the zoning anomaly of privately-owned public space. Planning discussion has not addressed the content of the protest, but the issues that were raised by the form that it took. This conference mirrored that preference, focusing

on the design and theory of public space instead of looking critically at how public spaces function and for whom. It was ironic, too, that despite the prevalent use of terms such as pluralism, feminism, and diversity, the members of the panels presented over the day and a half conference embodied anything but. Out of twenty-seven moderators and panelists, only seven were female. There was a relatively large contingency from abroad (the conference was co-sponsored by the Dutch Ministry of Infrastructure and the Environment), but the clear majority of panelists were white.

While the emphasis on diversity was not reflected in the racial makeup of the panelists themselves, many conversations did address the value of incorporating inclusive social movements into the reclaiming of public space. A session titled "How Relevant is Theory?" illuminated a connection between the Occupy movement and the second wave feminist movement. One panelist noted that the occupiers could have learned a lot from the feminist movement about the importance of designating a leader, even for a movement characterized by egalitarian ideals. Another member of the theorist panel, Greg Smithsimon, Professor of Urban Theory at Brooklyn College, invoked the work of Dolores Hayden to re-imagine suburban lots in a more communal, feminist plan. This discussion addressed some of the content that the feminist movement elucidated, instead of only referencing the lessons learned from the form of the movement (as has been the case with the Occupy movement.)

Rhetorically, much of the conference focused on prioritizing the pluralism inherent in public spaces. There were discussions of the tension created by private ownership in contrast with the interests of the public as well as who designs spaces and how that determines how they will be used in the future. Pluralism implies the need to incorporate alternative stakeholders to produce adaptive, flexible spaces that address the needs of a heterogeneous public. Therefore, diversifying the actors who plan, create policy, and design could produce public spaces that adapt to, nurture, and foster social behavior between and among social groups. Certainly, drawing influence from feminism and pluralism could provide public spaces that better meet the needs of a diverse public and incorporating these perspectives into the conference itself is instrumental.

The panel called "Public Space, Democracy and Equality" did exceptionally address several equity issues, bringing up how different racial, ethnic and class groups use space as a vehicle of empowerment. Perhaps unintentionally, this was one of the only panels with ethnic minorities represented as experts. Maurice Cox, Associate Dean at the Tulane University School of Architecture, provided an example of a youth empowerment program that uses vacant city land for gardening. He emphasized that social spaces are places of mixing, observing and socializing. Jeffrey Hou, an Associate Professor at the University of Washington, Seattle, discussed spaces generated and supported by cultural groups and driven by their cultural identity. He argued that creating cultural spaces can address historic exclusion of marginalized groups and facilitate their empowerment as citizens. Despite several questions from the audience during the other sessions urging the panelists to discuss whether public space itself can navigate issues of race and class, this panel was the only one to do so.

Historically, excluding women and minorities from social spaces is not a new phenomenon. The first recognized example of public space in Roman times, the agora, was intended for male citizens to engage in the public discourse and excluded women and non-citizens. Public space planning has come a long way from that narrow conception of who constitutes "the public." The current rhetoric focuses on including a more diverse public in the planning process to generate democratic spaces that can adapt to the needs of many users. Still, public space is being shaped by privileged groups for an image of the public that reflects their own social biases. The main actors shaping public space will have lasting impacts for what public space looks like and means for our city well into the future. If the conference represented a part of the public sphere itself, we should have expected to hear from those whose identities are different from the majority. But the "experts" framing the conversation were usually white males. In theory and in practice, the ideal of public spaces where one can encounter those who are different, with diverse social perspectives and experiences, seems a long way off. ■
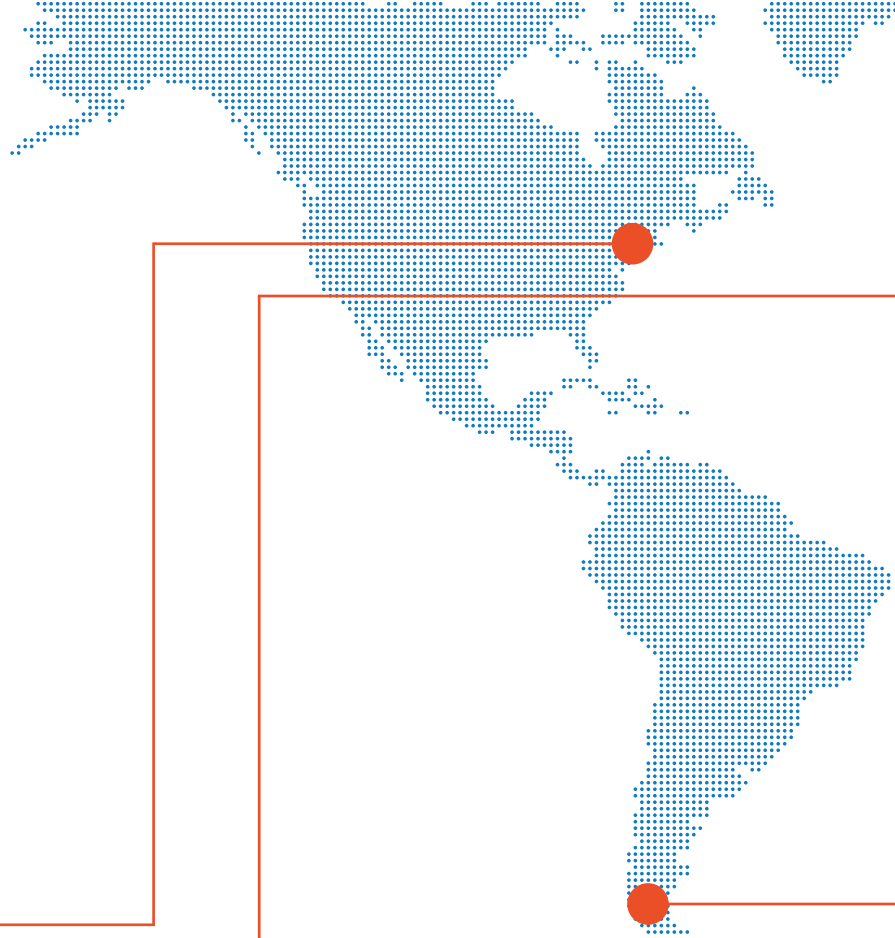
Imprints

Social Networking on the MTA
CUTHBERT ONIKUTE

For many New York City students, the commute to and from school is a series of reunions. While I was in high school, my reunions happened in stages. First, the bus ride from my home to the train station meant an opportunity to connect with friends who live in my neighborhood but whom I rarely got to see, either because they went to a different school or they were just outside of reasonable walking/biking range during the day. The bus ride was a chance to keep tabs on the goings-on in neighborhoods close to mine. Next, at Jamaica Center to catch the train, I said my good-byes to those parting ways, and had hellos and a quick catch-up with those transferring to other buses.

The train ride to school was another reunion, and often a dating opportunity, where catch-up involved learning about different parts of South Jamaica. We would talk about what was happening on Hollis versus St. Albans versus Rosedale and get the gossip on junior high school classmates whom we rarely saw anymore. The train ride was also an opportunity to check out the dating pool. It was a target rich environment and, because of the mini-reunions that were occurring every day, just like on Facebook today, you were bound to have least one friend in common with anyone. The reunion shifted in waves as friends got on and off in Queens, first at Forest Hills and then Queens Boulevard, and continued for me until my stop at 50th street in Manhattan.

Here, the last reunion happened, with friends walking towards 10th Ave. Brief though it was, it offered the opportunity to learn about programs and lives occurring in neighboring high schools. I could get a word on who had beef with whom and why. This was a chance to learn about New York City, as the reunion involved people from almost every borough and occurred twice a day, five days a week.

A lot of what I learned about New York City between 1997 and 2001 came in snapshots from these mini-reunions around the MTA's network. It's a narrative of and by the city that happens in front of our eyes, yet one we rarely acknowledge. Now if only we could get the adults on the subway to reunite with other regulars on their train route, imagine how much more awesome a train commute would be, morning and afternoon.

The Damascene's City
SARAH ALMUKHTAR

On a drive through Damascus:

"Look there, to your right. This is the monument for *aljundi almajhul* – the missing soldier." He declares it proudly. This sight sends chills down my spine. It is hauntingly beautiful and fills my mind with thoughts of loss and war.

"We have one in Baghdad, too. It is incredible how many people are out at this time of night. Sarah, did you notice the families picnicking on the highway islands? Can you imagine seeing that in New Jersey?" I immediately think of a seminar class discussion on Lagos and its citizens' creative use of the in-between spaces created by highway clovers. Why *doesn't* this happen in New Jersey?

It occurs to me that the people of Damascus own their city. They know and occupy every available space. Directions are given in striking detail because every neighborhood has been experienced and committed to memory. Use is not defined absolutely but temporally depending on who, what, where, and need. I don't just know this; I feel this. I have gained an intimate sensory understanding of the city because its people connect with me. They feed me, talk and laugh with me, hug and kiss me, and smile and show me.

In the background – the set on which Damascene energy thrives – are the historical and cultural symbols of the oldest continuously inhabited city in the world: the Umayyad Mosque at the end of the Hamidyya Market where we shopped almost every day, the National Museum where we examined Ottoman artifacts and lifestyles, and the Business District where we found the best shawarma.

Does the city make the people or do the people make the city?

There and Back Again for Pizza
SHRADDHA RAMANI

Getting off the cargo ship in Puerto Natales, I felt like I was at the frontier of civilization. The week-long journey – two days on a bus from Santiago, two more days of delays at the port waiting for ship's manifest, followed by a four day voyage through the fjords and narrow channels of Chilean Patagonia – sent me fantasizing about another century.

Capital of the aptly named province of Ultima Esperanza, which means "last hope," the town lies on the water's edge, its colorful wooden buildings set against the backdrop of the snow-capped Andes. This region was first discovered by European explorers in the 1500's but, until the late 1800's, few were daring enough to brave the cold climate and desolate landscape. In the early 1900's, Puerto Natales was established as a shipping port for the sheep farming industry; as trade declined, it became a nexus for tourists visiting the nearby Torres del Paine National Park, which is why my friend and I were there.

Disappointed with our unplanned, meandering travels through Chile, we arrived in Puerto Natales to spend our last week in the country, unsure of what to expect. It was the middle of fall and the tourist season was winding down. Unprepared as always, we explored the town to gather information and supplies for our hike before checking in to the cheapest hostel we could find for the night (there was no heat). When we woke up at four the next morning, I could see my breath in the air as we packed and set out.

The best part of our journey was our return to town four days later, exhausted from hiking and starving for food that wasn't cooked over a camp stove with melted glacier ice. Dirty, sore, and stiff from the cold, we wandered past the camping suppliers and overpriced grocery stores. At the center of town, we found a plaza surrounded by quaint shops and restaurants. On one corner of the square, we stepped into a restaurant that looked homey with communal tables and a large fireplace. There, at the end of the world, we settled in finally to a delicious pizza and microbrews. ◘