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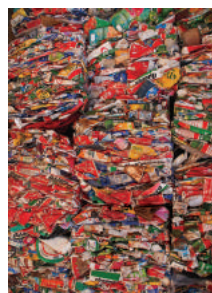
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by Marcela Rentería

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ON THE COVER

"Descarga Cero" by Jake Kheel, environmental director of Punta Cana Resort & Club in the Dominican Republic, shows waste before being processed in its ambitious Zero Waste Program.

Waste

Global Challenge, Latin American Lessons

BY MARTY CHEN

WASTE—ITS GENERATION, COLLECTION AND disposal—is a major global challenge in the 21st century. Cities are responsible for managing municipal waste. Solid waste management is, arguably, the single most important function of cities: waste that is not collected on a timely basis creates a public health hazard, and organic waste, collection vehicles, and most waste disposal methods, with the notable exception of recycling, contribute to greenhouse gas emissions. But the management of waste depends in large part on the global markets for recycled materials. The financial crisis that started in September 2008 exposed the interdependence of global markets and local supply of recycled materials. With the sudden drop in global demand for manufactured goods, the global demand for recycled materials—used as raw materials and packing materials—also dropped suddenly. Unsold recycled materials started to accumulate in ships, ports, warehouses, city streets and neighborhoods around the world as early as October 2008.

The issue of waste has long been of personal interest to me. In 1964, I made my first trip to Latin America with an international group of college students. Having grown up in India, I was on the lookout for similarities and differences between South Asia and Latin America. On that visit the waste pickers in Bogotá made a vivid impression on me, as they were dressed in what I considered to be modern Western clothes unlike the waste pickers of India, who dressed in traditional garments. Little did I know that 44 years later I would return to Bogotá to speak at the first international conference of waste pickers, including those from India, Egypt and Latin America (see the companion article in this magazine

by Fernández and Chen).

I couldn't imagine that by 2014, during the recent World Cup tournament in Brazil, cooperatives of waste pickers were contracted in six out of the ten host cities to provide waste collection, transport and disposal services at the World Cup stadiums.

By then, the global action-research-advocacy network known as WIEGO (Women in Informal Employment: Globalizing and Organizing) I co-founded in 1997 had been engaged in improving the status of the working poor, especially women, in the informal economy for almost twenty years. WIEGO promotes stronger organizations of informal workers, better statistics and research on the informal economy, and a fairer policy and regulatory environment for the informal workforce, including waste pickers.

Waste pickers are an important part of the story in Latin America, as more is being thrown away than ever. The World Bank estimates that the amount of solid waste generated in cities is growing faster than the rate of urbanization. The higher the income level and the rate of urbanization, the greater the amount of solid waste produced. OECD countries produce almost half of the world's waste. Africa and South Asia produce the least waste. High-income countries have the highest collection rates and are most likely to dispose of waste to landfills or incinerators. Low-income countries have the lowest collection rates and are most likely to dispose of their waste in open dumps. However, low-income countries also have the largest numbers of informal waste pickers who collect, sort, and reclaim recyclables—thus reducing costs to the city and to the environment.





Clockwise from top left: The prevalence of recycling bins and trash receptacles show progress forward in the recycling efforts in Panajachel, Guatemala. The receptacles are not always used, however. Each day, sanitation comes to pick up the trash left in this alleyway; Private garbage collection in Mexico operates in exchange for voluntary donations to make up for inefficient public garbage services; Women from an Uruguayan cooperative sort materials at their recycling center during the field visit of WIEGO team retreat in Montevideo, October 2013; Kids live and work in this Guatemala City dump, 1992.





As a middle-income region, Latin America falls at the mid-point in terms of waste generated and collected. It is also known for its large numbers of informal waste pickers. Some cities and countries in the region take into account the critical roles that informal waste pickers play in recycling waste by reducing the amount of waste that goes to dumps, landfills or incinerators, and thereby reducing the costs to the city and the environment. This article summarizes promising examples of the organization of waste pickers and their integration into solid waste management systems in Brazil and Colombia.

ORGANIZATION OF WASTE PICKERS IN LATIN AMERICA

Throughout Latin America, large numbers of people from low-income and disadvantaged communities make a living collecting and sorting waste and then selling reclaimed waste through intermediaries to the recycling industry. Although they create value from the waste generated by others and although they contribute to reducing carbon emissions, waste pickers are rarely treated with respect for the services they provide.

Privatization of public services, including waste collection, threatens their livelihoods, as an increasing number of municipal governments are issuing exclusive contracts to private companies for the collection, transport, and disposal of waste and recyclables. The first membership-based organization (MBO) of waste pickers in Latin America was founded in 1962 in Medellín, Colombia. By the 1980s, organizing among waste pickers began to spread across that country encouraged, in large part, by non-governmental organizations (NGO). Meanwhile, in 1980, the first MBO of waste pickers in Ecuador was founded in Cochabamba. Also in the 1980s, in Brazil, NGOs linked to the

Waste pickers work in one of the world's largest dumpsites, "La Chureca," in Nicaragua, where WIEGO is conducting a research-action project in more than 19 dumpsites around the country, together with local university and national waste-picker organization.

Catholic Church began to organize waste pickers in the main cities of the south and southeast region. The engagement of faith-based NGOs with the urban poor was a main driver for the formation of the first MBOs of waste pickers in that country.

By the 1990s, the first efforts to integrate waste pickers, through their cooperatives, into municipal solid waste management systems began in Brazil (see below). During the first decade of the 21st century, the organizing and mobilizing of waste pickers in Latin America accelerated.

INTEGRATION OF WASTE PICKERS IN SOLID WASTE MANAGEMENT IN LATIN AMERICA

The first efforts to integrate waste pickers, and their cooperatives, into municipal solid waste management took place in Brazil: beginning in Porto Alegre and Sao Paulo in 1989, then Belo Horizonte in 1993 and Santo Andre in 1997. Concerns about the environment and the livelihoods of the urban poor, as well as the need to upgrade existing solid waste management systems, prompted municipalities to integrate waste pickers.

A National Forum called Waste and Citizenship, launched in 1998 under UNICEF leadership, helped increase the visibility of waste pickers and their integration into solid waste management in Brazil. This visibility had an impact nationwide, as it inspired other groups of waste pickers to get organized, creating the basis for social activism that later led to the creation of the Brazilian national movement of waste pickers (Movimento Nacional dos Catadores de Materiais Recicláveis, MNCR). Although there are still many challenges to fully integrating waste pickers, the National Waste Policy approved in 2010 recognized their relevance and created a legal framework which enables their cooperatives to be contracted as service providers, including at the World Cup, as mentioned above.

For more than two decades, waste pickers in Colombia have struggled to continue waste picking and have filed legal claims to preserve their occupation. The Asociación de Recicladores de

Bogotá (ARB), an umbrella association of cooperatives representing more than 2,500 waste pickers in Bogotá, has played a key role in aggregating claims and taking the legal cases forward. Thanks to the efforts of ARB and others, the Constitutional Court of Colombia passed three landmark judgments in support of waste pickers and their right to earn a livelihood: the first, in 2003, ruled that the tendering process for sanitation services by municipal governments had violated the basic rights of the waste-picking community; a second ruling in 2010 mandated that cooperatives of waste pickers—not only private corporations—had the right to bid for solid waste management contracts; and the third, in 2011, halted a scheme to privatize solid waste management in Bogotá and ordered the municipality and the ARB to come up with a concrete proposal to integrate waste pickers by the end of March 2013.

In December 2012, the current municipal government of Bogotá de-privatized half of the waste collection, transport and disposal in the city and developed a system for paying waste pickers to collect, transport and recycle waste. With the help of WIEGO and other allies, the ARB prepared and submitted a bid to the

municipal government. In March 2013, the municipal government began to pay waste pickers in Bogotá to collect, transport, and sort recyclable waste. More than 7,000 waste pickers are currently being paid for these services. Also, the current municipal government introduced a scheme to replace horse-drawn vehicles with motorized vehicles, providing loans to horse-cart owners to purchase trucks. As of June 2014, 2,800 owners of horse-drawn vehicles had purchased trucks.

Under a recent national decree, upholding the December 2011 order of the Constitutional Court, cities across Colombia have been mandated to develop solid waste management schemes which recognize and pay waste pickers to collect, transport and sort recyclable waste.

FUTURE OF WASTE—AND WASTE PICKERS—IN LATIN AMERICA

Recycling waste is one key driver of environmental sustainability (reducing greenhouse gas emissions) and of the economy (supplying raw materials and packaging materials). Waste pickers are the principal actors in reclaiming waste for the recycling industry. Where others see trash or garbage, the waste pickers see paper, cardboard, glass and metal.

They are skilled at sorting and bundling different types of waste by color, weight, and end use for sale to the recycling industry. But recycling is big business dominated by large private corporations. And many cities are privatizing solid waste management, issuing contracts to large private corporations.

What the waste pickers and their organizations want is quite clear: a) recognition for the services they provide; b) access to waste; c) trucks, space, and equipment for hauling, storing and compacting-bundling-processing waste; d) the right to bid for solid waste management contracts; and e) fair prices for the waste they collect and the recycled materials that they reclaim, process and sell.

The future for millions of waste pickers in Latin America hangs in the balance, depending on the perspective, policies and practices of municipal governments and large corporations. Municipal governments have to make choices about solid waste management: whether to retain it as a public function with or without integrating waste pickers or privatize it by issuing contracts to large corporations with or without stipulating that the corporations have to integrate waste pickers. If waste pickers are to be integrated, cities and corporations have to decide whether to issue contracts to their associations or hire them as employees. The waste pickers want their organizations to be contracted to provide waste collection, transport and recycling services. That needs to be done to prevent the problem of waste from becoming insurmountable in Latin America.

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This article draws on the expertise and publications of WIEGO colleagues who work with waste pickers in Latin America and around the world: Sonia Dias in Brazil, Lucía Fernández in Uruguay and Federico Parra in Colombia.



A worker sorts the trash in a mini-dumpsite in Punta Cana, Dominican Republic.



TRANSFORMATIONS

Waste is dirty, smelly and an eyesore. Yet, its power of transformation helps to interpret startling archaeological remnants and stimulates people's ingenuity in the creation of books and costumes.

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Trash as Treasure

Learning from an Ash Heap of History in Copan, Honduras

BY WILLIAM L. FASH AND E. WYLLYS ANDREWS

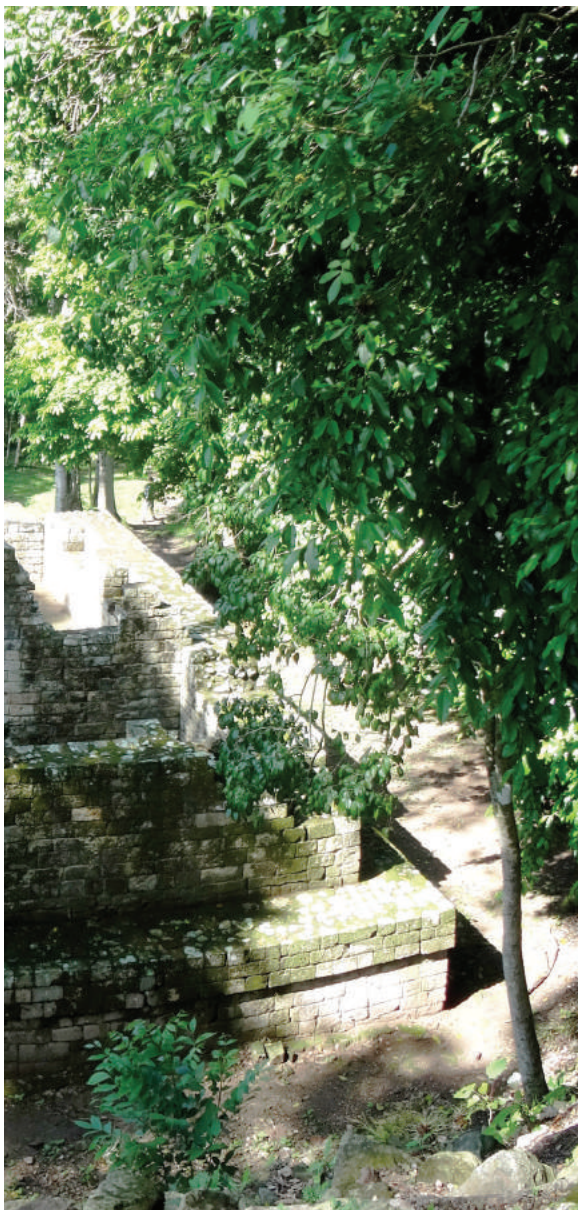
THE ADAGE “ONE PERSON’S TRASH IS ANOTHER person’s treasure” rings true for all of us who have happily devoted our professional lives to the study of archaeology. We make our livelihoods—and more importantly we build, dismantle and rebuild cultural histories and archaeological theory—through the concerted study of material culture. The Merriam Webster Dictionary defines material culture as the totality of physical objects made by a people for the satisfaction of their

needs, especially those articles requisite for their sustenance.

Much archaeological research consists of the careful recovery of broken things that got discarded because they were no longer useful to their makers. In practical terms, this means that we study discards and yes, wherever and whenever possible, mounds of trash! Most field (or “dirt”) archaeologists find a nice thick midden (trash) deposit at least as informative as the whole objects that were left

as special offerings to revered ancestors and supernatural forces (or “gods,” in Western practice and parlance).

The Classic Maya ruins in Copan, Honduras, where we have conducted much archaeological research, provide an excellent example. There, Will (the co-author of this article) uncovered and recovered a large ash-layer midden in the royal residential complex that proved enormously informative. During our time together as director and co-director of the Copan



Left: A Late Classic Royal Residence beside the Acropolis at Copan, Honduras; Right: The Gray Ashy Trash Layer in Group 10L-2, the Late Royal Residence at Copan.

Acropolis Archaeological Project (1988-1996), Will devoted several seasons of field research to the investigation of architectural Group 10L-2, on the south flank of the Acropolis. Evidence indicates that this residential compound had a series of discrete architectural components that were used for different purposes by the ruler, his immediate family and courtiers. These included a large public plaza area, a royal receiving area, residences for the ruler himself, his offspring, and

several courtiers, a royal ancestor shrine, and a kitchen area that had been re-purposed from an earlier use as a royal burial ground. Underlying the central part of the residential compound was the midden, which proved vital for understanding not only Will's site, but the political and economic history of the entire kingdom, a true archaeological "treasure."

Hieroglyphic inscriptions were found in association with four of the buildings on the public plaza or "Patio A" of this

royal residential area. The project epigraphers Linda Schele and David Stuart deciphered the texts, which discuss the different rituals performed there by the 16th and final ruler in Copan's history, Yax Pasaj Chan Yopat, who reigned from 763-822 C.E. These were very useful for identifying the uses of the group and its constituent buildings during their final decades of use, the names of the patron gods of the dynasty associated with the royal ancestor shrine, the identification



Bill Fash takes a break with team mascot Pancho in Copan.

of the supernatural patron of the final ruler himself (Cha'ak, the Rain god), and the importance he attached to rituals performed by the founder of the dynasty, at Teotihuacán, Mexico. But they did little to provide time-depth for either the life history of this vitally important architectural complex, or for the entire run of the Late Classic period (600-850 C.E. in Copan), when the Copan kingdom reached its maximum size and importance in the larger arena of ancient Maya history.

All of that changed when Will and his graduate students came across an ash layer underlying the great Late Classic edifices that they had so painstakingly uncovered, studied, and restored (Andrews and Bill 2005). This unprecedented layer, chock full of royal “discards,” constituted—quite literally—an ash heap of history that provided the single best “treasure trove” of ancient pottery ever unearthed in Copan or any other ancient Maya kingdom. The ash layer ran some 10 m. (31 feet) N-S by 20 m. (61 feet) at its widest extent, in places up to nearly a meter in depth. No one has ever found better preserved examples of the entire gamut of ceramic types, forms, and deco-

rative techniques than those encountered in this enormous feature. In most places, truth to tell, there were more potsherds in the ash layer than ash and earth.

When all the evidence was in, it became apparent that the deposit represented the remains of an enormous stratum of trash—a layer of fill prior to putting up a series of buildings—containing the discards from quotidian activities on the Acropolis of Copan. Besides the incredible number, variety, preservation and fine artisanship that went into this group of ceramics, the consistency of the material proved that it represented a very short window of time in the occupation and use of the Acropolis. This meant that it could be used to define a “baseline” for all of the different attributes of Late Classic Copan pottery at the time of the use and discard of the material. This included the sizes, shapes (or “forms”), vessel diameters, constituent materials (clay “paste” and “clastic temper”) of the different types of pots, decorative techniques, and evidence for use-ware within and between types, for the window of time (650-700 C.E.) when the material was used and discarded.

So what? Well, the “what” is that all archaeologists (and many archaeological theories) live and die by their potsherds! They are non-biodegradable, and are found anywhere people settled down in agriculturally based societies, be it at the village, town, or city level of societal integration. Pottery can tell us more about ancient economics (including subsistence, foodstuff preparation, trade with neighboring societies, ritual practices and daily life) than virtually any other class of material culture. Furthermore, pottery is associated with buildings used for different purposes, giving us a window onto the specialized activities of religious practitioners, craftspeople, and the lifestyles of everyone from the humblest farmers to the kings in their royal palaces. One thing the ash layer made abundantly clear was that the royal family had access to better-made pottery, and to much more of the most beautiful, polychrome Late Classic “serving ware” vessels imported from the best pottery workshops in the Maya lowlands to the north and west, than anyone else in the kingdom.

Needless to say, the ash layer and particularly its ceramic contents proved to be an incredibly useful archaeological resource for Cassandra Bill, who based much of her doctoral dissertation at Tulane on the production of ceramics in Copan on this material. Its ancillary research uses included enabling Bill to provide a much more refined chronological breakdown of the diagnostic attributes of Late Classic Copan pottery (Bill 1997). Thanks to the midden, instead of only being able to say that a particular lot of potsherds (the broken pieces of pots)—and the building or feature with which it was directly associated—“dates to the Late Classic period,” a span of 250 years in Copan, now all the archaeologists working in the region can say that a particular lot of sherds dates either to the first half of the 7th century (with attributes that antedate the kinds of pottery found in the 10L-2 ash heap); or from 650-700 (the time of use and deposition of the 10L-2 ash heap); or from 700-750 (based on the other middens associated

with the buildings immediately post-dating the ash layer); or to the final years of the dynasty (750–820), ending with the burning of the ancestor shrine of Group 10L-2. A small sample of “Terminal Classic” pottery, associated with the brief post-dynastic occupation of the site from 820–850, rounds out the picture, and the ceramic sequence.

Given that most of the 3,400+ buildings that are visible on the present land surface date to the Late Classic period, this new level of chronological control was an enormous step forward (Andrews and Fash 2005). Now we are able to document and interpret the social history of the vast numbers of people who comprised the supporting population of the valley at these three key points in the city’s history: during its rise to greatest power (600–700); during its artistic apogee and a brief political crisis (700–750); and during the final glory years when its last two rulers struggled to maintain unity in the region in the face of immense environmental, social, and political challenges (750–820). The end of the city’s history was violent, with the burning of temples and even the burning and ransacking of the final ruler’s tomb, constructed immediately adjacent to Group 10L-2. Thus, a single ash heap will help all future archaeologists working in Copan to understand “people’s history” on a much more secure footing. This humble layer of trash will ultimately also benefit other scholars and laypersons interested in the study of the rise and fall of that great urban tradition, by placing the experiences of other Maya cities in a broader comparative perspective.

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Recycle the Classics

Pre-texts for High-order Thinking in Low-resourced Areas **BY DORIS SOMMER**

LITERATURE IS RECYCLED MATERIAL, A PRE-text for making more art. I learned this distillation of lots of literary criticism in workshops with children. I also learned that creative and critical thinking are practically the same faculty, since both take a distance from found material and turn it into stuff for interpretation. For a teacher of literature over a long lifetime, these are embarrassingly basic lessons to be learning so late, but I report them here for anyone who wants to save time and stress.

My trainer was Milagros Saldarriaga, just out of college when she cofounded an artisanal publishing house named Sarita Cartonera for the childish and chaste patron saint of Andean migrants in Lima, Peru. This became one of the first of now more than 200 cardboard publishers throughout Latin America, with replications in Africa.

As far as I know, Sarita is the only one that developed a pedagogy along with publications. She had to. It was not enough to make beautiful and affordable books, inspired by the publishing house Eloísa Cartonera of Buenos Aires, if books were not in demand. Lima may have looked similar to distressed Buenos Aires, with its lack of money coupled with an abundance of good writers and poor paper pickers, but indifference to reading turned out to be an obstacle more stubborn than poverty. So Sarita began to use her products as prompts for producing more readers. What better way to use books!

Even during the Argentine economic crash of 2001, haunting photographs show porteños staring into bookstores, longingly. Just a year after the economy fell apart and long before it recovered, Eloísa Cartonera was responding to the hunger for literature with an alter-

native to the failed book business. Poet Washington Cucurto and painter Javier Barilaro started to use and reuse available materials, pre-owned cardboard and new combinations of words. Their solution to scarcity was to recycle. At the storefront retreat from business as usual, the two artists began to buy cardboard from practically destitute paper pickers at almost ten times the price paid in recycling centers. Soon the cartoneros themselves came to the workshop to design and decorate cardboard books.

One-of-a-kind covers announce the original material inside: new literature donated by Argentina’s best living writers. Ricardo Piglia and César Aira were among the first, soon followed by Mexican Margot Glantz, Chilean Diamela Eltit and many others. By now, Harvard University’s Widener Library has more than two hundred titles from Eloísa Cartonera, and the University of Wisconsin, Madison, has even more. Several of the former paper pickers in Buenos Aires and in Lima later found work in standard publishing houses; others returned to finish high school. All of them managed to survive the economic crisis with dignity.

Eloísa didn’t set out to be the publishing model for an entire continent and beyond, but her example proved irresistible. Rippling throughout Latin America and before reaching Africa or winning the Prince Claus Award for 2012, the Cartonera project reached Harvard University in March 2007 invited by Cultural Agents for a week of talks and workshops. Javier from Eloísa taught us how to make beautiful books from discarded materials, and Milagros from Sarita showed us how to use them in the classroom.

This was a moment of truth for me and for other teachers of language and literature, crouched on the floor cutting cardboard, and hunched over tables covered in scraps, tempera paints, scissors, string and all kinds of decorative junk. Until then, the Cultural Agents Initiative had been drawn outward, studying impressive top-down and bottom-up art projects that humanistic interpretation had been neglecting. We convened—and continue to convene—conferences, courses, and seminars on thinkers who inspire cultural agents of change, and on a broad range of artists who identify their work as interventions in public life.

But the Cartoneras changed me. I was already primed, having been charmed—and shamed—by two undergraduate maestros at Harvard College. In 2006 Amar Bakshi and Proud Dzambukira had gone to Mussoorie, India, where girls generally drop out of school by age nine. The college students established a non-governmental organization (NGO) that hired local artists to offer after-school workshops for girls who stayed in school. And they stayed. Keeping children in school by brokering art lessons was the kind of cultural agency I could manage.

With this wake-up call I understood that agency doesn't require genius or depend on particular professions. It can be a part of modest but mindful lives, my own for example. I am a teacher, after all, and the work of education is urgent almost everywhere, including our university-rich area where poor neighborhood public schools face escalating dropout rates and increasing violence. Sarita Cartonera offered an art-making model for linking good literature with high-order literacy, along with admiration for fellow artists. It works at all grade levels, from kindergarten to graduate school.

The principle is simple and the results are astounding: use a challenging text as raw material for creating a new work of art, in any medium. To create your drawing, monologue, dance, song, decorated cookie, explaining the work with reference to a text, you have to read it very well. The practice has become a

teacher-training program in literacy and citizenship that we call Pre-Texts. "Make up your mind," some potential partners demand. "Is it a literacy program? Or is it arts education? Or maybe civic development?" The answer is yes to all, because each dimension depends on the others. Let me explain: (1) Literacy needs the critical and creative agility that art develops; (2) Art-making derives inspirations from critical readings of texts and issues; (3) Finally, citizenship thrives on the capacity to read thoughtfully, creatively, with co-artists whom we learn to admire. (Jürgen Habermas bases "communicative action" on the Aesthetic Education he got from Schiller.) Admiration, many of us have learned from Antanas Mockus, animates civic life by expecting valuable participation from others. Toleration is lame by comparison; it counts on one's own opinions while waiting for others to stop talking. Pre-Texts is a hothouse for interpersonal admiration, as a single piece of literature yields a variety of interpretations richer than any one response can be. This integrated approach to literacy, art, and civics develops personal faculties and a collective disposition for democratic life.

Literacy should be on everyone's agenda because it continues to be a reliable indicator for levels of poverty, violence, and disease, and because proficiency is alarmingly low in underserved areas worldwide. Skeptics will question the cause for alarm, alleging that communication increasingly depends on audiovisual stimuli, especially for poor and disenfranchised populations. They'll even say that teaching classic literature reinforces social asymmetries because disadvantaged people lack the background that privileged classes can muster for reading difficult texts. Audiovisual stimuli on the other hand don't discriminate between rich and poor and seem more democratic. But public education in the United States is now returning to "complex texts" and to the (literary critical) practice of "close reading" through newly adopted Common Core Standards that value difficulty as grist for cognitive

development. Formalist aesthetics would help to make the transition by adding that difficulty is fun; it offers the pleasure of challenges that ignite the imagination.

Paulo Freire cautioned against the pedagogical populism that prefers easier engagements, because full citizenship requires high-order literacy. His advice in *Teachers as Cultural Workers* was to stress reading and writing in order to kindle the critical thinking that promotes social inclusion. Freire traces a spiral from reading to thinking about what one reads, and then to writing a response to one's thought, which requires more thinking, in order to read one's response and achieve yet a deeper level of thought. Teachers democratize society by raising the baseline of literacy, not by shunning literary sophistication along with elite works of art. The classics are valuable cultural capital, and the language skills they require remain foundations for analytical thinking, resourcefulness, and psychosocial development. Paradoxically, skeptics reinforce the inequality they decry by dismissing a responsibility to foster high-level literacy for all.

By now Pre-Texts has partnered with boards of education, schools, and cultural centers in Boston, Colombia, Brazil, Puerto Rico, Mexico, Peru, El Salvador, Nicaragua, Hong Kong, Zimbabwe and Harvard's Derek Bok Center for Teaching and Learning. Our current projects include a bilingual program for professors of the Autonomous University of Coahuila, Mexico, along with its network of high school teachers; a growing reach throughout Brazil with O Grupo Positivo; and training for staff and local teachers for the exciting network of 82 new Parques Educativos in Antioquia, Colombia.

Though developed for underserved schools with great needs and poor resources, the approach is a natural for higher education too. Research universities now recognize that art-making can raise the bar for academic achievement, and Pre-Texts makes good on that promise. It has significantly improved my teaching at Harvard, for example. A new undergraduate course called Pre-Textos



A selection of books crafted in Pre-Texts illustrates how literature can be recycled material.

tackles tough texts by Jorge Luis Borges, Juan Rulfo, Julio Cortázar, Alejo Carpentier and Octavio Paz, though students still struggle with Spanish. The pilot class in 2011 made maps, choreographed, composed music, created storyboards, acted and remarked on the mutual admiration that art-making generated in an intensely competitive campus. For a final project the group decided to coproduce a film based on the short story “Death and the Compass” by Borges. Each member contributed a talent for acting, or directing, or music, costumes, photography, and so forth; and all wrote accounts of their work as co-artist with Borges. For another example, my graduate course Foundational Fictions and Film offers a creative alternative to the standard essay assignment: compose one chapter of your own 19th-century national novel and write a reflection on the process. The new novels and authors’ notes almost always surpass the conventional essays, which hardly anyone elects. Creating a novel demands sensitivity to character construction, to registers of language, historical conflict, social dynamics, and intertextual references. Students will risk this “insider” appreciation of literature if teachers allow it.

Pre-Texts is an intentionally naughty name to signal that even the classics can be material for manipulation. Books are

not sacred objects; they are invitations to play. Conventional teaching has favored convergent and predictable answers as the first and sometimes only goal of education. This cautious approach privileges data retrieval or “lower-order thinking.” But a first-things-first philosophy gets stuck in facts and stifles students. Bored early on, they don’t get past vocabulary and grammar lessons to reach understanding and interpretation. Teaching for testing has produced unhappy pressures for everyone. Administrators, teachers, students, and parents have generally surrendered to a perceived requirement to focus on facts. They rarely arrive at interpretive levels that develop mental agility. Divergent and critical “higher-order” thinking has seemed like a luxury for struggling students. However, when they begin from the heights of an artistic challenge, students access lower levels of learning as functions of a creative process. Entering at the base seldom scales up, but turning the order upside down works wonderfully. Attention to detail follows from higher-order manipulations because creative thinkers need to master the elements at hand.

With Pre-Texts I am finally responding to my own proposal that we offer our best professional work as a social contribution, the way creative writers do when they donate literature to the Cartoneras.

Politics isn’t always a pause from one’s field of expertise. For me, literary studies—including theory at the highest level I can muster—is now useful for civic development. This dialogue between scholarship and engagement, thinking and doing, is not a double bind, though the self-canceling figure haunts the humanities like a hangover from heady days of deconstruction.

Literature as recycled material; it had never occurred to me before. The Cartonera book covers made of recycled cardboard became objective correlatives for the recycled material inside. This was my simple summary of Milagros’s practice, cutting through sophisticated literary criticism the way that Javier cut through cardboard. A daunting vocabulary of intertextuality, traces, iteration, permutation, point of view, focalization, influence, and reader-response becomes user-friendly when readers abstract literary functions from their practice of making things with literary prompts. The functions add up to a general principle about literature being made up of reusable pieces, cuts and pastes and pastiches that welcome you to come and play with them.

Doris Sommer is Ira Jewell Williams Professor of Romance Languages and Literatures and the founder-director of the Cultural Agency Initiative.



A Recycling (of) Tradition

A PHOTOESSAY BY ANDREW LANTZ

AT FIRST GLANCE, THE INDIGENOUS WOMEN—known as *cholitas*—looked like all the others who dance in the festive parades that regularly weave through the sharply angled streets of La Paz. Yet, at second glance, one would see that instead of being adorned with bright feathers or sequined corsets, these women danced with black plastic bags and newspaper hats. Their attire was composed entirely of recycled materials.

This was the 10th annual folkloric dance festival held by the La Paz Asociación de Centros de Mujeres (ACM), which supports some 20 organizations within the city and its surrounding areas. In many ways, a public exhibition to raise environmental awareness

is entirely in keeping with recent Bolivian socio-political discourse. Since Evo Morales assumed the presidency in 2006, the rhetoric of the ruling MAS party has been infused with references to establishing and protecting an equal relationship with the earth deity known as the Pachamama, an approach reflecting a need to promote the Andean spiritual worldview of the country's majority indigenous population, Morales' constituent base.

In 2011, Bolivia joined its Ecuadorian neighbors in amending its constitution to grant nature equal rights to humans. Despite this legal recognition, however, the administration has struggled to rid itself of the extractivist logic of its neo-

liberal predecessors, and many critics have noted a rather large gap between policy and practice, most evidenced by the continuing backlash surrounding the administration's plans to build a highway through the protected Territorio Indígena Parque Nacional Isiboro-Sécure, or TIPNIS.

On a more micro level, one can see that the message of environmental protection is not yet particularly resonant with the Bolivian populace just by hopping onto an intercity bus; passing through town after town, it is impossible not to notice the piles of trash lining the streets or the fellow passengers contributing to them by nonchalantly tossing unwanted items out the bus win-



From left: Sewing a costume; women wearing recycled carnival costumes dance in the streets; detail from a hat made of recycled material.

dows. On the first day of my recent stay in Sopocachi, an upper-middle class La Paz neighborhood, I watched as two fat pigs happily paraded from street corner to street corner, gorging themselves on tasty heaps of garbage. More unsettling than the act itself was that I seemed to be the only one that gave it a second glance; apparently many of Bolivia's urban residents have gotten used to the sight of these impromptu buffets.

Especially in the country's metropolitan areas of Cochabamba, La Paz, El Alto and Santa Cruz, thousands of pounds of waste are produced daily, and estimates suggest that upwards of 80 percent could be recycled if infrastructure existed to support it. Until the Morales adminis-

tration takes a more concerted initiative, however, events like that held by the ACM will only likely play a greater part in raising awareness and molding public discourse on this issue and others.

While the ACM carnival highlighted the importance of recycling in an entertaining fashion, it was the repurposing of traditional dance that distinguished it from other displays and allowed it to bring to bear two other matters: the leading role of women in Bolivian sociopolitical practice and the conceptualization of new forms—urban and cosmopolitical—of indigeneity. When I spoke with one group leader, she said that the idea to hold a recycling-themed dance evolved from the fact that women are

the ones directly involved with taking care of family. So while the event may have been based on a rather conservative premise that has itself been recycled for many years, the notion of women leading the way on issues of social and political import speaks to a more progressive stance, a type of green feminism rooted in indigenous practice, an idea truly worth recycling.

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Trash into Treasure

Building Up by Throwing Out in Chongoyape, Peru

BY TINA MONTALVO AND CHARLES MARTIN

IN A TOWN IN NORTHERN PERU, A COMMUNITY has stuffed trash into 7,000 half-liter plastic bottles, also known as eco-bricks, and built a library. The town has no sanitary landfill and little knowledge of trash management. Yet residents have managed to create Peru's first eco-brick building out of one metric ton of inorganic garbage, an accomplishment that owes its success to community participation and the cooperation of many organizations.

Comunidad Campesina Muchik Santa Catalina de Chongoyape, with 6,000 residents, is located in the Chancay valley between the coast and the Andes mountains. The people there earn a living mainly through agriculture and live in the middle of one of the largest dry tropical forests in the world. This is where I, Tina Montalvo, a native Marylander, spent the last three years as a Peace Corps Volunteer and member of Peace Corps

Peru's environment program, helping Chongoyape to learn and adapt to environmentally friendly living practices.

I was introduced to the eco-brick concept in 2010, when I saw an article in *The Peace Corps Times* about how volunteers such as Laura Kutner (Guatemala, 2008–2010) and Returned Peace Corps Volunteer Jonathan Miller (Guatemala, 2006–2008) had constructed eco-brick schools with the help of organizations called Pura Vida and Hug it Forward.

In July 2011, I began to introduce the idea to my own community and to local organizations such as CIPDES (Center for the Research and Promotion of Sustainable Development) Ayuda en Acción, ACOTURCH (Association for the Conservation of the Environment and Sustainable Tourism, Chaparri) and Ultimate Voyages. Together we developed plans to start the project with the volunteer

group Red Interquorum Chongoyape, an energetic bunch of 18- to 30-year-olds. They helped me visit local schools to talk about trash management, how to make an eco-brick and how to set up a bottle drive involving the six primary schools in the community. The success of the bottle drive was less than we hoped for, given the residents' unwillingness to give up their plastic bottles, which they could sell to the local chatarrero, a.k.a. "Junk Man," for a profit of .50 soles (about \$0.16) per kilo.

Then I met a very driven college business student, Jessica Idrogo Mestanza, at the Santo Toribio of Mogrovejo Catholic University. Jessica helped to organize a contest in two secondary schools to collect plastic bottles in the capital city of Chiclayo. We ended up with 14,500 plastic bottles that were transported back

Making eco-brick schools in northern Peru.

to the community to start the process of producing the eco-bricks we'd need for the project. Jessica also introduced me to María Teresa Montenegro, a professor in the university's Architecture Department. We held another contest, this time involving architecture students in their final year of course work, who submitted building designs. The winner turned out to be a multi-use facility: library, theater and eco-museum.

We were then able to communicate with a local community development group within Scotiabank called *Iluminando el Mañana* (Illuminating the Future). The Scotiabank group, along with the organizations I've already mentioned, helped me carry out fundraising activities such as a raffle, a *Gran Pollada Deportiva* (buy a ticket in advance; show up at the event to claim your chicken dinner; eat, drink, dance and play soccer), and a benefit concert with a performance from a local musical group, *Domo Ensemble*. Every *nuevo sol* earned (as you've gathered by now, the *nuevo sol* is the Peruvian monetary unit) was matched by Scotiabank Canada, giving us approximately US\$8,000 total. The overall cost of the building project was estimated at US\$25,000. CIPDES and ACOTURCH generously committed to providing funds that would cover the difference.

FIRST THINGS FIRST

Our combined efforts amounted to another first in a community known for its firsts. In 2001, with the help of the renowned National Geographic photographer Heinz Plenge, Santa Catalina de Chongoyape dedicated 85,033 acres of dry forest to Peru's first Area of Private Conservation, known as the Ecological Reserve Chaparrí—an area where the Andean spectacled bear roams freely and the critically endangered, endemic white-winged guan thrives. Sustainable ecotourism has helped mitigate deforestation, habitat destruction, the illegal hunting of endangered animals, and has created jobs and improved health and education in the community. A portion of the money generated through tourism in the reserve

helps purchase school supplies and construct and maintain the health post in Las Colmenas and build new bathrooms in the primary school, Tierras Blancas, paying skilled laborers to construct the library.

Creating eco-bricks was another step forward in preserving a threatened ecosystem, a way of putting the community's trash to use instead of burning it or discarding it in the street. Before the initiation of the project, virtually the entire community employed the litterbug strategy of trash disposal. A Peace Corps Volunteer, Matt West, who'd worked previously in the area, was able to install 60 trashcans in four towns; the municipality collected the trash every 15 days. But without a sanitary landfill, they were only moving the trash to another location and burning it there—at least the part of it not carried off by the wind to nest in trees or clutter hillsides or be eaten by the local livestock. In the past, trash management hadn't been much of a problem because everything Chongoyapanos used was locally sourced and made of natural materials; with the onset of the global distribution of goods, however, packaging materials have now proliferated in the marketplace; plastic bags and junk food wrappers have become a huge contamination problem. Plastics take 500 to 1,000 years to decompose and are broken down into smaller particles only to leach directly into rivers, streams and oceans. It is said that these particles are found in higher concentrations than the natural plankton and sea microbes and are being consumed by humans and all other species, creating as yet unknown long-term health risks.

Through school contests, promotional events and town meetings, some 300 families learned the concept of the eco-brick and proceeded with the task of filling half of the 14,500 plastic bottles obtained in the contest in the capital city with clean and dry inorganic waste—litter, in other words. A single bottle can take up to 10 minutes to fill and even longer for young children, who made up much of our work force. School children, teachers, mothers and fathers sat in circles, singing, reminiscing, and gossiping; at the same time

learning the importance of trash management as they produced thousands of eco-bricks. Campaigns to collect and wash glass bottles resulted in the 2,500 glass bottles used to create Muchik cultural designs—representing Santa Catalina de Chongoyape's indigenous heritage—in the walls of the proposed structure.

BETA TESTING AND STRONG DEMON(S)

To test the stability of the eco-bricks, the community, assisted by a World Connect "Kids to Kids" grant, created four bird-watching benches at the Tinajones Reservoir in an area inhabited by many migratory and native waterfowl. An average of 18 eco-bricks went into the construction of each bench. Benches were placed at the vantage points from which tourists and townspeople most commonly enjoy the view. The materials used in the benches held up and allowed us to continue working toward the construction of the actual eco-brick building.

In a small rural town such as Comunidad Campesina Muchik Santa Catalina de Chongoyape, you wouldn't expect to make short work of the job and most certainly we did not. We started construction in April 2013. We should have started much sooner, but the location of the building became a point of contention. There were plans to create an ecological park in the same area, so the townspeople wanted space to accommodate a health-food restaurant, stores where beekeepers and artisans could sell their products, and a church. Accordingly, we moved the stakes and string that marked the building's footprint, only to be asked to return the next week and move them again—and the following week move them yet again. We moved the stakes five times, eventually moving them back to where they'd been in the first place. As a result of this process, community members learned that it's important to give and receive feedback prior to the initiation of an activity instead of after the activity is already in progress and have since been able to better manage the planning of projects.

We broke ground on April 1 (no joke—

April Fools Day!). During construction, many more obstacles arose. For example, we had to convince community members to interrupt a normal day of paid work and come to work without pay on the bottle building. Many meetings took place to resolve this issue. (There are always lots of meetings. Sometimes there's a meeting at which nothing is decided except to schedule another meeting.) Slowly, community members began to understand the importance of the building and eventually they embraced the project. The agreement reached obligated each community member to dedicate two days of work to the building. However, the problems didn't end there. We engaged in a long series of technical disputes on how to construct the walls. Some favored a "quadrant" approach—framing consisting of uniformly shaped quadrants formed by two columns and two beams. Others thought we should just imbed the eco-bricks in adobe—mud walls. Fortunately, the technical team of the NGO CIPDES assisted with advice and modifications and came up with an approach that was both structurally sound and aesthetically appealing.

The structure and base of the building were made of cement and iron rods to ensure stability and withstand natural

disasters such as earthquakes and torrential El Niño rains. The eco-bricks were placed between sections of wire mesh and then covered with cement and plaster—a combination nicknamed "diablo fuerte" or "strong demon." It takes about three layers of diablo to create a structurally solid wall, but parts were left open to allow visitors and community members glimpses of what lay underneath.

We inaugurated the building on December 17, 2013. The building—which measures 26.24 x 49.21 feet—was designed to house a library, an eco-museum and a theater, benefiting the community in a variety of ways:

1. By promoting solid waste management and ecological awareness through the construction of eco-bricks and the building itself.
2. By creating within the new library a literacy program that will increase critical thinking, reading, and writing skills in children and adults.
3. By enabling—through the implementation of the eco-museum section—hands-on science and cultural learning activities to help promote and sustain an environmentally aware outlook in the community.
4. By developing creativity, self-esteem

and leadership skills in the children and adults who will utilize the theater section.

5. By standing as a living monument to community development and achievement through cooperation and thereby promoting further community development and cooperation.
6. By developing computer and information-technology skills via library resources.
7. By creating a new tourist attraction to boost the community's economy.

Today, what stands in the middle of the town of Santa Catalina de Chongoyape is a great example of what a community can accomplish when everyone works toward a shared goal. The look of pride in the participants' faces the day we inaugurated is something I will never forget. However, there is still much to be done to make this building a functioning, sustainable entity and to allow it to reach its full potential: the creation of cultural and environmental exhibits; the procurement of books, computers, tables, chairs, and equipment stands; and much more. The community is now working on a campaign to obtain the materials needed and continues to accept any and all donations.

In many respects the plastic bottle has become the evil poster child of environmental degradation. Imagine the satisfaction in seeing this lowly and despicable emissary of blight and pollution transformed into a building block for a humble but beautiful center for culture and learning. It's as if, as they fill with refuse, the plastic bottles in equal measure empty themselves of the unsavory nature we've attributed to them.

***Tina Montalvo**, a graduate from the environmental science biology track program from Towson University, worked in Peru for three years as a Peace Corps volunteer. For more on the project, see Facebook: Bibliotella Chaparri.*

***Charles Martin** is a Peace Corps Response volunteer in Inkawasi, Peru, and a former volunteer in Perquín, El Salvador, and Callanca, Peru.*

How to Make an Eco-Brick

- Choose the most common bottle size in your area to ensure a sufficient supply.
- Equip yourself and your coworkers with a stick or length of rebar longer than the height of the bottle you've chosen; this is for stuffing and compacting the trash with which you'll fill the bottles.
- Select your trash carefully. You can't use organic materials; they decompose. Nor should you use recyclable materials like paper or cardboard. Materials that wouldn't otherwise be recycled, such as styrofoam, plastic, discarded pens and markers, and food packaging make ideal eco-brick stuffing. The materials shouldn't be wet; wet materials will generate mold and bacteria.
- Stuff the bottles completely, compacting the trash with your stick or rebar as you stuff. It's important to have plenty of plastic bags and other malleable materials in your trash supply in order to fill gaps. The eco-brick must be filled entirely—solidly; no gaps! When you finish your eco-brick you should be able to stand on it without it deforming. Remember: it's a brick, not an eggplant. A completed brick made from a one-liter bottle should weigh about 300 grams—well over half a pound!
- Cap the bottle tightly when you finish to keep out insects and moisture.



RECYCLING LIVES

Those who live and work among the trash, recycling for a living, are sometimes at the forefront of change—for themselves and their communities.

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Living off Trash in Latin America

Debunking the Myths **BY MARTIN MEDINA**

AS A CHILD GROWING UP IN MEXICO, I OFTEN saw men, women, children and the elderly picking through other people's trash, searching for reusable and recyclable items. Due to their daily contact with garbage, ragged appearance, and often low educational levels, scavengers were considered the poorest of the poor and the lowest of the low in Mexican society. Most Latin American societies have traditionally viewed their own scavengers similarly. Only the poorest and most desperate would be willing to handle trash and sometimes live next to garbage dumps, in order to survive. Scavengers can be found in most cities in the developing world. Yet they are largely ignored by researchers, policy makers and society in general. My experience researching scavengers over the past 15 years may serve to debunk some commonly held beliefs about this population and their activities. My findings may surprise you.

WHY STUDY SCAVENGERS?

When I had to make a decision about the topic of my doctoral dissertation, I thought cross-border scavenging could be an interesting topic. While an undergraduate student in northern Mexico, I sometimes visited Texas border towns and noticed that Mexicans would pick through the trash there. When I searched through the literature on this subject, I was surprised and excited to learn there were only a few scholarly writings about scavengers. I could not find a single publication in the literature—either in Spanish or English—about cross-border recycling on the U.S.-Mexico border.

I was intrigued by the subject as scavenging is relevant to poverty issues, social justice, history, public health, environmental sustainability, industrial development, globalization and climate change.

During my library research I found

three highly recommended books: Hector Castillo's *La Sociedad de la Basura: Caciquismo Urbano en la Ciudad de México*, on Mexico City scavengers; William Keyes' *Manila Scavengers: Struggle for Urban Survival*; and Daniel Sicular's *Scavengers, Recyclers and Solutions for Solid Waste Management in Indonesia*. Keyes examined the plight of scavengers and the misguided Philippine government policies towards them in the early 1970s, a study with many implications for Latin America. Castillo exposed the corruption in scavenging in Mexico City and the political clientelism involving the local government, the ruling party (PRI) and scavengers. He was beaten up and received death threats for doing that.

Conducting research on scavenging can be hazardous in other ways too: you must spend a lot of time in garbage dumps, where you are exposed to various toxic substances. The landscape at some dumps I have visited is Dantesque, strewn with dead animals, exuding unbearable stench and buzzing with millions of flies.

The three studies referred to did excellent qualitative analyses of scavenging, but did not get reliable quantitative data, such as number of scavengers, their demographic characteristics, incomes or economic impact. Therefore, I decided that in my research I would use random sampling and quantitative methods in order to obtain reliable numbers on the scavenging population and their activities. I concluded that scavenging was understudied but faced skepticism. When I proposed this as a dissertation topic to my advisor at Yale, he was very supportive. But when I approached another renowned Yale professor, whose name I do not care to remember, he was utterly dismissive. After reading my proposal, he would not even talk to me. He wrote

a letter to the dean, telling him that what I wanted to do was garbage. He replied that I would only embarrass Yale if I pursued this topic. Nevertheless, I believe I have proved him wrong. I have received several awards for my research. After my book *The World's Scavengers: Salvaging for Sustainable Consumption and Production* came out, both the World Bank and the Inter-American Development Bank invited me to give lectures, and soon after, both banks started to actively support scavengers. My work has been used to design programs and legislation supporting scavengers in Brazil, Colombia, Argentina and the Philippines. My dissertation, and later my book, were the first to propose a methodology for obtaining reliable quantitative data on scavengers, examine in detail the history of scavenging, as well as demonstrate its linkages with the formal and international economies.

But I faced significant practical obstacles in the beginning. I had to develop a new research design using a joint qualitative/quantitative methodology. I also had to build trust among scavengers for six months before conducting a survey.

Getting middlemen's cooperation was even harder. Middlemen are the link between scavengers—whose activities are mostly informal and often illegal—and industry. They regularly earn big profits, often exploiting the scavengers. Therefore they try to avoid attention and divulging any “trade secrets.” One middleman in Texas did not even let me finish my request trying to get his cooperation. He told me I was trespassing and threatened to call the police to get me arrested. Luckily, I met a middleman's son, who provided invaluable insights into the middlemen's role in the recycling business. I am very grateful to this informant who will remain anonymous.



An overview of a dump.

I encountered a different problem when members of a scavenger co-op asked me to help them get rid of their corrupt leader. It was very hard not to get involved. Even terminology was a problem. Scavenging exists throughout Latin America, but nearly every country uses a different word because the Spanish language lacks a standard term for it. I knew that Mexicans call them *pepenadores* (derived from Náhuatl, the language spoken by the Aztecs), but not the terms used in other countries. I eventually learned that they are called *catadores* in Brazil; *guajeros* in Guatemala; *minadores* in Ecuador; *clasificadores* in Uruguay; *recicladores* in Colombia; *cartoneros* in Argentina, and so forth. *Buzos*, one of the most common terms, is used in Cuba, Costa Rica and Bolivia.

In time I realized that the study of scavenging was not only a theoretical exercise, but that it also had policy implications for development and climate change. My main findings question the following eight myths.

MYTHS ON SCAVENGING

Myth # 1: Scavenging is a recent activity

The belief that scavenging goes back only a few decades is widespread. In fact, scavenging has existed for thousands of years. Humans began to use and refine gold, copper and bronze some 5,000 years ago. They quickly realized that some things left over from the process—as well as old and broken objects—could be melted down and recycled to make new objects. People who recover metals, glass, rags, wood and paper have been around for centuries.

Myth # 2: Scavengers are the poorest of the poor

It is true that scavengers sometimes have very low incomes, below poverty levels in many countries. However, this poverty tends to be caused by exploitation by middlemen and corrupt leaders. If scavengers are not exploited, their earnings can be above the poverty line, in some cases significantly higher. Microenter-

prises, cooperatives and public-private partnerships have been successful in reducing poverty among scavengers.

Myth # 3: Scavenging is a marginal activity

Scavenging is often believed to be an activity relegated to society's fringes. This is not true. Scavengers play a fundamental role in supplying raw materials to industry. In Latin America, scavengers have been essential to the paper industry for more than four centuries. Mexico's paper industry is trying to use as much waste paper and cardboard recovered by *pepenadores* as possible in order to survive the international competition created by NAFTA. And Brazilian *catadores* recover about 90 percent of the post-consumer materials recycled by industry in that country.

Myth # 4: Scavenging is a disorganized activity

It is true that many scavengers are unorganized as a labor force. However, they often specialize and have division of labor. In the



From top left: Rag cart; Hauling trash in Argentina; Carrying garbage for recycling in the dump; Searching for food in the trash.



streets, they sometimes establish territorial divisions. Scavengers also make agreements with local residents, stores and businesses to get exclusive access to waste materials. Garbage dumps and landfills can be highly structured. Hundreds or even thousands of people may work there, and they tend to be organized in order to avoid conflicts. Some dumps resemble factories: they have work shifts, supervisors, and each worker has a specialty. Latin America is the most advanced region in the world in organized scavenging: more than 1,000 scavenger cooperatives and associations exist in the region today.

Myth # 5: Scavenging has a minimal economic impact

This opinion is widely held, but incorrect. In Brazil alone, scavenging has an annual economic impact of about US\$3 billion. The World Bank estimates that about 15 million people worldwide work as scavengers. Assuming a median income of US\$5 a person per day, their global economic impact is at least US\$21.6 billion dollars a year, and about US\$7 billion in Latin America. Scavenging cuts down on imports of raw materials, which enables the country to save hard currency. Scavenger-recovered materials are often exported, thus generating hard currency. In Argentina and other countries, for instance, PET, the clear plastic used to make beverage containers is exported to China, where it is recycled into new products.

Myth # 6: Scavenging is a static activity

Scavenging is actually highly dynamic. I was surprised to learn the degree to which scavenging is connected to and depends directly on developments at the national and international level. Population growth and urbanization increase the production of consumer products and the resulting waste materials. The industries that make these products require raw materials. Increased economic activity and international trade also boost the demand for the materials recovered by scavengers. The prices scavengers get paid depend on global supply and

demand factors. In times of economic crisis, scavenging tends to rise as a result of unemployment and poverty. Argentina's 2002 peso devaluation and economic crisis, for instance, dramatically increased the number of *cartoneros* working on the streets of Buenos Aires and other cities. During the 2008 recession the prices of recyclables dropped 50 percent in just a few months due to lower global demand. Global recycling supply chains now exist, forming a giant loop: Chinese factories manufacture and export products worldwide. And scavengers in the developing world recover recyclables, which then are shipped back to China to start a new cycle. Thus, scavenging is inextricably linked to the global economy.

Myth # 7: Scavengers are a nuisance that must be eliminated

Authorities in most countries consider that scavengers cause problems to society and to themselves and ought to be eliminated. Scavengers may open bags of garbage and scatter their contents onto the streets. Working in dumps poses serious health risks to scavengers. Child labor in trash picking should be phased out. Most municipalities have banned scavenging, but bans only cut scavengers' income and worsen their living conditions. If governments want to reduce poverty, they should work with scavengers, not persecute them.

Myth # 8: Scavenging has no place in modern waste management systems

Many government officials believe that the only way to improve waste management is to adopt the same advanced technologies used in developed countries. It is true that scavengers do not play a significant role in formal waste management in the developed world today. In the past, however, when most of their populations were poor, scavengers played an important role in the economy and society in Europe and the United States, particularly in the 19th century. A British researcher living at the end of the 19th century estimated that London had 100,000 scavengers at that time. That number is higher than we can find in most of the

megacities in the developing world today. Also at the end of that century, New York City even built a facility where scavengers could sort materials from the city's trash. Clearly, the city considered scavenging as beneficial and supported it. The socioeconomic conditions in the developed and developing worlds today are completely different, and require dissimilar solutions. Developing countries need to create millions of jobs each year, especially for youths; advanced technologies reduce the number of jobs. Scavengers save cities money by reducing the amount of waste that needs to be collected, and lengthening the life of dumps and landfills. They supply inexpensive recyclables to industry, improving their competitiveness. Recycling saves energy and water; and the industrial processes are less polluting than using virgin resources. Energy savings translate into lower generation of greenhouse gases. Scavengers can be successfully incorporated into the collection, processing, and recycling of source-separated materials, thus reducing their health risks while improving their productivity and their incomes.

SCAVENGING FOR SUSTAINABLE DEVELOPMENT?

Evidence is mounting that scavenging—if government-supported and conducted in an organized and sanitary manner—can be a perfect example of sustainable development: it can create jobs, reduce poverty, prevent pollution, reduce greenhouse gas emissions, conserve natural resources and protect the environment. Therefore scavenging benefits society and public policy should actively support it.

Martin Medina has collaborated with governments, NGOs, academic institutions and international organizations in Africa, Asia, Latin America and the Middle East. He has published widely on the informal recycling sector, community-based waste management, and sustainable materials management. He is currently Sr. International Relations Specialist at the US National Oceanic and Atmospheric Administration.



Recycling Livelihoods

A Global Network Supports Waste Pickers
in Latin America

BY LUCÍA FERNÁNDEZ AND MARTHA CHEN

STANDING FOR LONG HOURS IN LINE TO RECEIVE your first paycheck may sound pretty stressful. However, for recyclers in Bogotá, their first paycheck was a huge victory after more than twenty years of legal and political struggles—proof of the power of committed partnerships between academics and workers in the informal economy.

In 2010, the global action-research-policy network Women in Informal Employment: Globalizing and Organizing (WIEGO) and the Asociación de Recicladores de Bogotá (ARB) conducted joint research on a waste management financial modeling tool. In late 2011, Colombia's Constitutional Court ruled that waste picker associations should be allowed to bid for solid waste management contracts, mandating that their organizers should submit bids by March 2013. ARB used the financial modeling

tool in preparing its successful bid—a historical legal victory for waste pickers. Beginning in March 2013, thousands of wastepickers have been getting paid for the tons of recyclable materials they collect every day from the streets of Bogotá.

The Bogotá model for integrating waste pickers, through their organizations, into the existing municipal solid waste management is to be replicated across Colombia, according to a recent decision by the Ministry of Environment, showing what is possible when municipal governments decide to partner with waste pickers and their associations. It is also a powerful example of WIEGO's work with waste pickers in Latin America over the past six years, in this case in collaboration with ARB and the efforts of WIEGO's regional waste picker coordinator in Bogotá, Federico Parra.



WASTE PICKERS WITHOUT BORDERS

In March 2008, WIEGO and the Asociación de Recicladores de Bogotá (ARB) co-hosted the first international conference in the Colombian capital of waste pickers, meeting in Bogotá. Latin America was chosen as the venue for the conference as it was the first region to have a regional network of informal worker organizations: Red Latinoamericana de Recicladores (Red Lacre). More than 300 recyclers and their supporters from 34 countries around the world participated in the conference.

The two of us met at that conference. Lucía Fernández, who had done pioneering work in support of waste pickers across Latin America from her native Uruguay, was asked to coordinate the event and eventually became WIEGO's global waste picker coordinator. Martha (Marty) Chen, WIEGO's co-founder and international coordinator, announced in a speech that WIEGO was planning to work with and support waste pickers and their associations around the world, as we had done with home-based workers and street vendors since 1997 when WIEGO was founded. Today we support the virtual platform globalrec.org for the Global Alliance of Waste Pickers, sharing more than thousands news from waste pickers around the world.

WOMEN'S EMPOWERMENT AND INCLUSION IN BRAZIL

Brazil did not win the last football World Cup, but waste pickers there, known as *catadores de materiales reciclables*, won the contract to collect waste from the 12 World Cup stadiums. Thus, around 840 *catadores* organized in cooperatives were able to recover more than 400 tons of recyclable materials—a major victory that likewise had years of “training” behind it. Brazil is the country with the most experience, not only in Latin America but internationally, in organizing waste pickers and securing support for them from the government and civil society. The Movimento Nacional de Catadores de Materiais Recicláveis (MNCR)

began building a national network of organizations of waste pickers across Brazil in 2001. Today, MNCR has more than 80,000 *catadores* in its membership, organized into local cooperatives and sub-national networks.

Sonia Dias from Belo Horizonte, Brazil, WIEGO's waste picker sector specialist, has worked for the recognition and professionalization of *catadores* for nearly thirty years since her early involvement in the Waste and Citizenship forum of Minas Gerais. More recently, she has focused her research and activism on gender relations and dynamics among waste pickers with a view to increasing women's leadership in these organizations and networks. In 2013, after a participatory research process, WIEGO, MNCR and a local university launched a Gender and Waste project. It seeks to understand the multiple levels of discrimination that women waste pickers face in the home and workplace, and as leaders in their networks and movements. “This project is very important for us women recyclers, as it has enabled us to exercise our autonomy,” said MNCR leader Madalena Duarte. Hundreds of Brazilian women recyclers have been empowered through the Gender and Waste project, one of the first of its kind in Latin America. WIEGO expects to scale up the project and continue to empower women recyclers, disseminating the findings of the project while starting a similar process with women waste pickers from other countries in Latin America.

Previous: Waste pickers work in one of the world's largest dumpsites, La Chureca, Managua, Nicaragua, 2013. **Top left:** *Catadores* from the Brazilian movement of waste pickers MNCR during a street demonstration at RIO+20, Rio de Janeiro, June 2012; **Top right:** Working as a waste picker for more than 50 years in Managua, Nicaragua, February 2012; **Bottom:** The mountain on the left is made by waste; in the background is a typical Nicaraguan mountain, February 2012.







Recicladores from the Association of Recyclers of Bogotá sort waste at one of their cooperatives during field visits during the First World Conference of Waste Pickers in March 2008.

RECYCLING IN NICARAGUA

For more than fifty years, Juana Rafaela Juárez collected, sorted and sold recyclable materials at a landfill in Matagalpa, Nicaragua. In February 2012, with Red Lacre and Red de Emprendedores del Reciclaje de Nicaragua (RedNica), Lucía Fernández and other WIEGO colleagues co-organized the first regional conference of waste pickers in Central America. They named the conference after Juana Rafaela, in honor of her hard work and who also stands as a symbol of countless anonymous waste pickers.

The year before, WIEGO had supported an extensive mapping of waste pickers in Central America carried out by the leaders of established waste pickers organizations in the region. They visited ten countries in Central America and the Caribbean, meeting their peers, most of whom were unorganized, promoting and encouraging the importance of the organization as a way to improve their

livelihoods and protect individuals from the threats facing the sector. In Central America, as in the rest of Latin America, privatization of the collection and disposal of waste together with the use of technologies, notably incinerators, that do not promote recycling were identified as the key threats faced by waste pickers.

LOOKING TO THE FUTURE

In 2008, when the international conference was held in Bogotá, only five countries were part of Red Lacre, the regional network of waste picker organizations: Argentina, Brazil, Chile, Colombia and Uruguay. Today, national networks or movements of recyclers exist in 12 more Latin American and Central American countries: Bolivia, Costa Rica, Dominican Republic, Ecuador, Honduras, Nicaragua, Panama, Paraguay, Peru, Puerto Rico and Venezuela. Red Lacre continues to be a pioneer model for waste pickers from other regions, organizing waste pickers

and integrating them into national policies and city schemes for solid waste management. WIEGO is grateful to be able to continue to support these processes, knowing that there are many challenges ahead for waste pick to secure their livelihoods and dignify their profession.

***Lucía Fernández** is an international specialist on informal recycling, working for more than ten years with waste pickers organizations from 20 countries. She is an architect with a Master's degree in ethics and sustainable development and had a research affiliation with MIT.*

***Martha Alter Chen** is a lecturer in public policy at the Harvard Kennedy School, an affiliated professor at the Harvard Graduate School of Design, and international coordinator of the global research-policy-action network Women in Informal Employment: Globalizing and Organizing (WIEGO).*

Ciudad Saludable

Building Healthy Models for Cities **BY ALBINA RUIZ RÍOS**

I HAD THE PRIVILEGE OF BEING BORN IN THE jungle of Peru to campesino parents. They were people of infinite wisdom from whom I learned many things in my life: most importantly, to think of others and not to bow down to adversity. As there was no university in my jungle, I moved to Lima at sixteen to study industrial engineering and found myself amid mountains of trash. In my world in the jungle we did not have trash. All leftovers went to our animals and without knowing it, my parents showed me how to recycle and live sustainably, even though these terms did not become a part of my life until many years later.

When I moved to Lima and discovered trash, I also discovered that it stays where the poor live. Why wasn't trash collected in the human settlements where I resided? I hitched rides on garbage trucks around the city to answer this question for my thesis. I soon saw that the trucks were unable to navigate the piles of garbage in the street or travel up the hills where the poor lived, but the limitations were not simply mechanical. Authorities claimed that those who live in these places like to live in filth and were unwilling to pay for services. Nothing could be further from the truth. My neighbors wanted to be clean and were willing to pay for it, but at a fair price and when services were actually delivered. (Corruption was another critical factor—often contracted services showed up only occasionally or never at all.)

What saddened me most was not the trash itself, but the people living not only in it but also from it, eking out a livelihood as garbage pickers. That's when I started to develop a program now known as Ciudad Saludable (Healthy City). From the very beginning, I knew we had to involve them in the solution, particularly poor single mothers whose children often got

sick from living in a garbage dump. Single, unemployed mothers made up our first informal waste collector enterprises, so we were able to tackle unemployment along with unsanitary conditions. The local enterprises collected and processed garbage, charging affordable fees and separating recyclables. At first it was tough to explain to neighbors that paying a fee for waste collection was better than treating diarrhea. But once we achieved this mindset change, there was no turning back; families wanted waste collection because they knew it would improve their quality of life. While at the beginning it was just a simple, low-cost model making use of local resources and labor, we later incorporated these informal waste collectors into municipal waste management systems, creating long-lasting change.

What saddened me most was not the trash itself, but the people living not only in it but from it, eking out a living as garbage pickers.

I then joined Ashoka, a network of people with innovative ideas, and discovered my new vocation: social entrepreneur. I discovered a world of many "crazy" people like me, social entrepreneurs around the globe that Ashoka selects and links in its supportive network, people who believe things can change and employ real solutions to problems. Ashoka and my peers pushed and supported me to think about replicating my idea for greater impact. I had long rejected founding my own organization because of fears that leading an organization would take me out of the field, but Ashoka showed me I was sitting on an idea that could be helping cities around the world; I had to open up and

share it with others.

Ciudad Saludable was born as an instrument of change to build a community-based solid-waste management system and to spread that model throughout Peru and the world. Our program, Pro Reciclador, works with all actors in the value chain of recycling, particularly at the base of the pyramid, as the lowest income individuals are called. Recyclers receive assistance to form formal micro-enterprises and to implement recycling programs in tandem with local governments. They also gain access to comprehensive healthcare and financing for their recycling operations, as well as contact with export companies to directly sell recycled materials. Through our program Ciudadanía Ambiental, we also work with schools to teach students and

parents about waste sorting and how to implement it in their everyday lives.

As Ciudad Saludable grew as an organization, we asked ourselves how many years we would need to change the entire world, city by city. We recognized that we could never live the 500 years necessary to do this, so we had to accelerate the process. Instead of building new ciudades saludables, our goal became to promote other change makers who would adopt the model of Ciudad Saludable and make it their own. We shifted from managing programs to working for system change.

When we formed our first recycling association in Peru in 1998, we didn't dream that one day we would see hun-



Above: Albina Ruiz (right) talks with recycler; **Opposite page, from top left, clockwise:** Workers sort garbage in a collection center; A woman empties recycled materials in a collection center; Vacationers play an educational game about recycling trash on a Peruvian beach.

dreds of these organizations across Latin America. But then we realized replication itself was not enough to truly change the status quo. We had to change the system by influencing public policy on inclusive waste management and building alliances with public and private institutions. We learned how to dialogue with politicians and business leaders, but most importantly, how to empower our own neighbors in recycling collectives to join us in being change makers. We formalized this new outlook in our program Basura Cero (Trash Zero), which promotes technical and legal norms at various levels of the public sector, develops sustainable and inclusive solid-waste management plans and created a post-graduate program in solid-waste management through the Universidad Católica. This new focus resulted in the first law regulating recycling activity passed in the world, Law 29419 in Peru in 2009, and we are working with other countries to replicate this achievement. We also helped roll out a publicly admin-

istered incentives program that brought formalized recycling programs to 205 Peruvian municipalities in 2013.

My dream is that all other developing countries would have comprehensive, sustainable and inclusive waste management systems involving those living at the base of the economic pyramid and strengthening the value chain of recycling; we will achieve that when everyone in the process becomes an actor of change. I remember the night I met Sonia Quispe Taco and her mother opening trash bags in the center of Lima to collect food for their pigs. Sonia listened intently when I told her we were establishing a recycler collective. After becoming a devoted recycler and collective leader, she later opened her own business, Ecomanos, which makes art from recycled paper. She was very nervous about her meeting with the manager of an upscale Lima art gallery, but she called me afterwards, so excited that they had invited her to a glass of wine to discuss the final agreement, entrepre-

neur to entrepreneur. Even though her early death took her from us, her legacy of well-trained and motivated colleagues continues her work. We are encouraged to see that around Peru and in a number of other countries, opportunities continue to grow for families like Sonia's with the increasing adoption of integrated solid-waste management programs. However, we know we have quite a way to go until people truly see garbage as an opportunity instead of a problem.

***Albina Ruiz Ríos** is a Peruvian environmentalist and social entrepreneur. Founder and leader of Ciudad Saludable, she is a Schwab Foundation fellow of the World Economic Forum, an Ashoka Fellow and a Skoll Foundation social entrepreneur. She received her Ph.D. in Chemistry from Ramon Llull University in Barcelona, Spain.*

***Leah Scott-Zechlin**, an intern for the Ashoka Globalizer, contributed to this article.*



The Sound of Garbage

The Landfill Harmonic Orchestra

BY ROCÍO LÓPEZ ÍÑIGO

THE RECYCLERS IN CATEURA, ASUNCIÓN'S municipal garbage dump, live from the trash and, in many cases, among the trash. The fetid odor carried along by the wind from Cateura to the nearby communities of Bañado Sur is intense, since the area has no sewage system and the service of running water is deficient. Children often work alongside adults picking trash or as street vendors instead of going to school—school attendance is only 40 percent. However, a sweet melody has now emerged among the discarded metal, plastic and smelly refuse: the Landfill Harmonic Orchestra, which in Spanish is known by the more evocative name, la Orquesta de Instrumentos Reciclados de Cateura—the Orchestra of Instruments Recycled From Cateura.

When environmental engineer Favio Sánchez, now 39, arrived in the community eight years ago to work on a waste recycling project, he found the conditions in the dump, one of the focal points of environmental tension in the Paraguayan capital, startling. The dump received—and continues to receive—800 tons of garbage daily. Only a few feet away from the banks of the Paraguay River with its continual threat of flooding, the dump is home to some 2,500 families who squat in small shanty towns near the garbage dump, their primary source of income. These gancheros recycle what the rest of the city has cast aside. Whether it's cold, rainy or very hot—Asunción can reach temperatures of 110 degrees in the summer—the residents of Cateura pick through the trash to make a few dollars.

To get closer to the families, he began teaching music to the children who approached him, curious about this stranger in the dumps. None of the kids could afford a musical instrument to

practice on. After a day of musical lessons, they would always go home without being able to feel an instrument in their own hands. But soon they got the idea of looking for raw materials in the trash, recycling them and transforming them into guitars, cellos and flutes.

Nicolás “Cola” Gómez, a Cateura recycler, took charge of the creation of the string and wind instruments. Although he had never seen a violin, his sheer determination and talent in carpentry transformed him into a “trash magician.” Oil tin cans, bottle caps, pieces of metal tubes, even forks, all served to put together musical instruments. The children learned to play Mozart, Beethoven, Henry Mancini and even the Beatles on their makeshift creations.

The project has grown from a mere ten children in 2006 to more than two hundred music learners today, with 35 children actually in the orchestra. All of them live in conditions of extreme poverty, with all that that signifies: broken families, street violence, drugs and alcoholism. Although it rises out of the trash, the project's emphasis is not only on its environmental value, but in what it teaches children about effort, cooperation, tolerance and leadership—qualities that are all too often absent from their communities. To be a member of the Landfill Harmonic Orchestra requires commitment. Sánchez puts much emphasis on shaping values, but cautions that it's too early to measure results. “Time will tell,” he says.

Thanks to the documentary by Juliana Penaranda-Loftus, *Landfill Harmonic*, the children of the orchestra have begun to travel to travel far and wide within Paraguay and overseas, telling the story of the recycling of instruments and the recycling of lives. The rock group Metallica even chose them as the opening act in its last

tour around Latin America. The orchestra has now received donations of new instruments; it also now has its own place to rehearse and receive music lessons. “But everything doesn't get resolved with a trip to Europe,” cautions Sánchez. He points out that the children's daily reality is much different from what they witnessed in Düsseldorf, Boston and Madrid. The changes Sánchez hopes to achieve in the children's lives are slow, one step at a time.

Even more than the craft of music, Sánchez hopes to impart to the children the concept of making an effort and of gaining perspective on their own lives, making their own decisions. Sometimes it is just enough to show alternatives for them to take initiative. Nevertheless, daily reality is not easy to confront. Thus, the project supports the families so that students can stay off the streets and continue their studies; sometimes, the project contributes to improving houses and providing materials and food. But more than material benefits, the project provides formation and respects their backgrounds, the realities of the difficulties of living in or around the dump.

Their everyday life is difficult, living in the middle of garbage. But in Cateura, garbage also signifies hope. The mountains of discarded trash have transformed themselves into opportunity in a little school. Dozens of children from the garbage dump are learning to see the world in a different way, and the world in turn is learning just what these children are capable of doing.

Rocío López Íñigo is an Erasmus Mundus MA Global Studies candidate from the EMGS Consortium who has lived and worked as a journalist in Argentina and Mexico, experiencing different Latin American realities.



Clockwise from top left: Favio Sánchez and Nicolás “Cola” Gómez; Tania has learned to play instruments made from recycled materials; Cola with his recycled instruments.

A Long Way from the Dump

Recycling Lives **BY EVELYN MANSILLA**

I AM THE OLDEST OF FIVE CHILDREN, AND FROM the time I was little I learned to look for toys and food in Guatemala City's sprawling garbage dump. My grandmother raised pigs, and I had to be in charge of them when they went to feed in the dump. My defensive weapon was a big stick that I also used as support when I had to pull my rubber boots out of the sticky mud, surrounded by hovering vultures that were attracted by the smell of rotting garbage. The morning air always carried a thin cloud of smoke, the smell

of burning copper, decomposition, but also smells that drew us to action, like the exhaust from the garbage trucks that brought trash from the fast food restaurants. Those trucks were the most popular. An avalanche of waste sat in the plastic bags that had scraps of hamburgers, fried chicken and pastries.

The dump was very chaotic and stressful because more than three thousand people swarmed to it to find things to eat or sell. Half of them were kids like me who were competing to find toys

and food. We had to survive the garbage trucks that careened from all directions and the tractors going from one side to the other, and besides that I had to look out for thieves who wanted to steal one of my piglets. That's how I learned to defend myself and what was mine. But the truth is that I felt useful and glad that I could do things. Nevertheless, my aspirations and dreams didn't go beyond the vague ideas of getting a job, helping my family, contributing to the household expenses and helping to fix the place we lived in.



Since I can remember, my mamá has always worked for others, day and sometimes night, washing clothes, ironing and house cleaning. My father had been a car mechanic but suffered a bad accident when a car motor fell on top of him, detaching his retina and seriously damaging his eyes, part of his face and right arm. He survived but couldn't get a job after that. As the years passed by, I learned from my mother that women can maintain the home, but she also taught me to be submissive, to think that I couldn't do the same things that a man could. She thought we had to be realistic, which meant I was not to dream about having a pretty house or an extraordinary future because I was born into poverty and condemned to live my family's destiny. There was nothing that could be done about it.

When I was 12 years old I started to go to photography classes with a project that was originally called Out of the Dump. For me it was like discovering a new world; I could use the camera to show my environment and at the same time taking photos opened me up to entirely new horizons. During my first year of classes I started to develop my self-confidence. At first I was afraid to get close to people to take a photo. I liked to hide behind the camera, click, and go on. Later I discovered that every instant, every moment that got me to take a photograph was etched in my heart. My eyes were opening, making me more perceptive, sensitizing me and giving me the understanding that although my situation was difficult, there were families and children that were even worse off.

During this process of self-discovery, I began to realize I could do a lot more than care for pigs. I could show the world my vision of things. I could express myself without fear. But what was great was how the people perceived my work. The first time that one of my photos was in an exhibition, I couldn't believe that people called me—ME—a star. I felt great and hoped that from then on I could take control of my future, dream, plan, and have goals.

Given the Out of Dump's remarkable success, the project was able to expand beyond the dump and offer the same opportunities to other children from areas affected by extreme poverty and violence, and the name was later changed to FOTOKIDS.

After three years in Fotokids I was



Left: Nine-year-old Mirian takes a portrait of her mother; Above: Young boy works in the dump, 1992; La Piñata, 1995.



Top: Evelyn, 14, with Marisol, helping Nancy McGirr cover the presidential elections, 1995; Below: Evelyn Mansilla now teaching the Save Girls class.

given the opportunity to travel to Spain, a country with a culture completely different from mine, and share this experience with other children from the Sahara, London and Granada. I had dreamed about what it would be like to fly in a plane, but frankly never thought I might have the opportunity to travel twice to Spain, and to Australia, London and California.

I was the first in my family and in the Fotokids group to graduate from high school and the first to go to university, where I studied journalism. I started teaching photography classes to younger children in the Fotokids program when I was 14 years old. Teaching is one of the things that fulfills me as a human being: the power to share with other young people the knowledge I have acquired and give them the opportunities that I have been given.

I am now married and have a 9-year-old daughter. I am the administrative director of Fotokids and I continue giving classes in photography, video,

graphic design, creative writing and gender studies.

Fotokids really spun my life around. It wasn't simply giving a child a camera and showing her how to use it; it was giving children like me the opportunity to discover themselves. To know that regardless of our present circumstances or what might cross our paths, we are valuable and that we can change our future. The Fotokids' scholarship program offers economic support from primary school through the university. Getting children to learn to think and see, get an education, acquire a vocation, and gain parental involvement is what makes Fotokids a successful and integrated program.

***Evelyn Mansilla** is the executive director of Fotokids in Guatemala.*

She also teaches classes in photography, video, graphic design, creative writing and gender studies to the youths in the program.

More on Fotokids By Nancy McGirr

Fotokids has worked to break the cycle of poverty through professional training in photography, graphic design, web design, video and writing for more than 23 years. From its original start in Guatemala City's garbage dump, the organization has expanded to provide educational scholarships for some 170 students, all of whom live in some of the most violent and harshest economic conditions throughout rural and urban communities in Guatemala and Honduras.

FOTOKIDS PROGRAMS WORK BECAUSE:

- We work long-term with kids, teaching them vocational skills in graphic design and photography while at the same time giving them scholarships to enable them to attend traditional academic schools.
- We keep it small and start with young kids, 10 to 11 years old, who can stay in the Fotokids program from elementary school through university.
- It's an integrated program; we work with the families and the schools.

We know our kids, their families, their problems; we foster self-confidence and critical thinking, and give them an opportunity to be heard and to show off their artistic skills.

Along with special programs for at-risk secondary school-age

girls, we provide vocational training for teens, and head start for grade school kids. Fotokids classes are free, but the academic scholarships that have helped hundreds of kids who otherwise wouldn't be able to afford school cost us from \$300 to \$1,200 a year.

Our graduates have gone on to the university to study law, architecture, journalism, graphic design, business administration and systems engineering. They've found good jobs and their photographs have been exhibited in 14 countries. The graduates now have their own design studio, Jakaramba.

***Nancy McGirr** is founder and Director of Fotokids, award winning staff photojournalist in Central America for Reuters and recipient of the 2011 Lucie Award for her humanitarian work in Photography.*

Funding for academic scholarships, vocational training and teachers' salaries is much needed because of the escalating violence and insecurity in Honduras and Guatemala. You can donate through the PayPal donation button on www.fotokids.org or by sending a tax deductible check to Fotokids, P.O. Box 661447, Miami FL 33266.



THE ART OF TRASH

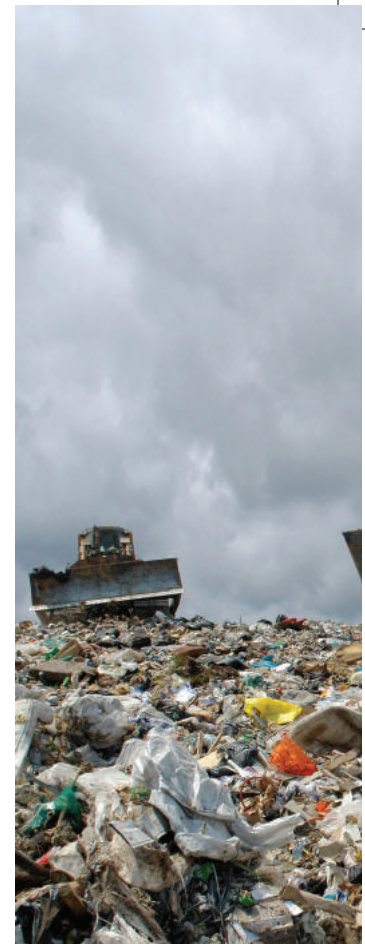
Trash is dirty. Trash is smelly. Trash can provide the raw materials for exquisite art—from sculpture to film and beyond.

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Trash Moves

On Landfills, Urban Litter and Art BY MAITE ZUBIAURRE



TRASH MOVES, ALL THE TIME. IT BECOMES A steadily growing heap of clutter behind closed walls, accumulates and festers under tight lids, travels from a small trash can in the kitchen to a large one on the curbside, joins other people's rubbish when the garbage truck arrives, drives to the transfer station, where it circles around on conveyer belts, bids farewell to recyclable or compostable goods, is loaded (if declared useless: the ultimate trash) into yet another garbage truck, or barge, or even train, until it arrives at its final destination: a sanitary landfill.

Even in the landfill, it does not remain still. Monster "waste handling dozers" move rubbish around, compact it and press it against the soil. More importantly, they incessantly "sculpt" refuse with their huge shovels and caterpillar wheels, making sure the garbage mound does not tip over to create a fetid avalanche. When night falls, and the trash load of the day finally disappears under a thick layer of mud, detritus still moves: once underground, it settles differently, and decomposes at a different speed, thus continuously altering landfill topography: where there was an even plateau, now there is an abruptly descending

slope, and a valley; and where there was a perfectly smooth road, now there are deep crevices in the pavement.

This is how trash moves. But...who moves on trash? In the United States, it is mostly big-wheeled machines, an industrious army of giant yellow insects busying themselves on a heap of rubbish. In Latin America, it is mostly people. People who hand-pick garbage, who build their shacks on densely compacted trash layers, and who, day in and day out, eagerly throw themselves into the boisterous cascades of fresh debris falling from garbage trucks. In many of the garbage dumps around the world, scavenging becomes a steady job.

In 2012, Mexico City's enormous 927-acre landfill, Bordo Poniente, closed down, leaving 1,400 *pepenadores* (scavengers) without a job, and four hundred families without a dwelling, since many of the "pepenadores" used to live in and around the garbage dump. That same year, yet another garbage mountain in Latin America, Jardim Gramacho, home to 3,000 *catadores*, became a thing of the past. Located on the outskirts of Rio de Janeiro, and one of the three largest active landfills in the world, it is now a

deserted site, a vast topography of abandoned garbage mounds.

Trash is as resilient as cockroaches, but less repugnant to some people and much less alien to human nature: we universally share (and fear) the fate of trash; we understand putrefaction, because putrefaction, ultimately, is what awaits us. This incontrovertible truth is what makes trash "moving" for artists and philosophers alike. It certainly explains why Slavoj Žižek openly embraces trash in a filmed documentary and feels at home at a dumping site (*Examined Life*, 2008); why Vic Muniz creates monumental trash art in Jardim Gramacho with the help of *catadores* (*Waste Land*, 2010); why Favio Chávez and Nicolás Gómez decide to build musical instruments out of garbage and get 35 children from Cateura, Paraguay's biggest trash dump, to travel the world with their "Recycled Orchestra," or "Landfill Harmonic" (<https://www.youtube.com/watch?v=sJxxdQox7n0>); and, finally, why "Eloísa Cartonera," a work cooperative in Buenos Aires, proudly produces handmade books with cardboard covers: "We purchase [...] cardboard from the urban pickers (*cartoneros*) who pick it



Opposite Page, Far Left: Trash pickers watch truck with garbage. **Middle Photo:** In the United States, rummaging among trash in a sanitary landfill is strictly forbidden, even for staff working on the premises. One day, a huge load of factory-fresh Barbie dolls arrived at Puente Hills Landfill, about twelve miles southeast of Los Angeles. Employers gathered to watch the dumping of thousands of Barbie dolls, a Pop-explosion of silken blondness, slender limbs and bright blotches of fabric on chewing gum-rosy skin suddenly impacting the blue Californian sky. By law, slightly defective and potentially harmful merchandise needed to be discarded. And by law also, no one was allowed to retrieve leggy beauties from the garbage pile. **Right photographs:** From upper left, clockwise: chewing gum with embedded autumn leaf; fossilized tube; corroded napkin; melting Crayola. (Series “Roadkill,” Filomena Cruz, 2014).

from the streets. Our books are on Latin American literature, the most beautiful we had a chance to read in our lives”

(<http://www.eloisacartera.com.ar/ENGversion.html>). “Eloísa Cartonera” started in 2003, and since then various countries in Latin America (and lately also in Europe and in Africa) have put forward similar initiatives. “Sarita Cartonera” (Peru), “Katarina Katadora” (Brazil), and “Santa Muerte Cartonera” (Mexico) are only three examples among many.

No matter how “movable” and “moving” (literally, and figuratively) trash may be, one likes to imagine it as something carefully contained. Garbage properly “stored” and put away brings peace of mind, as do corpses boxed and buried, or criminals confined to a cell. However, rubbish has a tendency to spill and to overflow, and more often than not, some of it invariably ends up on the street. And it is that particular type of trash—

trash left behind, trash on the sidewalk, squished, squashed, and weathered—that Colombian artist Filomena Cruz recreates in her work. Her photographic series “Road Kill” painstakingly captures tiny “trash corpses” on the pavement. A piece of chewing gum with an “engraved” leaf; a flattened-out tube; a corroding paper napkin with a still intact heart; or a frog-green Crayola melting in the heat, all speak the language of “worthlessness” suddenly becoming meaningful (and moving). For one thing, trash corpses faithfully record city life, and they do so with the brevity, carefully measured emotionality, and poetic intensity of a haiku. For if we look at trash on the ground, we will probably imagine things very similar to the ones Filomena Cruz saw, namely, passersby chewing noisily and spitting, and golden autumn leaves silently falling from branches; children eagerly storming out of school during a hot day; heavy

trucks with big tires carelessly driving over stuff; and people hurrying back to their offices after lunch, still holding napkins in their hands: all that we see, thanks to the trash that we don’t want to see. And thanks to Art: for Art shows how trash—even the one that stops moving, and particularly the one that lies squished, squashed, and weathered, almost fossilized, on the ground—has the potential to move: to move us, that is.

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Beautiful Trash

Art and Transformation **BY PAOLA IBARRA**

*The river bears no empty bottles,
sandwich papers,
Silk handkerchiefs, cardboard boxes,
cigarette ends
Or other testimony of summer nights.*
T.S. Eliot, *The Waste Land*
(New York, London: W.W. Norton, 2001)

IT'S THE NIGHT BEFORE COLLECTION DAY. THE trashcan is full of rancid food mixed with wilted waste and rotten flowers. Pull the red string fast, tie a knot, and put in a new bag: empty, white and odorless. The paper bag with recyclables is filled with flattened cardboard, rinsed plastic containers, envelopes and beer bottles. On the street, the public bins are lined up on the sidewalk—late at night comes the sound of glass and cans collected by people that sell them to make a living. But, while everything gets emptied into the garbage trucks in the morning, the cycle of accumulation has already begun at home.

We relate to garbage daily. We use it, produce it and dispose of it. Endlessly. The most obsessive of us get rid of it as fast as we can. The hoarder likes to salvage a few things for later use—the plastic and glass containers, the cardboard boxes.

Talking about trash sparks a discussion about society and mass consumerism, on the increase as Latin America becomes more middle class. We know that capitalism's escalating cycles of production, consumption and obsolescence keep worsening an already problematic relationship between humankind, waste and nature (not to mention social and economic relations). Despite a relatively increased awareness about consumption and its consequences, the pace at which

we also acquire and dispose of material objects is exploding.

Particularly in the connection between garbage and the arts, I am interested in two questions. First, the issue of recycling as a general practice in the arts; and secondly, in the whole issue of representation—that is, representation of waste as subject, and representation (of waste or others subjects) through waste as material.

ART AND RECYCLING

Recycling has always been a common practice in the arts at least at a non-material level. From creating a world of words in literature, to rhythm and images in poetry, sampling in hip hop music, representation in the visual arts, or editing the illusory continuity of a film, art implies taking disparate elements (ideas, images, references, objects, etc.) and putting them together to form a new whole. Take and put. De-contextualize and re-contextualize. In that sense, art, as a system, is an act of recycling.

Although the strictly material dimension of recycling is commonly associated with the visual arts, especially sculpture, it can also be found in other art forms.

For instance, consider the Argentinian cooperative publishing house Eloísa Cartonera. Making books from waste cardboard results in a simultaneous reproduction of literary works at accessible prices (with the authors' donated rights), and a production of an art object (the books themselves, with their rough cut edges and handmade painted covers) made of discarded materials. Some of them are preserved as art books at university libraries, while others circulate as literary pieces expected to disintegrate in time—something anticipated of the material they are made from.

Assemblage at a tangible level (that is, of actual physical objects) became evi-

dent with the transformation of visual representation introduced by collage in 1912. As pointed out by Clement Greenberg in his essay "Collage" in *Art and Culture: Critical Essays* (Boston: Beacon Press, 1961), Picasso and Braque incorporated, for the first time, extraneous materials into the surface of a picture in search for "sculptural results by strictly nonsculptural means." In turn, Cubist collage gave way to what Greenberg refers to as the "new sculpture" or "construction-sculpture" that revolutionized the medium—from its materials to the techniques and compositional methods:

The new sculpture tends to abandon stone, bronze and clay for industrial materials like iron, steel, alloy, glass, plastic, celluloid, etc., etc., which are worked with the blacksmith's, the welder's and even the carpenter's tools. Unity of material and color is no longer required, and applied color is sanctioned. The distinction between carving and modeling becomes irrelevant: a work or its parts can be cast, wrought, cut or simply put together; it is not so much sculptured as constructed, built, assembled, arranged.
Clement Greenberg, "The New Sculpture," in Art and Culture: Critical Essays (Boston: Beacon Press, 1961)

This new approach continued to develop in a context of increased industrialization and commodification of everyday life. Consequently, more radical challenges to conventional figurative representation in sculpture—and to the arts in general, including its institutions—were brought about by constructivism and, ultimately, by the readymade. By means of the readymade, Marcel Duchamp actively introduced the question of "the relation of utilitarian objects to aesthetic objects, of commodities to art," as explained in Hal

Autoconstrucción Room, 2009. Installation view, Thomas Dane Gallery, London.
Installation of 15 objects; mixed media
Variable dimensions Collection D.
Daskalopoulos, Greece



Detail, *Forever; Blue Yonder* by artist Kyle Huffman: another example of recycled art, this time from colorful textiles.

Foster, Rosalind Krauss, Yves-Alain Bois, Benjamin H. D. Buchloh, *Art Since 1900* (New York: Thames & Hudson, 2011).

It's been almost a hundred years since Duchamp's most iconic and polemic readymade, *Fountain*, stormed into the art circuit in 1917. In contemporary art, the relationship between object and art has switched from the industrial object to just about everything, including a good amount of detritus.

REPRESENTATION: WASTE AS MATERIAL AND WASTE AS SUBJECT

Some artists use disposable objects as materials through which they construct their work. And sculpture, more than any other medium, allows the incorporation of discarded elements. For instance, sculptors Thomas Hirschhorn and Abraham Cruzvillegas both use debris as material, but they have quite different

readings in regards to waste.

In his essay "Detritus and Decrepitude: The Sculpture of Thomas Hirschhorn," Benjamin Buchloh distinguishes Hirschhorn's altars and pavilion from other kinds of sculpture, namely the solid monolith, the serial structure or "the ready made analogue to the commodity." He stresses not only the radical participatory potential of these sculptures—commonly placed in public spaces (low-income sites, public trash containers, and other peripheral locations)—but also the material they are made from: that is "detritus, the materials of waste and impoverishment."

Too Too—Much Much, a massive sculpture by Hirschhorn exhibited at the Belgian Museum Dhondt-Dhaenens in 2010 is, as the title tells it, a reflection on the meaning of quantity. It consists of a huge amount of beverage cans overrunning the entire gallery space and pouring out the main door into the entrance garden. As described by Hirschhorn, the accumulation of cans signifies consumption and excess, but serves also as commentary on artistic practice and the desire to create more and more. Besides the mountains of cans on the floor, various elements are scattered throughout the gallery: mannequins, pieces of furniture, old electronics, aluminum foil figures, plastic bottles, pornographic magazines, stuffed animals, cardboard mock-ups of skyscrapers, Christmas trees, etc. Some cans are assembled as mass consumption figures such as machine guns, television cameras, masks and airplanes. The complete sculpture suggests a landscape very much like that of a landfill.

What Buchloh argues in his essay on Hirschhorn, is that detritus is an inevitable consequence of "the incessant overproduction of objects of consumption and their perpetually enforced and accelerated obsolescence [that] generate a vernacular violence in the spaces of everyday life." While Hirschhorn is a Swiss artist, he speaks to the increasing perception in Latin America about encroaching commercialism and its consequences.

In contrast, in her forthcoming book *The Logic of Disorder: The Art and Writing of Abraham Cruzvillegas* (Cambridge: Harvard University Press, 2015), Robin Greeley looks at the work of this Mexican artist and his project Autodestrucción, from the perspective of “the logic of disorder,” one that “locate[s] his aesthetic production not in a universally uniform experience of relentless commodification, but in the systemic connections between object experience in ‘peripheral’ nations.... versus that encountered in the metropolitan ‘centers’ of developed countries and the international art market.”

Thus, while Hirschhorn exposes debris and the logic of excess in our society (including art and the art world) as an inevitable production of detritus, the work of Cruzvillegas explores the imbalance between center and peripheral experience in today’s globalized societies. He works with the creative modes of subsistence developed by the later group, activating discarded objects to reflect improvisation and collaboration. In a way, we deal with two sides of the same coin: that is, excess and scarcity.

Cruzvillegas’s sculptures have the qualities of both perfect equilibrium and latent transformation. Installations such as *Autoconstrucción* (2009) and *The Autoconstrucción Suites* (2013) are constructed with objects of different shapes and materials (e.g. wooden boxes, metal buckets, discarded sections of chairs, wooden and metal beams, clothing, rubber tires, old television sets) assembled in a balance so precise it upsets the precariousness of the materials and the discontinuities between them. In Greeley’s words, Cruzvillegas’s “object misuse does not remain purely at the level of metaphor, but is structured as a system of aesthetic production that enacts specific procedures.” One of them being that “nothing is viewed as pure detritus; everything has a potential for reuse.”

On the other hand, photography frequently makes a representation of trash as subject matter. Two compelling exam-

ples are Vik Muniz’s *Pictures of Garbage* (2008) and Andreas Gursky’s *Untitled XIII* (Mexico) (2002).

Pictures of Garbage is a photographic project about the catadores (trash pickers) working at Rio de Janeiro’s landfill, Jardim Gramacho. Through a multilayered process, Muniz makes photographic portraits of some of these catadores, reproducing images of familiar masterpieces such as Jacques-Louis David’s *The Death of Marat* (1793). He

In contemporary art, the relationship between object and art has switched from the industrial object to just about everything, including a good amount of detritus.

then composes the images through a sculptural process—a thorough assemblage of colors, textures, forms and shadows—using garbage gathered from Jardim Gramacho. Once the image is completed, he photographs it and the object is discarded. What is left, that is, the final product, is the photographic register (see Lucy Walker, *Waste Land* [UK, Brazil, 2010]).

The photographs, seen from a distance, resemble the original image used by Muniz as reference. Thus, it could be concluded that they are not photographs of waste as subject. Nevertheless, when seen up close, what we have in front of us is, indeed, a picture of garbage.

In a similar register of images that create an illusion from afar that differs from the up-close complex details forming the whole, Andreas Gursky gives us a straightforward photograph of Mexico City’s garbage dump. Its particular framing, elevated perspective, and use of a very large format are consistent with Gursky’s overall aesthetics of creating grand landscapes composed of numerous details. Other projects by Gursky, for instance *99 Cents II Diptychon* (2001) and *Copan* (2002), deal also with elements of mass culture (such as raves, stock exchange activity, multifamily

buildings, subway stations, music concert, factories) and prompt reflections about consumer goods in contemporary society. However, in contrast to Muniz’s images, Gursky’s *Untitled XIII* (Mexico) is clearly a photograph of garbage.

Whether in sculpture, photography or other media, art frequently deals, directly or by allusion, with daily challenges of life in Latin America and elsewhere. This makes me think of the confines of our escalating creation and manage-

ment of refuse. Illegal mining in regions such as Madre de Dios in Peru generates spaces of mud, pollution and abandonment, people indiscriminately scavenging resources without considering the consequences to the environment and their own health; toxic elements emanate from materials being shipped to China to be reduced to pure metal; and tons of plastic accumulate in the middle of the Pacific Ocean without the possibility of ever disintegrating. As described by Buchloh, “any spatial relations and material forms one might still experience outside [the] registers of overproduction of objects and of electronic digitalization now appear as mere abandoned zones, as remnant objects and leftover spaces...” In such a context, is there a limit to recycling and representation? Or is there a point at which waste cannot become art (or anything else)?

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Daniel Lind-Ramos

Standing (De Pie) in Loíza **BY LOWELL FIET**

THE ACCOMPLISHED AFRICAN-PUERTO RICAN artist Daniel Lind-Ramos paints on canvas with oil, brushes, and spatulas, meticulously blending colors, layering textures, and shaping images. He also works with common cardboard, wire screen, discarded appliances, car parts, the refuse of coconut palm trees, broken musical instruments and used articles of everyday domestic and agricultural labor. Local artisans in his hometown of Loíza, the seat of Puerto Rico's African cultural heritage, use these materials as well to create the dynamic masks of the characters for the annual Fiestas of Santiago Apóstol.

Lind-Ramos' mastery as a painter of large canvasses has been established over decades, but he also increasingly innovates through installation, video production and assemblage. He experiments with versions of the Viejo (foolish old man) mask of the Fiestas, which is crafted from cardboard and less defined than the better known coconut-husk

"Majestic" is not a critical term nor does it fully express the design and reach of the assemblages of Daniel Lind-Ramos. Yet the word kept ringing in my head while I walked among the pieces and then after I left De Pie (Standing), an exhibit of newly assembled pieces by Lind-Ramos on the second floor of the Museum of the Americas in the colonial Ballajá Barracks in Old San Juan, from November 23, 2013, through February 2014. The exhibit displayed what I can only call a majestic dance or interplay of local specificities and abstract art, fixed objects and performance, and supposed ethnographic and universal aesthetic elements. It explored a kind of creative pointillism to fill a global map dot by dot, space by space, that counteracts the marginalization of art for reasons of geography, gender, race or belief system.

"Standing" could signify political or cultural resistance or maybe still "standing" after so many years; it could also be

Pie reflects four decades of mature creativity, always innovative, experimental and capable of reinventing itself without losing touch with rootedness, as much in the artist's skilled technical control of his medium as in the sandy earth, the foliage and the social, cultural, and domestic specificities of the African-Puerto Rican community. Lind-Ramos "stands" from Loíza with his shadow pointing toward San Juan, New York, and Paris, where he has studied and worked, and toward the University of Río Piedras-Humacao Campus, where now he teaches; also farther out, toward showings in Senegal, Buenos Aires, Trinidad, Jamaica and Barbados, among others, but always with his feet (pies) like rhizomes firmly planted in the stories of survival and sustenance of the Antilles.

Lind-Ramos' assemblages are not simply found objects on display or "ready-mades." Everything is purposefully selected and then transformed as it joins with other elements: old televisions, saws, hoes, machetes, burlap bags, the sharpened metal spikes that open coconut husks, cooking pots blackened by open fires, glass food-storage cases that now display lists of names and other relics, all drawn into compositions alongside palm trunks, the fibrous trunk fabric (*yaguas*), the branches or fronds (*pencas*) and the coconuts themselves. The large pieces project multiple realities that range from the repulsion of British invaders in 1797 to struggles in the Tocones sector against land developers, the unjustifiable and unpunished murder of Adolfin Villanueva by police in 1980, and to the astonishing natural beauty of the area reflected in the "standing" trunks composed of palm fronds that appear to be large altars that adorn and illuminate a royal road.

Daniel Lind-Ramos purposefully selects and transforms his assemblages, joining elements such as old televisions, hoes, burlap bags and even coconuts.

Vejigante (trickster-devil) mask, the wire-screen face mask of the dandy-like Caballero (gentleman or knight), or the blackened and made-up face of the cross-dressed Loca (crazy woman). For Lind-Ramos, the Viejo permits broader interpretive possibilities. That practice results in a reconfiguration of his artistic media as a more direct reflection of the social and cultural environment of Loíza, located about 10 miles from San Juan on the island's northeast coast.

"stand" up as command or incentive for reclamation of rights or of what's owed; or "standing" out, becoming visible against a backdrop of prior invisibility. But it perhaps better communicates the height and structural independence of a solid and firmly rooted base that allows the artist to erect polyvalent totemic forms forged from the natural vegetative refuse and recycled articles of the day-to-day domestic and work environment of the tropical coastal region of Loíza. De



Clockwise from top right: Daniel Lind-Ramos; Charcoal-drawn image of the local struggle against foreign commercial development; The *Caballero* as a more contemporary cowboy; The traditional charcoal grill (or *buren*) undergirds the modern TV set.

In his written statement about the exhibit, Lind-Ramos refers to “luminosity” and the creation of a “utopia of light” through his art. His workshop in the Colobo sector of Loíza features a large skylight that provides the clarity required to comply with that creative vision. For over more than a decade I have had the privilege of visiting the artist’s workshop and studying his works in various stages of their development. I saw various fragments of the assemblages of *De Pie*, but I did not foresee the impact of the more

massive pieces once they were finished and installed in the rooms and hallways of Ballajá. Assemblages such as the large *Armario de la conciencia* (Conscience’s Wardrobe) and the slightly smaller *Centinelas* (Sentries) illuminate the interior spaces they occupy. The two trunks made of palm branches topped by glass cases that frame the hallway in front of the exhibit rooms suggest an extraordinary polysemy that grasps observers’ senses and ignites their curiosity. These structures, composed of recycled and

reused objects, demonstrate the plasticity, dimension, complexity, and enlightened flow of creative force seen in works by other internationally known artists such as mask makers Romuald Hazoumé and Calixte Dakpogan of the Republic of Benin, as well as the transformation of common objects into works of uncommon visual beauty demonstrated in the tapestries of El Anatsui of Ghana.

Four large canvasses with charcoal drawings represent more immediately readable imaginaries inside the socio-

historical, political and cultural contexts of Loíza. Titled *Tocones*, *Elegía*, *Costa Serena* and *Apoteosis*, they relate the resistance of the Loíza community through more than three centuries of marginalization and political and economic domination. Here charcoal, without the shaded colors and textures of oil, imprints its raw images and immerses the observer's imagination in multilayered mythologies: in these drawings indigenous Tainos, free and enslaved Africans, Spaniards, immigrant Irish landowners, Catholics saints, and African belief systems integrate with and transform current tensions created by unemployment, gang, drug, and police violence, and limited economic development to keep a community "standing" on the solid syncretic basis of its African-Hispanic cultural heritage.

I visited Lind-Ramos in his studio in late September 2014 to view an in-progress assemblage of even larger dimensions than those of De Pie. He requested that I not photograph the project in its entirety but did permit photos of clusters of objects. The story of the Fiestas of Santiago Apóstol, its saints, masked characters, music, processions, and their *egungun* function of calling the ancestors, resides inside its assembled objects and memories. A segment of a new unfinished piece contained a broken trombone slide given to Lind-Ramos by a friend, the Loízan-born jazz great William Cepeda; another part comes from a discarded high school instrument; and the broken horn itself was acquired as junk in Amsterdam. From Loíza the artist recycles the World.

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A Present from the Sea

The Work of Nick Quijano

BY SONIA CABANILLAS

FROM THE CENTER OF THE PUERTO RICAN Cordillera Central's green backbone, one can see the clear blue line of the horizon. Being on an island, we live, breathe and feel the constant presence of the sea. But, like estranged lovers, we choose to look inland, away from the ocean and refuse to contemplate the rhythm of the waves that visit us from faraway places. That is not the case of artist Nick Quijano.

Quijano knows a beach which beckons him, and its waves, like generous friends, are plentiful with unexpected gifts in his frequent visits to its shore. As a sanjuanero since 1980, Quijano discovered Cascajo Beach to the east of La Perla—San Juan's mythical slum—where the Atlantic Ocean regularly returns the debris discarded elsewhere by humans. The sea lovingly washes, polishes, takes away all utilitarian

vestige and deposits the trash ashore so that it may reincarnate in a life not pragmatic, but aesthetic, through Quijano's hands.

For a prosaic eye the sand is shamefully covered with garbage. Yet, to a keen gaze, the beach is full of possibilities, a veritable quarry made up of diverse and enticing pieces of a puzzle, its possibilities awaiting the call of imagination. Quijano will collect them, wash them, classify them and later combine them into assemblages, three-dimensional collages, new cultural objects with their own stories to tell.

There are certain self-imposed rules to this creative process: first, the assemblages or artefactos must all come from material washed ashore on this beach; second, it must be plastic and industrial refuse, result of the processing of fossil fuel; third, it must be



Opposite page: *Mapa inmundi*, 2012; above: *Basura 4 and 5*.

polished by a long stay in deep waters, sometimes even encrusted with corals, shells or pebbles, or simply scraped by the ocean floor. As a sign of respect and sacralization, these pieces will be incorporated without any adjustment: no cutting or bending, seen as a mutilation of the object. Its identity cannot be veiled or masked but always must be recognizable amidst the other components; e.g., a comb must remain a comb even as one may see it as a mustache.

The eye “sees” new objects, infers connections or recognizes resemblances as the mind creates them out of the juxtaposition of elements. So the myriad of “sculptures” rises. The artist then calls them “personages”—as actors in a play—cultural types more than individuals: a brainy man smoking a pipe, a bitchy blonde, a dreamy heartbroken lover... The pieces can also morph into

strange ideograms of long lost civilizations; maquettes of ancient/future cities or of postindustrial ghost towns. Plastic bottles can be seen as clouds; ropes and wires can become gigantic nests. Whimsical creatures—à la Arcimboldo—can exist as a Frankensteinian moment, remaining only as a photograph.

The artist is creating a narrative both simple and complex: Where do we come from? Where are we going? We know about prehistory from its stone artifacts, we know about the Neolithic era from its copper, bronze or iron weapons. What are we leaving as evidence of our moment in time? Of course, it is plastic and all the petroleum derivatives that make up every aspect of our contemporary life. The sea returns this refuse; it is not biodegradable. Ours is still the time of “black gold” and yet this time is also destined for extinction. Art made out of

discarded plastic is a testament to a disappearing epoch.

Quijano, through his work, unveils the “techne”—human intervention on the materials of art—questions the “telos”—a work’s finality and its dissolution in a new meaning—and unmasks its being as something useless in the world of consumption—garbage—while he transports it into the other realm of uselessness: as a work of art.

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For a video of the exhibition, please see https://www.youtube.com/watch?v=v6IoEF_Tsrw.

Burning Messages

Antonio Berni's Provocative Trash Aesthetic **BY MICHAEL WELLEN**

A BOMB EXPLODED AT THE ENTRYWAY TO ARTIST Antonio Berni's home and studio in Buenos Aires early one morning in 1972. Fortunately no one was injured: the artist was away in Paris, his wife startled but safe in their bedroom a few rooms away from the blast. Why had Berni been targeted? And by whom? Initial news reports speculated that terrorists had bombed the wrong address, intending to hit a nearby government building. But nowadays most agree the bombers were aiming for Berni and were part of an anti-Communist terrorist group—possibly a precursor to the infamous Argentine Anticommunist Alliance, or Triple A, a secret government-affiliated death squad that carried out assassinations and illegally detained intellectuals and rival political leaders during the Dirty War of the 1970s. Berni, briefly a member of the Communist party in the 1930s, had long sympathized with the left. But in all likelihood the attack on his home was not prompted by his political affiliation, but rather by his artwork and the powerful critical message contained within.

At the time of the bombing, Berni was arguably at the height of his career—one that stretched during much of the 20th century. In the 1930s and 1940s, he had gained national recognition for leading the country's *Nuevo realismo*, or New Realism, movement, channeling his exceptional skills as a painter to create mural-sized scenes about working-class life in the era of the Great Depression. During the 1960s and 1970s, Berni's prominence reached new heights, above all for his series about two fictitious characters, Juanito Laguna and Ramona Montiel. In this series, Berni transformed trash into imaginative visual narratives about contemporary Argentinean realities. Narrating episodes of Juanito's and Ramona's lives in a non-linear sequence,

these works epitomized the artist's creativity and his mastery of materials. Through them, he wove together controversial content and form to create a tightly knit set of social and political commentaries that resonated with the Argentinean public.

Berni began developing his idea of Juanito, a boy living in the shantytowns on the fringes of Buenos Aires, around 1959-1960. Berni later explained on a 1977 album about his character, which he co-created with musician César Isella: "When I first started sketching scenes of the poorer neighborhoods I used to look at the barrio kids and felt that my character lacked an identity of its own. So I decided to give him a name; I wanted to name the character, this archetype of all those children of greater Buenos Aires and all the little boys in every Latin American city. He could be from Santiago, Lima, Rio de Janeiro, or Caracas...." Like many Argentinean families at mid-century, the fictional Laguna family had migrated from the countryside to the capital city in search of jobs and better lives, only to find that the available work—mostly menial and low-paid factory positions—forced them to live on the margins. Berni constructed images of Juanito and his family from a variety of found trash taken directly from the streets of actual shantytowns: corrugated metal, factory waste, broken toys, damaged electronic components, dirty cloth scraps, tin cans and various other pieces of garbage. In a representative example from the series, *Juanito Goes to the City* (1963), we see a life-sized Juanito made from discarded clothing, plaster and paint, his hair likely strands of an old broom. He wades through a pile of garbage on his way to the city center, perhaps in search of work, or to bring lunch to his father, the metal worker, as the title of a different assemblage announces. Rows of buildings and a diesel truck (viewed oddly

from the rear) appear at mid-ground. An ominous grey cloud hangs over the scene. Yet, despite his miserable surroundings, Juanito is not to be viewed purely with pity. Instead he perseveres, being an underdog with street smarts. As Berni reminded interviewers, "Juanito is a boy who is poor, not a poor boy."

At the same time that Berni created assemblages of Juanito, he also invented his own form of printmaking—techniques he called "xilo-collage" and "xilo-collage-relief"—that incorporated trash materials into his woodblocks; the resulting paper prints contained rich surfaces of embossing and debossing. In 1962, Berni won first prize for printmaking at the prestigious Venice Biennale, where he showcased several assemblages and large xilo-collages depicting Juanito fishing, hunting and bathing in the abandoned areas nearby factories. With his prize money, Berni set up a studio in Paris and began developing his second protagonist, Ramona Montiel, a lower-middle-class girl, raised Catholic, who worked as a seamstress to support her family. Motivated by desires for the finer things in life, Ramona became attracted to the glitz of nightlife, working as a cabaret dancer and eventually a prostitute. Ramona served as a prism through which Berni explored conflicting societal pressures and desires. Judged for selling her body, Ramona is also a powerful heroine who uses her sexuality to gain influence and wealth.

Like Juanito's, Ramona's narrative takes place in Buenos Aires, but there are key differences between them: whereas Juanito was the subject of various assemblages, Ramona's narrative unfolded primarily through prints. Also, Berni chose to incorporate different materials into his Ramona works, namely, images from fashion magazines, pieces of lace, plastic doilies and furniture pieces that he scav-



Clockwise from right: *Ramona en la calle*, 1966, xilo collage relief; *La sordidez*, de la serie *Monstruos cósmicos*, c. 1964; *Juanito ciruja*, 1978; *Juanito va a la ciudad*, 1963. All but *Juanito ciruja* are highlights of the collection at the Museum of Fine Arts, Houston.



enged in Parisian flea markets and that spoke to Ramona's material conditions and her desire for glamour.

For nearly twenty years, Berni alternated between creating images of Juanito and Ramona, using each to address a different set of timely subjects. (In fact, they do not appear together in Berni's work). Through Juanito, Berni reevaluated trash, literally bringing it into established art centers and encouraging art collectors and the elite to confront images of the poor and downtrodden, people who generally go ignored. As evidenced by *Juanito the Scavenger* (1978), Berni's boy hero lives with pollution and environmental waste generated by mass consumerism. He makes do, even when he appears powerless. Through his *Ramona* series, Berni turns his attention to social hierarchies and pressures confronting modern women. He created various portraits of Ramona's suitors and protectors, her so-called "friends." These images, perhaps some of Berni's most satirical, present a cross-section of Argentinean society: here are religious leaders, a spiritual psychic, an aristocrat, a mafia thug, a bourgeois couple named Mr. and Mrs. Pérez, and various military men, all with their own agendas for Ramona. Some are cari-

atures of recognizable figures, such as *The Sailor* (1963), which exaggerates the pointed nose of admiral Isaac Rojas, who helped overthrow Juan Domingo Perón in 1955. In the mid-1960s, Berni also created large monsters of trash, generally understood as characters from Ramona's nightmares. With titles like *Sordidness*, *Hypocrisy*, and *Voracity*, they embody the deadly sins consuming modern society. Darkly comedic, the monsters are at once amusing and general indictments of the people in power as well as of the common man.

Given Berni's unflinching aesthetic, perhaps it's not surprising that he became the target of a bombing attack as the country entered the worst periods of military dictatorship. In retrospect, it seems the bombers were destined for failure. They could not turn into rubble what was once trash in the first place. In fact, Juanito and Ramona grew beyond Berni's control to become folk heroes. By the mid-1970s, Berni recalled seeing "Juanito Laguna" painted on the back

of trucks. Folk singers including Mercedes Sosa created music about Juanito, and some of the nation's most influential writers, including Ernesto Sábato, wrote versions of Ramona's story. These characters' popularity continues today. They appear in school plays and text books, but also have Facebook fans and appear animated in YouTube videos. Yet, the problems that Juanito and Ramona faced—including class and gender discrimination, pollution, government abuses of power—refuse to diminish. And so their relevance only grows.

Michael Wellen is a curator of Latin American art at the Museum of Fine Arts, Houston, and coorganized Antonio Berni: *Juanito and Ramona*, the first major traveling exhibition of Berni's work to appear in the United States in nearly 50 years. View the exhibition at Malba-Fundación Costantini, Buenos Aires, until Feb. 25, 2015. Contact: mwellen@mfah.org



Haiti in the Time of Trash

Recycling, Rebuilding, and Remaining Joyful Five Years After the Earthquake **BY LINDA KHACHADURIAN**

ANDRÉ EUGÈNE IS PERCHED ON A CORRODED tin box inside his downtown Port-au-Prince studio on Grand Rue, demonstrating his hammering technique on a scrap of rubber. Droplets of sweat dance and glimmer on his forehead as he works. He is barefoot, clad only in black shorts and several pieces of beaded, woven and metal jewelry that encircle his neck, wrists and fingers.

“I get more inspiration working with recycled materials because those pieces are unique and can’t be duplicated,” says Eugène, a senior member of *Artis Rezistans*—a community of artists who work solely in the medium of garbage.

The narrow 14 x 5-foot cement studio is brimming with items of his handiwork, ranging in price from \$50 to \$50,000 for some of the larger pieces

that take over a month to complete. A metal skull, balanced atop a wooden block, grins at me from the corner. One red and one green Christmas light flickers merrily in each of its eye sockets, and it is crowned with a cowboy hat fashioned from tire rubber. Several bottles of Argentinean vino blanco are holding court around the base of the sculpture’s perimeter.

The artists work with whatever materials they can pick up off the streets: metal, wood, nails, cracked CDs, tires, bottle caps and dismembered dolls. Eugène says that he's partial to metal, which has become more and more difficult to find because of the clean-up initiative by the city. When I ask him if part of him wishes there were no such effort underway, he answers: "No. When you have clean streets you have good health, and that is the most important thing."

One of Eugène's students, Patrick Ellie, then leads me around the corner to his cavernous studio on Rue Bois. He is wearing paint-splattered jeans and a droopy beanie with an oversized pom-pom that bobs behind him as he walks. Ellie's studio is broken up into a maze of rooms: in one, a man is reclining on a wooden chopping block; in another, a slim woman is modeling paper handbags on the crook of her arm; in a third, dubbed the "inspiration room," there are piles of bicycle parts, air conditioners, tires, and metal scraps. One lone doll head, sporting a radiant orange bob, sits atop a smashed plastic basket.

Three young boys are darting in and out of the rooms, making sure not to miss out on any of the action. "André is a person who loves to help children," Ellie says as the kids run underfoot. He tells me that his favorite material is rubber from car tires. He shows me his first recycled creation, a wall hanging made out of rubber that is an abstract representation of the Holy Trinity. When I ask him why he chooses to work in the medium of trash, he replies, "It gives respect to my city to use the garbage. It shows that everything can be used, and nothing was lost."

A few weeks earlier, I had been at the Massachusetts Institute of Technology, discussing recycling and rebuilding with Jan Wampler, professor of architecture, and Gerthy Lahens, a Haitian-American former research fellow, social activist, and founder of the non-profit Haiti Renaissance. My volunteer-run organization, Charitable Confections, is partnering with Haiti Renaissance and the Port-au-Prince-based Haiti Scholar-

ship Association to build a 6,500-square meter campus in the capital's poorest slum, Cité Soleil. Wampler plans on constructing the multi-building lot, which will include primary, secondary and vocational schools, entirely out of bamboo—a material that is both durable and renewable, as it grows quickly—and that doesn't generate waste when sourced. Wampler is keen on doing whatever it takes not to generate refuse, as well as on creatively utilizing what already exists. Some of the ways that Wampler has recycled debris in the past has been to form crushed concrete into hills and mountains, and to place extraneous bits of stone and brick inside wire cages to use as outside support for walls of buildings.

"Two hundred years ago, people didn't throw away things," he said, shaking his head. "My team always examines every piece of debris and tries to figure out how it might be best used. Dumping it in someone else's backyard isn't an option."

A couple of days later, during my follow-up phone call with Lahens, she exclaims: "Garbage in Haiti has become political!" I laugh, thinking she's joking, but then I hear her indignant "Yes!" on the other end, and I realize that she's serious. She tells me that some neighborhoods in Port-au-Prince have entered into an unofficial competition to claim the title of the most garbage-strewn, on the assumption that wealthy foreigners will be so moved by their dire situation that they will open their wallets to provide financial aid. While Lahens acknowledges that the local government officially condemns such behavior, she says, "Actions speak louder than words. They're not doing enough to enforce the laws."

A few days after my visit to Artis Rezistanz, Lahens' friend, Samuel Bernard, a twenty-something Haitian who is part of the extended Haiti Renaissance team, takes me to Carrefour, a residential commune on the outskirts of Port-au-Prince, to meet recycled charcoal crafter extraordinaire, Sony Desir, in his open-air atelier. Desir is part of Federation Inter-Regionale des Organisations (FIROPAP), a non-profit whose mission

statement is "to contribute to the reconciliation of the Haitian men with their environment in a logical way to develop an economy which is sustainable."

While regular charcoal consists mostly of pure carbon, made by cooking wood in a low oxygen environment, the recycled briquettes are made from a porridge of paper waste, water, sawdust, and clay, plus a "special" ingredient that is poured into cylinders to extract the water and form circular briquette disks, which are three inches in diameter with a hole in the middle.

When I inquire about the mystery ingredient, Desir tells me he has an "important room" to show me. He leads me to an alley at the back of his workshop that is overrun with prickly branches and rotting logs and has a row of six plump garbage bags fastened with meticulous topknots. He kneels before one of the garbage bags, unties the knot, and peels back the plastic to reveal the autumnal-hued leaves stuffed inside. "Voilà!"

I'm somewhat disappointed by his revelation, as I was hoping for something more exotic and flamboyant, but I smile and say "Oh, wow," and get to the business of obtaining exact recipe measurements for the porridge.

Desir provides them to me without including the leaves. I inquire about them and he tells me that it's not necessary to measure them because he knows by instinct, but when Bernard sums up the process as being an improvised, inexact one, he becomes somewhat agitated.

"Why don't we say that although there is no exact quantitative expression for the measurement of the leaves, the amount is meticulously scooped out by the expert hand of one who has had years of experience," I offer. Desir looks confused, so Bernard translates in Creole and gets an affirmative head bob. The matter of the leaves is settled.

Desir sells his briquettes at the extremely modest price of 50 centimes (\$.01) for a set of six to local families. He tells me that his organization's aim is not to make money, but to "raise awareness of the garbage issue and provide a



Recycling art in Haiti.

solution for the problem of our environment. “He adds that the process of turning garbage into energy also can help slow down the deforestation process in Haiti—one of the larger problems the country is facing right now—by providing an alternative means to heating homes and cooking. Clementine Lalande, Haiti country director of Yunus Social Business, founded by Nobel Prize-winning economist Muhammad Yunus, tells me that one of the primary problems of past reforestation initiatives has been that the poor in rural areas would cut down trees prematurely, because their only source of cash is often to make traditional charcoal and sell it to charcoal distributors in Port-au-Prince. The organization is currently launching a reforestation initiative in conjunction with Virgin Unite, The Clinton Foundation, and the government of Haiti.

“I encourage my friends to not cut down trees for the other charcoal!” Desir proclaims. “They can make clean streets and some money with recycled briquettes.”

In his memoir about the cleanup effort after the 2010 earthquake, entitled *Collier de Debris*, Haitian author



Gary Victor writes: “The debris is a gaping wound in our bodies, in our souls.” During my first visit to Haiti in 2008, the combination of the prolific trash and the dusty air, which felt so heavy, overwhelmed me and turned me off; but a year later, it was the images of debris, immediately following the earthquake, that captured my heart. One, of a young boy who had been almost entirely swallowed by a heap of concrete, with his bright red t-shirt and cognac-hued arm outstretched towards the sky, made me realize how quintessentially Haitian it was to remain colorful and defiant even in the time of tragedy.

According to Michel Bonenfant, country director of United Nations Office for Project Services (UNOPS), the organization’s debris clearing process, which removed millions of cubic meters of refuse, has officially ended. “Haiti is the world’s example for removing debris the fastest,” he says. During the emergency phase, immediately post-disaster, UNOPS repaired 800 houses and built over 1,500 shelters in the poorer neighborhoods of Port-au-Prince. He tells me that now that the organization is out of the emer-

gency phase, it is focusing on large-scale rebuilding projects that will promote the sustainable development of Haiti.

Bonenfant later dispatches an email with more information about UNOPS’ rebuilding projects. Folded in with the text is a photo of a two-story ciltro-green home with bamboo accents. It is decorated with a mosaic of a tree with undulating branches fanning out across the lower level that is reminiscent of Gustav Klimt’s painting, *Tree of Life*. When I see it, I can’t help but clap with delight and think to myself “Vive la belle Haiti!”

Marcel Jean, founder of Haiti Scholarship Association, is driving me to Cité Soleil to meet with the HSA-sponsored scholars who will be the first students to be matriculated into the scholastic campus, once it has been completed. He stops the pickup truck to greet a teenage boy plucking cans from the patch of land, carpeted with trash, that is adjacent to the street. He has a large plastic bag that is half-filled with his loot, which he will take to a local recycling center, in order to receive “some very small money.”

Nearby, a young boy, draped in an oversized purple polo shirt, is playing a game of one-man Frisbee with a plastic lid. He hurls it into the air, then gallops after it, giggling. The boy catches the eye of a toddler in an emerald shirt, who has repurposed a squashed Diet Coke can into an imaginary airplane slicing through the sky in majestic loops, and he, too, begins to chase after the lid.

“Other people come to Haiti and see junkyards, but we see magical playgrounds,” Jean explains as he watches them. The children are sprinting farther and farther down the street, and have become two colorful dots on the dusty horizon, but we can still hear their voices clearly. Their peals of laughter ring like bells heralding good tidings.

Linda Khachadurian is a medical and educational editor and founder of the volunteer-run non-profit, Charitable Confections, which raises awareness and funds for educational programs in developing nations.

Thinking on Film and Trash

A Few Notes **BY ERNESTO LIVON-GROSMAN**

Journalist: How do you see the future of scrap?

Melzig: I don't see it, I experience it.

Journalist: The future has already begun?

Melzig: It never stopped beginning.

From "The Blind Director" a 1985 film by Alexander Kluge

LATIN AMERICAN FILMS HAVE PORTRAYED trash as an urban social issue since the 1940s, if not earlier. If the first incentive to film trash and its presence in the city was hygiene, very soon after that decade filmmakers began to depict the process of collecting trash as an activity that carries an important economic and social impact. In very early newsreels one could find some of the same informal recyclers that we can still see today, but in those images the rag picker is a lonely character walking or riding a carriage through the city far from the collective activity of today's informal recycling. The number of documentaries today related to trash is vast and therefore this very short list of films is one of many possible ones.

Leaving aside the newsreels that were for the most part screened at film theaters before the main feature, a brief history of films and trash could also be thought of as a history of the changes that took place in the making of Latin American documentaries. By the 1950s a film like *Tire Dié* (Fernando Birri, Argentina, 1956) already portrays the collecting, classifying and recycling of trash not only as a source of informal income but as a commercial activity linked to the formal economy. In the film trash is included as a component of a newly formed shantytown, which in turn depends on the city and the train that connects Santa Fe and Buenos Aires. Birri's film showcases the multiple efforts of the shantytowns population to overcome extreme poverty, but

Doña Lola, the person who runs the local landfill within the shantytown, is the only example of true economic success offered in the film. Her story underlies the importance of trash as an economic factor:

I'm known around here as Doña Lola. I've been here for 15 years and I am happy because I've prospered. I started out very poor but now I'm as well off as anybody else. I have many different types of animals. I also have hotels, boarding houses, all over. There is 'Los Hornos' ... which is a North American property and a lot of trash comes out of there. Mostly paper which is what we also gather.

Paper, glass, bones and all that. Everything is done along with my children and laborer. I own three carts.

Birri's films of this period stressed the hard working qualities of the inhabitants of the poverty belt. They are arguably the beginning of the long lasting influence of Italian Neorealism on Latin American documentary filmmaking. *Tire Dié* manages to strike a balance between a concern for the people of the shantytown and the attention to economic and social factors and became the poster child of social documentary making for several generations to come.



Scenes from *Cartoneros*

Shortly after Birri, Alberto Miller directs *Cantegriles* (Alberto Miller, Uruguay, 1958) a short visual masterpiece with piano music as the only sound track that focuses on the life on and around a landfill. Its attention to the interaction between people and trash is a good precedent for a new upcoming transformation of the genre: *Quema* (Alberto Fisherman, Argentina, 1962). As a film *Quema* is not only daring because of its formal choices—voice over and reenactment—but because of its capacity to stylize the extreme poverty of the everyday life of the landfill. All this is possible thanks to the camera work of Ch. Tin-

as an effective strategy to link the very detailed story of one tomato to larger political issues such as race, religion and ultimately to global politics.

Boca do lixo (Eduardo Coutinho, Brazil, 1993) avoids the voice over and centers on the people of the landfill but with a twist. While films like *Tire Dié* stress the pathos of each of the testimonies in function of a larger narrative, *Boca do lixo* makes each interview a stand-alone story. As a result Coutinho avoids melodrama and the neorealist effect and allows the spectator to see the different stories as a narrative composite. It is not only a matter of keeping sentimentality

dores, etc. are a fundamental part of an informal economy that shares problems and solutions independently of national borders. The particulars of local situations might differ from one location to the other but they share a substantial number of issues. What movies on trash have shown is their capacity of pointing simultaneously to the particular and the general in the same film.

These movies share the idea that trash could be a departure point to think about the modern condition as defined by consumption, class disparities, contamination and urban development. The poet Charles Baudelaire is one of the first to make the connection between the rag picker and the modern city. Walter Benjamin picks it up and from then on the fragmentary condition of trash will remain associated with contemporary art and ultimately with the Modern condition: the industrial refuse could be redeemed by art. It is in this sense that filmmaking becomes allegorical and mimics the process of recycling when it reappropriates archival materials and found footage to create new narratives from scraps, fragments, of films that were not in any way connected to these new narratives.

As the opening quote in this article indicates, the future history of films and trash has already begun. Above everything else, these movies are part of an expansive process in which trash is becoming a globalized topic and film makes more visible what in many cases has been invisible or ignored. Their focus on trash expose unjust social conditions and also show the transformative process of an integral part of a truly globalized economy. By doing so, they have the potential of telling the story of Latin America's environmental crisis and its place in a global reality.

Ernesto Livon-Grosman is an Associate Professor of Hispanic Studies at Boston College. His film Cartoneros was awarded several distinctions, including best educational film at the 2007 Tulipanes International Film Festival.

In these films, trash is not the end of a process of consumption but the beginning of a cycle of production.

kelenberg and the sound track of A. Bratslavsky. The emphasis on the aesthetic anticipates the connection between art and trash that would become the signature of Antonio Berni, one of the most relevant artists of the same period. Berni would create murals made out as collages of found material, in some cases taken from the very same area in which *Quema* was filmed.

The absurd as the logical cinematographic response to the irrational waste of a consumer society makes a stellar entrance in the history of Latin American of film on trash with *Ilha das flores* (Jorge Furtado, Brazil, 1989). Furtado's is also one of the first films to center its focus on tracing the transformations of trash from the harvesting of a tomato to the people that will search a dump in search for edible food. Until then the emphasis of most of these films was on social conditions and the people who deal with trash. *Ihla das Flores* creates a narrative where every human character in the movie is subservient to the object, the tomato of the story. Furtado uses techniques that resemble Monty Python animations of still images and it does so

at bay; what really matters in *Boca do lixo* are the multiple narratives. By now it is becoming more evident that every new film on trash will pick and choose a particular aesthetic and increasingly give up the pretension of transparency. That was in fact my own experience during the making of *Cartoneros* (Argentina, 2006). The illusion of "just" collecting testimonies was not a possibility anymore; the challenge became to link every element of the film as much as possible to its main narrative while becoming increasingly aware of the formal choices one makes at the moment of portraying trash.

All these films share an awareness that the trash is not the end of a process of consumption but the beginning of a cycle of production. In a sense these movies anticipate, rehearse and expose the notion of recycling as an integral part of different economic models. Today, knowing how many of the issues put forward by these Latin American films are shared beyond national boundaries helps to create a global picture of the issues at stake. Trash, garbage, scrap, rags and bones, cirujas, cartoneros, catadores, pepena-



CONFRONTING WASTE

Whether it's on tiny Panamanian coral islands or in sprawling Mexico City or a Dominican tourist resort, citizens are searching for solutions to the problems of waste.

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Privatizing Latin American Garbage? It's Complicated....

A View from the Northern Border of Latin America **BY SARAH HILL**

IN THE EARLY 1970S, A PLUCKY GROUP OF 200+ *pepenadores* (scavengers) in Ciudad Juárez, Mexico, secured a 25-year concession to recover recyclable materials deposited in that city's dump, along with the right of first refusal on a second 25-year contract.

And so began a celebrated chapter in the long saga of Socosema, one of Mexico's most—for a time—successful worker-owned recycling cooperatives.

And, as well, so marked another chapter in a long-standing tension in Mexico between “public” and “private” management of waste.

In the years that followed, illiterate cooperative members left their old cardboard hovels on the dump for houses made of conventional building materials. They sent their children to school. They got inoculations, treated their wounds and illnesses and saved for retirement.

And as their enterprise grew, they invested in it, purchasing tools, trucks, machinery and a small warehouse. Their success generated international acclaim, and they welcomed visitors—and received foreign invitations—to explain their rags-to-riches transformation.

Key to that transformation was how they had persuaded Juárez city officials that the collective riches of garbage belonged in the hands of its workers, not



A garbage truck in Mexico City, 2003, has been reconfigured to do more than merely collect trash quickly. Workers made the trucks suitable for sorting and siphoning materials for resale.

in the hands of the businessman who had previously “owned” the dump.

But a little more than two decades later the cooperative unraveled when Juárez closed its long-serving dump (called, in the border argot of English borrowings, “el dompe”) and opened, five miles distant, a new, technically engineered and federally permitted sanitary landfill.

The new landfill lay far away from the scavengers’ settlement and was

launched under management contract to a subsidiary of a multinational waste firm. Cooperative rolls fell off sharply as members decried this development and speculated that the waste management giant aspired to secure the pending recyclables contract.

PUBLIC OR PRIVATE?

This snapshot of Juárez’s dump story over a quarter century pokes some holes in easy categorizations of waste management as trending toward, or away from, privatization in Latin America. Indeed, unlike other public services that have shifted from well-defined public ownership to wholly private hands (such as telephone and airlines in some Latin American countries), waste management has often defied the neat boundary between public and private, even in the contemporary era, when the ideological dominance of privatization suggests that the management of waste should be the business of business, not governments.

Any observer in the region might note garbage trucks trundling down city streets emblazoned with the logos of multinational firms (as in Colombia, Brazil and Cuba, for example). Nonetheless, a closer look at both the history of sanitation and present developments challenges axiomatic claims that waste management has been a largely public service to date (and that moving it to the “private” column is a good thing).

The porous boundary between public and private in waste management begins with the nature of garbage itself: individuals generate unwanted stuff, but that stuff only becomes garbage when it finds its way—unwanted—into the public domain, where it becomes in essence a collective problem.

Waste management is hardly new in Latin America. Pre-conquest Mayan cities, for example, had formal waste repositories. And in the enormous Tenochtitlán, up to 1,000 low-caste workers kept that city’s streets clean under Aztec waste management.

In the colonial era, Mexican authorities promulgated sanitary laws, creating

some of the first known legal frameworks for waste management. These laws explicitly acknowledged the private origins of noxious and unsanitary stuff, while tacitly acknowledging the crown’s duty to control that stuff.

Nonetheless, the sanitary laws converted that duty into private burdens by dictating what could and could not be done with household output. And they established contracts with a private concessionaire who employed crown-owned carts and crown-enslaved natives to sweep the streets.

Should we call the ancient arrangements public or private? And do colonial laws mark the beginning of public or private control of waste management in Latin America?

The picture gets no clearer in the early 20th century, the era of municipal reform in the United States and Canada, when most large cities there brought street sweeping and garbage collection under municipal command and control. They did so for explicitly sanitary purposes: to clean cities more effectively and completely of refuse that threatened public health.

While many Latin American cities continued to advance the legal framework shaping private practices of household effluvia and stuff, only the very large ones (for example, Bogota, Mexico City, and Rio among others) appear to have offered what their U.S. counterparts did: a definitively public service in a vertically integrated system that from start to finish was wholly owned and operated by a government entity (municipally owned vehicles or equipment run by municipal employees, and a municipally owned site of disposition).

But those cities that did launch public collection services saw them nibbled away by private and informal arrangements (e.g., sweepers who worked for neighborhoods; materials-buyers who paid households for valuable trash) which not only moved a lot of garbage by other-than-public hands; they also ate up a lot of the garbage before it ever made its way to a dumpsite.



A garbage truck in Mexico City, 2004.

MEXICO CITY: A HYBRID “SYSTEM”

Let’s take a closer look at the dynamics of trash in Mexico City: its public-sector union of garbage collectors dates back to 1934, a history that echoes similar public service arrangements in the United States, Canada and various European systems of the time.

But throughout the 20th century, the vehicles and the collection practices of these public workers bore little resemblance to their foreign counterparts. Whereas U.S. municipal sanitation workers worked to clean streets and curbs of garbage, Mexican municipal sanitation workers sought to harvest resources in garbage. Accordingly, Mexico City sanitation workers modified their trucks so that they could perform a dual duty of transporting both waste and sorted recyclables. In that way, poorly paid city staff supplemented their city salaries by exploiting their public charge for private profit.

Trash day in prosperous neighborhoods unfolded like this (a scene I first witnessed in the 1990s): drivers parked their trucks for no less than 30 minutes on quiet side streets while workers—some paid and others “volunteering”—scurried between apartment buildings to collect waste, typically conveyed, gooey

and wet, in plastic grocery bags.

The workers broke these bags open on the sidewalks to mine for usable or marketable items. Valuable materials then went into separate bags—one each for plastics, metals, glass, and other substances—that dangled like ornaments from hooks welded to the sides of trucks. Cardboard got flattened and stacked to fit into ingenious topside cradles.

While the law in Mexico City had long established garbage collection as a free public service, in practice residents paid fees (and still do) to get their stuff out of their households and into the hands of the collectors. These voluntary “tips” averaged 500 pesos a year in 1997 (or about USD \$60). Even today, maids might also sweeten the pot a little by offering garbage collectors choice materials (or they might themselves glean from their employers’ trash).

On the trucks, a strict hierarchy established the rate of income that workers obtained from the recycling business (again, a supplement to their union-negotiated salaries). They called their routes *fincas* (plantations) and referred to their bosses as “owners” (not bosses) who harvested the lion’s share of income from collecting, sorting, and selling.

At the dumps, the public work of waste disposal further disintegrated in the hands of thousands of scavengers who combed for what the plantation owners (in the *finsa* system) had overlooked, as well probed the garbage coming from sources other than municipal collection routes.

In his 1983 study of Mexico City’s garbage, sociologist Héctor Castillo Berthier described this feudal arrangement as embedded within Mexico’s corporatist structure. Like other corporatist entities, waste management conveyed market opportunities to party members by seamlessly blending public and private systems of power, reward and control.

In sum, 20th-century waste management in Mexico City, though operating under the framework of a public service, looked more like the system of private carting that had prevailed in U.S. cities before the advent of waste management as a public service.

WHAT’S THE PROBLEM?

What are the advantages and disadvantages here? Let’s step back and consider the historical objectives of public and private waste management systems. True public systems grew up in Europe and north of the U.S.-Mexico border at the beginning of the 20th century, when municipal sanitarians began to understand the relationship between refuse and public health. So, these systems had (and still have) as their goal, the sanitary disposition of waste.

By contrast, until the mid 20th century, the private carting system in the United States primarily served to exploit garbage for its marketable resources. Carters collected garbage—typically for a fee from householders—in order to siphon off materials with market value. Thus, carters made their money primarily on the value of the contents of garbage, not on the service of waste removal. (My former in-laws in Parkersburg, West Virginia, for example, began their lard rendering business as pig farmers in the early 20th century, looking for slops).

And throughout the United States,

cities like El Paso and New Orleans put waste removal in the hands of exclusive municipal “scavenging” (i.e., not “waste removal”) contracts. By contrast, other cities, following the lead of New York, regarded sanitation as too vital to leave to contractors with any interest other than the public’s health.

By the third quarter of the 20th century, carters had become more like public-sector service providers, thanks to local ordinances that gradually imposed upon them the responsibility for safe and sanitary garbage removal (which in turn became their primary source of revenue). That shift stemmed from both the emergence of environmental laws, including a trinity of federal legislation in the 1970s (the Resource Conservation and Recovery Act, the Clean Air Act and the Clean Water Act), and fundamental changes in the markets for salvaged stuff.

The City of San Francisco provides an emblematic case of how carters transitioned from exploiting waste for its resources to managing waste to minimize its dangers. The sequence of name changes for the city’s primary private provider reflects that shift: from “Sunset Scavengers” at the turn of the 20th century, to the “Sanitary Fill Company,” to “Norcal Disposal,” to most recently, “Recology SF” (this last reflecting the return in the industry to a business model that combines disposal with resource-recovery).

Arguably, however, in Mexico City that late 20th-century shift to a privatized service did not occur. And why should it? For the entire 20th century and now into the 21st, Mexico City’s hybrid system has worked very efficiently (something that advocates of privatization value) at recovering valuable materials. Public-sector employees, eager for the supplemental income generated by diversion activities, have responded nimbly with entrepreneurial instincts to market signals.

Nonetheless, the World Bank, during the period when this system was most robust, urged Latin American city governments to “privatize” waste management.

For example, in an undated post on

its website, under the heading of “Urban Solid Waste Management: Private Sector Involvement,” the bank explains its advocacy of the private sector: “[t]he private sector improves efficiency and lowers costs by introducing commercial principles such as limited and well-focused performance objectives, financial and managerial autonomy, a hard budget constraint, and clear accountability to both customers and providers of capital. The private sector plays other important roles by mobilizing needed investment funds, and by providing new ideas, technologies and skills.”

But, as the evidence from Mexico City suggests, its municipal public-ish system possesses many hallmarks of private enterprise: driver/managers work autonomously, maintain their own budgets and pay themselves not an hourly or salaried rate but according to the market value of collected goods, thereby incentivizing themselves to collect more and to collect it quickly.

So why would the bank advocate privatization for cities, such as Mexico, that already obtained some of the key attributes of privatization?

It did so because the goals of waste management in Latin America need to change. In short, Latin American municipal governments should now seek to protect the environment (and consequently human health) from garbage, rather than seek to exploit garbage for its resource potential.

According to other World Bank literature, Latin America generated close to 370,000 tons of garbage a day in 2007. But at best, less than 40 percent of that waste wound up in “environmentally sound” landfills (that is, landfills purpose built as such, lined to prevent ground water contamination, and plumbed to capture leachate and methane). And perhaps the percentage is even less, considering that Mexico—a country of 108,000,000 in 2007—counted only 11 such landfills in that year (including the one in Juárez).

Instead, most of this staggering volume of waste wound up in unlined, open-

air dumps. True, such dumps, speckled with scavengers and informal waste sorters, no doubt recover more salvageable materials than gets diverted from the waste stream in the United States and Canada. But landfills outside of Latin America aim not to recover resources but to protect the environment.

To put the bank’s advocacy of privatization in a broader context: if Latin American countries adopt either European or U.S. standards of environmental protection, they will need to adopt the sanitary landfill and waste collection infrastructure that at this point, only very large, transnational waste management firms can provide.

No city anywhere in the United States or Canada (or in Europe, for that matter) builds its own trucks; no city designs its own landfills or incinerators; and few own all their transfer stations and other pieces of the vital waste management infrastructure. All of these services now come from industrial suppliers who make their profit on long-term, exclusive arrangements.

If Latin American cities do decide to change course in order to protect against garbage, rather than make the most of it, they will, inevitably embrace the kind of true privatization that may well put hybrid privatization out of business.

Still, at least one Latin American city, Brazil’s Curitiba, has experimented with developing its own indigenous waste management technology (you can read a detailed account of it in detail in a 2012 Huffington Post article by Roberta Brandes Gratz). But its homegrown ingenuity cannot extend beyond collection and sorting of mixed waste.

Ultimately, environmentally sound waste management in Curitiba will require a contract with a multinational waste giant. And this may provide a new future for Latin American waste management hybridism.

Sarah Hill writes about Latin America, garbage and nature from Kalamazoo, Michigan, where she teaches anthropology and environmental studies at Western Michigan University.

Trash in the Water

An Indigenous People Confronts Waste **BY JAMES HOWE AND LIBBY MCDONALD**

THE GUNA OR KUNA, AN INDIGENOUS PEOPLE OF Panama, suffer from the same waste problems as the rest of the world, with the added complications caused by life on tiny, crowded coral islands. The Guna, originally mainland dwellers, moved offshore in the 19th century, thus escaping mosquitoes, snakes, and the diseases spread by mosquitoes while facilitating access to foreign trading boats. Today, of the forty-nine villages in the autonomous indigenous reserve called Guna Yala, all but ten are located on islands along the northeast Caribbean coast, with populations ranging in size from a few hundred to several thousand.

Until recently, the small island populations kept their villages clean without great effort. Everything went into the ocean: human waste, the remains of household cooking, and even glass bottles and other trade goods. But populations grew, processed foods and manufactured goods increased, and soon plastic and other refuse started turning up in the water, on the ocean floor, on

Problems of modernity have hit especially hard at the western end of the coast, in the region called Carti, which has for many years hosted cruise ships and adventuresome tourists who flew in to village air strips. In the last five years tourism has grown exponentially, promoted by a newly paved road leading from the Pan-American Highway over the mountains to Carti on the north coast. Tourists from Panama City now arrive by car in a few hours, sometimes several thousand per week during the winter tourist season, mostly to swim and relax on uninhabited “desert” islands a few miles offshore which have been converted into modest, Guna-run resorts. And as the Carti population has embraced the expanding tourist economy, dependence on imported foods and manufactured goods has increased apace, along with the question of how to dispose of their remains—a dilemma the Kuna share with other communities on the Caribbean shore of Central America blessed by tourism. In Carti, some of the

ticipatory development of small, waste sector businesses in low income countries—to design a waste system for the four principal Carti islands, Mulatupu, Yantupu, Suitupu and Tupile. McDonald in turn sought advice from James Howe, an MIT anthropologist with long experience in Guna Yala, the co-author of this article. The project, dubbed “Basura Cero” (“Zero Waste”), joined forces with IDIKY, the research and development arm of the Guna General Congress, and with ANCON, a Panamanian NGO committed to environmental sustainability. Accompanied by students, expert advisors, and Guna representatives of IDIKY and ANCON, McDonald and Howe paid a series of visits to Carti between 2012 and 2014 to measure household waste output, observe current practices, map the villages using kite-mounted cameras, observe current economic practices, and assess possible routes for transporting recycled materials to the city. At the same time, the team began consulting and collaborating with the four villages and encouraging the formation of local recycling associations.

As is true elsewhere, the waste problem breaks down into a number of problems calling for separate solutions. The Guna already recycle aluminum cans, compacting them by hand (or more precisely, by foot or rock) to sell to Colombian trading boats, and a market exists in Panama City and Colon for recycled plastic; but for both materials a supply chain had to be created, starting at collection points in the island villages through a mainland sorting center, all the way to recycling companies in the city. Organic garbage like banana and plantain skins, which makes up the greatest part of the waste stream, needed to be composted, and trash that can be neither composted nor recycled

Problems of modernity, as well as increased tourism, have caused increased waste, complicated by the fact the Guna live on tiny, crowded coral islands.

the beaches, and in the coastal mangroves. Tourists, who contribute significantly both to the local economy and to the trash problem, started complaining, and the Guna themselves were dismayed and repulsed. Although more than half the Guna population has moved to the city in recent decades, we have witnessed that the garbage crisis has not eased for the more than thirty thousand who have stayed in Guna Yala.

waste is now taken to a mainland dump, but most of it still ends up in the ocean.

After an exploratory study by a Panamanian anthropologist for the Inter-American Development Bank (IDB) and a series of consultations with Guna focus groups identified waste as a critical issue in the region, the Bank asked co-author Libby McDonald at MIT's Community Innovators Lab (CoLab)—an organization devoted to the collaborative, par-



Clockwise from top: Guna community members meet at the schoolhouse to discuss waste issues, a reflection of the new economy in the increased use of purchased food with disposable packaging, which increases pressure on the waste disposal system; until recently, everything went into the ocean—the old disposal way.

had to be transported to a true sanitary landfill on the mainland, replacing the noxious open-air dumpsite.

Medical waste presents a special problem in the islands, most of all in the materials contaminated by disease and the “sharps”—needles, scalpels, etc.—used in treatment. The region surrounding the four project villages is served by a single clinic on the island of Carti Suitupu, supported by a smaller facility on another island a few miles away. During the week, medical waste is collected at the Suitupu clinic in plastic bags, color-coded for hazardous and non-hazardous waste and sharps are collected in special dedicated containers. Unfortunately, both bags and sharps containers sometimes run out, forcing dangerous improvisations by medical personnel. Once each week, minimally trained young janitors take the bags by boat to the mainland dumpsite a few minutes away in a mangrove thicket, where they toss the bags on shore, douse them with gasoline and set them alight. The fires, which contaminate the air, water, and soil, often fail to consume the waste, especially the sharps. Though well aware of the problem, the clinic’s doctors and nurses have until now had few solutions within reach.

For all kinds of waste, the answer is in part technical and procedural. Engineers and other experts affiliated with Basura Cero are designing a sanitary landfill and a mainland recycling center. The project has purchased a boat and motor to carry waste and recyclables from islands to mainland. Edgar Blanco, from MIT’s Center for Transportation and Logistics, has mapped out recycling routes, identified possible buyers, and analyzed the economic viability of recycling. Students and advisors to the project have designed simple compactors and collection vehicles to move waste and recycling from the shore to the landfill and collection center. To manage the medical waste, the project is procuring new equipment: larger, color-coded bins, improved sharps containers; boots, masks, and other safety equipment; and potentially, a dedicated

medical waste autoclave for material, including sharps, that will then be encapsulated and buried. Instruction will be offered to clinic personnel on improved safety procedures, such as double-gloving, i.e., wearing two pairs of latex gloves at once, and dealing immediately with spills, pricks, and other accidents.

Overall, however, technical questions matter less than organization and cooperation. It is especially important to lend a hand and suggest solutions without imposing western ideas or western power on the local “targets” of development or alienating people who have, in truth, seen a lot of projects come and go. The Guna are famous for their hard-won political autonomy and self-management, but things do not just happen by themselves in Guna Yala. In their democratic political system, positive results follow only after hours of discussion, negotiation, and even heated argument. Projects fail if they do not attend to the wider political environment, especially to the will of the Guna General Congress, the ultimate authority for the autonomous reserve, but they must also defer to the jealously guarded autonomy of each community. One can nudge and exhort and suggest and plan but never push, give orders or favor one village over another.

Within each community, much depends on internal politics and long-established but rapidly changing gender roles. Village women—already organized to sweep the streets on three of the project islands, and, at least on Suitupu, the largest of the four, participating in a number of different committees and organizations—are a natural choice to manage recycling, but the formal leaders of some villages (all men) have mixed feelings on the question. Decision-makers must also determine whether to organize recycling as a for-profit business or as an arm of village government, and each must strike a balance between immediate gain for recyclers as they buy and sell aluminum cans and plastic bottles, and long-term benefits for the regional economy and the natural environment. Choosing sites on the mainland for the sorting center and

landfill requires still more discussion and negotiation, within and between villages.

At this writing, with planning and consultations well advanced, and with negotiations underway with several crucial project partners—local boatmen, a Guna-run trucking company, and recycling plants in Panama City—the project is moving into implementation. Two of the four islands have already created community gardens and composting centers, and village recycling associations will be launched in mid-December 2014, during a week combining fanfare with enterprise creation workshops provided by MIT’s CoLab on practical matters such as accounting and business management. The first shipment of recyclable materials is expected to depart for the city in late December 2014.

Even as the project gets underway, the situation keeps changing. The Guna owners of little resorts and cabañas located on offshore islands, who are in the process of forming a business association, have expressed strong interest in joining the recycling effort, and it is anticipated that other villages in the region will want to sell bottles and cans to the project islands. Debates proceed, locally and regionally, whether to dedicate a portion of a tax levied on tourists to the project. A new hospital is under construction on the mainland, complicating but also perhaps facilitating the disposal of medical waste. And Carti Suitupu, in particular, has taken the lead in confronting the crisis of rising sea levels caused by global climate change, with tentative plans to move back to the shore and vacate the island. All this will tax the ability of the project’s collaborators to adapt in their quest to solve the trash crisis in Guna Yala.

James Howe is emeritus Professor of Anthropology at MIT and author of several books on Guna culture and history.

Libby McDonald is the Program Director of Global Sustainability Partnerships at MIT’s Community Innovators Lab and Instructor of MIT D-Lab’s class, D-Lab Waste.



Zero Waste in Punta Cana

Garbage and Tourism in the Dominican Republic **BY JAKE KHEEL**

I NEVER IMAGINED THAT MY JOB AT A LEADING Dominican resort would be so dirty—at least not at the beginning. I spent my first months as environmental director of Puntacana Resort & Club with my team opening and examining hundreds of bags of garbage generated by the resort and its airport. We categorized the waste material to figure out how we might minimize the purchase of unusable materials or find alternative final destinations for our waste, rather than the dump we were using when I arrived.

Tourism makes garbage. At that time, in 2005, the Punta Cana region, one of the fastest growing destinations in the Caribbean, with more than 30,000 hotel rooms and close to two million arriving passengers yearly, produced between twenty and thirty tons of garbage daily.

Yet tourism demands cleanliness. The tourism industry of the Punta Cana region, and to a large degree of the

Dominican Republic, is entirely dependent on its beautiful beaches, crystalline blue seas, and abundant freshwater for its hotel guests and tropical landscaping. With no barriers to avoid contamination of the underground aquifers, the dump I found upon arriving, only eight miles on a straight line from the ocean, could foul freshwater supplies and potentially reach the ocean and destroy the coral reefs.

Working with Victor Ojeda, a waste expert who had advised numerous cities, municipalities and tourist destinations in Latin America on the creation of integrated solid waste management programs, we spent close to six months analyzing the waste production and process flow both of the Puntacana Resort & Club and of the Punta Cana International Airport (a private airport owned and operated by Puntacana Resort & Club that receives as many as 80 flights in a single day). We had to find an alternative

to the foul dump—a threat to the future and long-term sustainability of tourism.

My first visit to the privately run Gerom dump had been nightmarish. Dozens of Dominican and Haitian *buzos* (scavengers) sorted through the piles of garbage by hand, looking for useful or valuable materials. The smell was overwhelming. Tractors pushed the mountains of trash from side to side. This “landfill” was actually a former limestone quarry that had been converted into an unlined dump, receiving unsorted garbage from close to 40 all-inclusive hotels operating in the Punta Cana region. The collection system wasn’t much better—ancient compaction trucks leaked a putrid brown liquid on the streets of the resort as they drove around collecting garbage. On top of this, the system was expensive and often erratic, and we

Tourism makes garbage.



had already been warned of a 10 percent increase in waste hauling fees. But with little government oversight to regulate waste (no local government even existed in 2006), there appeared to be no solution in sight.

Yet we needed to find solutions. So we studied our garbage, identifying numerous previously unrecognized problems. For one, users didn't want to touch the dirty trash dumpsters and left their garbage outside of the dumpsters, even if they were empty. Local *buzos* then opened the trash bags, allowing stray dogs and cats in search of food to spread the remaining contents near the dumpsters. The unsightly messes attracted clouds of flies and mosquitoes. Significantly, the dumpster system also meant that anyone with garbage could utilize our dumpsters and we would pay for it. With waste having no discernible cost, the community had no incentive to sort it and recycle.

After studying our waste production, Ojeda and our team prepared a detailed proposal for completely transforming our existing system into a model one. Our plan called for a new system based on the growing international trend of "Zero Waste" communities that seek to minimize the amount of garbage they send to the landfill. We proposed building a recycling and incineration center for the resort, where we would receive and sort all of the waste from the airport terminal, all arriving airplanes, and all the resort installations, including three hotel properties, more than 1,000 homes, a medium-sized shopping mall, half a dozen office buildings, an electric plant, an industrial laundry, three golf courses, more than 14 restaurants and a marina. International waste from arriving planes that couldn't be recycled would be incinerated as required by international regulations.

We proposed eliminating all dumpsters around the resort and implementing a door-to-door collection service that we would manage ourselves, rather than relying on an external service. We would

Top to bottom: Gerom, the old dumpsite; recycling center; the golf course at Punta Cana.

create a worm-composting system to handle organic wastes and convert them into organic fertilizers for growing vegetables and for compost to use on our golf courses. Additional organic waste would be given to local pig farmers until we could find a better solution.

In addition to the recycling plant and worm-composting, we proposed implementation of a resort-wide training and education program, encouraging classification of waste at the source to avoid contamination of the recyclable materials we could sell, and facilitating the use of organic materials in composting. We would radically change how we managed our waste, sending a fraction of the material to the dump, reducing our dependence on external companies and their volatile pricing, all while eventually reducing our costs. We even insisted that we should no longer refer to these materials as “garbage” but rather as “materials” and “solid waste,” to encourage a different mindset of considering these materials as potentially useful.

After we showed how our program, while expansive and expensive, would pay for itself in time, our CEO, Frank Rainieri, declared, “Yes, yes, the financial part is important. We need to make it economically sustainable. But we need

to do this for another, more important reason: to be competitive.” He observed that passengers, guests, homeowners and potential homeowners come primarily from developed countries, and they expect their waste to be handled correctly. “If we want to remain competitive, we need to manage our waste as well or better than the countries where our visitors come from,” he added.

Thus, we set about implementing Zero Waste at Puntacana Resort & Club. After seven years, it has become one of the largest recycling programs by any company in the Dominican Republic. We are able to recycle 47 percent of all the waste we produce, reducing significantly the amount of waste we send to the landfill (no longer operated by Gerom) and reducing our operating costs. With the volume of recyclables we generate, we helped create a market for them in Punta Cana, which has encouraged dozens of hotels to begin recycling. It has also led to the creation of several companies dedicated to recycling and integrated waste management. More importantly, the program, which we share regularly at conferences, during site visits, videos, and through as many media channels as possible, has inspired the formation of a nationwide network dedicated to

“Reduce, Reuse, and Recycle,” leading to improved waste management by dozens of companies in the Dominican Republic committed to improving their waste management.

While the program has had a profound impact on our community and company and proved to be economically viable, we now realize Zero Waste is not just a project but an ongoing and almost continuous process of improvement of practices. Our Zero Waste enterprise has not yet completely eliminated all waste at the resort as the lofty name suggests, and we are still searching for a viable, long-term solution for organic waste, to complement our growing but still experimental worm-composting program. We still continually conduct training and education programs throughout the resort. And I still occasionally get my hands dirty.

***Jake Kheel** is environmental director for Grupo PUNTACANA and executive director of the PUNTACANA Ecological Foundation in the Dominican Republic. He has extensive experience directing interdisciplinary projects and his work has earned numerous international awards. He has a Master's degree from Cornell University and BA from Wesleyan University.*

A WORMY TALE

I never imagined that today one of my prime interests would be worms. In an effort to make better use of waste, we started the worm composting as an experiment to see if we were capable of producing high quality composts that could be used for vegetable production and to replace imported synthetic fertilizers on the golf course. We have become considerably more sophisticated in our worm composting, bringing in experts from California and New York State to advise us. We now pre-compost all the organic material in Aerated Compost Bins (closed bins that work with an air pump and a time to periodically blow air in the bins and stimulate microorganisms to break down the material and drive the temperature of the material up to 140-160 degrees. We have three bins and the material spends a week in each bin. When it is passed from one bin to the next, the material gets mixed. The end product is a

homogenous, semi-composted but nearly parasite-free mix that can be fed to the worms. The worms are able to eat the material faster and produce a better quality, more consistent material that we have tested with our golf course superintendents and they are now demanding in much greater quantities. Now that we are consistently producing high quality material, our challenge is to scale this up considerably. The next phase is putting into operation a 40 x 6 feet wide Continuous Flow Bed, an elevated stainless steel box with metal grating on the base. The worms sit near the top of the box and the compost is pushed down through the metal grating, so we can continuously produce compost without ever having to separate the worms from the compost. The worms sit in the top six inches of the Bed, while the material is pushed through the floor. All of this is run by a local community member, who also does beekeeping with us.



Recycling Nature in Guatemala

A PHOTOESSAY BY KELLIE CASON O'CONNOR



Left: Building materials are reused to create expansions of homes; Top: The prevalence of processed foods sold at local tiendas increases the rubbish content in small villages across the countryside; Above: Locals in Panamachivak, Guatemala, are being paid for their recycling efforts. They save recyclables waiting for the arrival of the truck to pay them for their goods, particularly metals.





Left: 500-gallon drums catch water from upcycled water catchment systems that are used primarily during the rainy season in Paxixil, Guatemala. This is a pilot program to assist in clean water efforts for local communities when rivers are muddy and swollen from too much rain. The men of the community are being trained to install these catchment systems as a livelihood; **Top:** Feed sacks line barbed wire fences to further keep animals and people out of the farming fields; **Above:** In San Lucas Toliman, a reforestation project began in 1975. If the children of the village bring a two liter bottle full of rubbish to the center, the program director, Torribio Chajil, will give them a sapling to plant in their community. More information on the program is located at <http://www.sanlucasmission.org/pages/program-areas/foodland/reforestation-project>

Kellie Cason O'Connor is a fine arts film photographer based in Pueblo, Colorado. Kellie attended Massachusetts College of Art and Design studying photography under photographers such as Laura McPhee, Nicholas Nixon, Frank Gohlke, and Abelardo Morell.

O'Connor's current works consist of imagery that addresses the reclamation of nature and the relational aspects between humankind and nature. Her other works include works based in her Appalachian roots, documentary work of the Quiche Mayan culture based in Guatemala, and alternative photographic techniques. Kellie's works have appeared in Lenscratch, Fototazo, Update, and F-Stop Magazines.

The images are created primarily through the use of a 4x5 view camera and a medium format rangefinder. All images are created using film. Further information about the artist's works is available at www.kelliecasonoconnor.com.

Buenos Aires

Wasteland **BY JESSICA SEQUEIRA**

WALKING DOWN AVENIDA JUAN DE GARAY LAST week, I passed a giant black trash bag that had ballooned and burst. Orange peels, burst tomatoes, candy wrappers, cigarette butts, Coca Cola bottles, torn newspapers and used condoms had spilled over the sidewalk and mixed with mud from the recent rains, so that pedestrians had to skip over the trash or veer into the street to avoid it. At the time it struck me as oddly beautiful, like some kind of symbol—as in most urban spaces, the distinction between private and public life verges on nonexistent here, and the insides of the city were on display in all their putrefying glory.

One of the most intimate ways to understand a city is by looking at how it treats its waste. The relationship between humans and what they cast off goes back to the primitive days when, out of love or fear, men chose to come together and form societies. The question now is whether modern cosmopolitan cities have reached the stage of maturity necessary to confront what they have discarded. Will they attempt to transform it into something usable, or pretend it does not exist even as it continues to build up around them?

Buenos Aires is an ideal case for thinking about what to do with what has been left behind. The sprawling Latin American city produces 6,000 tons of waste every day, the leftovers of nearly 13 million people. “Wet” waste is sent to an enormous processing plant called the Complejo Ambiental NORTE III in the district of José León Suárez, while “dry” waste is sent to a treatment plant in Villa Soldati. The Suárez plant has received a fair amount of negative press, as over the last year the bodies of three young women were found dumped there. (The cultural attitude toward women making *basura*, or trash, a common insult and this a logi-

cal end for them has been discussed ad nauseam by the local press.) These plants operate overtime processing what the city churns out, but remain far from sufficient to handle the avalanche of garbage.

Recycling has not traditionally figured high on the political agenda in Buenos Aires, but that is changing. Under city government head Mauricio Macri, a new Ministry of Environment and Public Space was created last year, and several recycling plants are now being constructed with accelerated completion times. Macri will be a contender in the 2015 presidential election, but political exigency alone doesn’t explain the rush; those working for the ministry are genuinely concerned with improving the city they live in. Buenos Aires’ relationship with garbage and its new focus on recycling speak to mutually beneficial links between political allegiance and social improvement which, as with so much here, are more complicated than they first appear.

On a sunny September afternoon, Juan and Andrés—two engineers from

the “Urban Hygiene” wing of the new ministry, sub-section “Treatment and New Technologies”—drive me to a new recycling plant for a glimpse of what the city is working on. The plant is located in the Bajo Flores neighborhood, across the street from the Pedro Bidegain stadium home to the San Lorenzo football team, and is very close to where the Pope used to work; San Lorenzo remains his favorite club. During the car ride we pass a building with a sign for “*Madres contra el paco*” [Mothers against paco]. Paco, a drug similar to crack cocaine, has seen its use increase exponentially over the last decade, especially in run-down parts of the city like this one. “It isn’t the nicest area,” says Andrés, “but the idea is for the plant to improve the surrounding zone.”

The plant itself is a reconverted coal factory, abandoned in the 1970s after operating fewer than six months. As we pull into the “*Planta Varela*,” named after the street it is on, they give me a bit of background. “We’re a small department, just seven people who take care of every-



The waste-processing plant is a reconverted factory.

thing. We have a very large budget but few people. It's a nice problem to have," says Juan. "The plant has already started working really hard, 24 hours, six days a week. Trucks like to come at night to unload cargo when there isn't so much traffic and there aren't as many problems. But it isn't at full capacity yet. In a month and a half it will be up and running perfectly."

After we park, Andrés goes to speak with the truck drivers; negotiating with them on behalf of the government is his job. Juan and I continue onward, trucks pulling in to dump material all the while, although a machine part broke in the morning and operations are temporarily suspended. The plant takes in about 2,000 tons of material a day; the company running it won the government contest with a proposal to recuperate 95 percent of this material.

Walking across the entrance lot, we reach a second space. A machine high above with parts imported from England is being assembled, its gaping mouth prepared for input. "We have to get machinery from abroad since Argentina still doesn't have factories that produce such new technology," Juan explained. "It takes more time to instruct a supplier how to make a part than to order a new part from overseas."

We crunch back over the dirt to the main building and squeeze through a set of criss-crossing metal bars into the old factory. It's a shell of what it once was and soon will be—the site for an additional machine and staff offices. In a display of aesthetic optimism, however, the walls have already been painted the "Macri" green characterizing all the city government's "Ciudad Verde" [Green City] projects across Buenos Aires.

The plants that the government has in the works are for plastic bottles (producing PET flakes), tree clippings (producing chips) and organic waste (producing compost). They are being set up extremely quickly, with scheduled completion times of one to four months. Large green recycling containers and black trash containers—the ones people danced on top of after the World Cup semifinal win—will also continue to be placed throughout the city, accompanied by 34 "green points" which accept recyclable materials from neighborhoods without containers.

But the engineers express their hope for an even deeper change in the culture. A first step to achieve this is an educational center planned for the Soldati plant, a destination for student field trips. "All this is not just about constructing works, but about generating the consciousness necessary to resolve problems

rooted in long-standing Argentine tradition," says Juan. "Changing the way we interact with what we produce is really important and really challenging."

Along with countries like New Zealand and Denmark and left-leaning cities like San Francisco and Seattle in the United States, in 2004 Buenos Aires adopted a "Zero garbage" policy, known locally as the "Ley de basura cero." According to the Greenpeace Argentina website, the goal is to create a self-sufficient system in which industry is helped to reduce or eliminate waste products, with materials recycled from the start rather than requiring toxic chemical treatment later on. The challenge is how to do so without debilitating industry. A model example would be a dairy company that is able to transform whey left from cheesemaking into additional subproducts.

But disinterest in recycling on the part of both individuals and private companies is widespread. Buenos Aires' 64-kilometer long Río Matanza, known as the Riachuelo, is the third most contaminated river in the world in large part due to the untreated sewage and industrial waste habitually released into it. In *Contaminados: An Immersion in the Filth of the Riachuelo*, journalist Marina Aizen identifies three main culprits of this industrial waste: refrigeration companies, tanneries and electroplating companies. The first two release primarily animal byproducts, the third chemicals.

Despite the efforts of the Autoridad de Cuenca Matanza-Riachuelo ("Acumar"), an organization that monitors what companies do with their waste, dumping continues on the sly. Various "mochadas," or tricks, have been developed to bypass inspectors and the WALL-E style camera installed to watch the river—some as simple as getting rid of waste at night and flushing large amounts of water on top to confuse chemical sensors. Resistance comes from the reality that treating by-products in an ecologically responsible way is often expensive and time-consuming. Excuses for dumping waste in the river rather than recycling it range from "Everyone else does it and



we'd lose competitiveness" to "What we throw out is natural" in the case of animal byproducts.

In fact, animal waste decomposes into ammonia, nitrate and nitrite. Nitrate in particular combines with the blood and replaces oxygen; according to Aizen, if contaminated water is given to an infant, it has a high likelihood of ending up with blue baby syndrome, an ailment registered frequently at hospitals in the metropolitan area of Buenos Aires. Like the engineers I spoke with, Aizen is hopeful that Buenos Aires will change but emphasizes how difficult this will be, since "in the metropolitan area, business deals, politics and the power hubs of different state strata are connected by a kind of invisible Facebook in which everyone owes everyone else favors."

And what about that waste whose creation is unavoidable? The umbrella term in the business for everything that enters a plant is "solid urban waste." Trash, in other words—paper, cardboard, metals and plastics, but also the least glamorous kind of waste. In a country in which the words mierda and culo are thrown around with the same frequency as like and um in some parts of California, it is perhaps unsurprising that people are open about discussing fecal matter. Sophisticated recycling techniques are already in place in José

León Suárez, where a specialized plant converts this type of solid waste into "biostabilized material."

Waste in the villas is an issue of its own. The city sends trucks around to the slums at a rate approximately double that of the rest of the city, but waste seems to proliferate there much faster. Entire neighborhoods like Villa 21-24 have been built on top of mounds of trash, such that dislodging any part increases the risk the whole thing will collapse. One slum in Avellaneda is referred to as the "Inflammable Villa" for the health effects it suffers from proximity to a nearby petrochemical plant.

Nearly the entire time we are at the Planta Varela, Andrés remains in conversation with a few quite agitated-looking men. "Those are the owners of the dump trucks," Juan says. "There are always problems with the unions. You know, 'You let him pass and not me,' that kind of thing. We're working to standardize papers and keep the trucks in good condition. We want to keep notes on everything; today everything is being regularized. But change is difficult. You understand how it is with unions and strikes; these boys can be complicated."

"One really serious problem is that they dump the contents of their trucks wherever is convenient. They see a corner where there aren't any people

and just leave the trash there, because you have to pay to drop it off with the CEAMSE [Coordinación Ecológica Área Metropolitana Sociedad del Estado] and they would rather pocket that amount. With this plant the city has arranged things so that trucks can come and unload their contents for free, with the aim that 100 percent of the trucks reach their final destination."

Documents from the city government say it is "working to provide drivers with better conditions of hygiene, health and work security, along with a stronger sense of identity and a better relationship with neighbors." This speaks to the fact that workers have traditionally been hired on an informal basis and paid little.

Another difficulty is that the national government of President Cristina Fernández de Kirchner is often politically at odds with the city government of Mauricio Macri. "It's difficult to get things done because we don't have the support of the national government, which is always trying to do the opposite," says Juan. The push by Macri on behalf of the environment, far from neutral, is in many ways an attempt to demonstrate the efficiency of his Propuesta Republicana (PRO) party in getting real results in the run-up to 2015.

I ask if there's pressure to get things done because of the election. "It's very likely there's a rush for that reason," Juan observes. "But that's the reality, and it enables us to do a lot of good things. The truth is that the political situation accompanies the facts, so that we can really take on these issues. Luckily the city government stood firm and was able to make this a concrete reality, because usually here it's just talk and more talk. There's a lot of work to do, and it's a continual learning process. In six months all this will be insane, a real sight to see. We're in full swing, full speed ahead."

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Transforming Values

The Impact of Bogotá's Public Trash Collection Service **BY JULIA LEITNER**

MOUNDS OF GARBAGE AMASSED ON STREET corners, in front of houses. Bags splayed open, spilling onto the sidewalks, filling the city with stench. For three days, between December 18 and 20, 2012, trash piled up on the streets of Colombia's capital city, a city of eight million residents. This period marked the handover of waste collection in Bogotá from private companies to public entities. For those who had ignored the previous months of debate on garbage collection, the problem was brought to the forefront, to the sidewalks, and a fetid phenomenon opened a discussion on environmental responsibility, social and political inclusion, private vs. public interests and the profitability of garbage.

By the start of 2015, the experiment of public waste management will have to come to an end and the service contracts will once again open to bidding from both private and public companies. The

reaction to Mayor Gustavo Petro's new scheme of trash collection brought to light the intricate interplay of public, private, and marginalized forces involved in the business of garbage. While the political backlash involving Petro has captured media attention, the case of trash reform in Bogotá holds important national, international, local and environmental implications, of which Petro is merely a catalyst, not the protagonist.

AN EXCLUSIVE BUSINESS

When Petro took office in 2012, he inherited a problem that had been brewing for a decade. For 25 years, the public entity Unidad Administrativa Ejecutiva de Servicios Públicos (UAESP) had contracted four private companies to operate garbage collection in Bogotá. In the cracks within the waste collection system work the recyclers, a marginalized population that makes its living by collecting recy-

Basura Cero (Zero Waste) street cleaner works in front of a green mural in Bogotá.

clable materials and selling these materials to intermediaries, who then sell them to recycling plants. Recyclers roam the streets, filling makeshift carts or packs with cardboard, paper, plastics, glass bottles and metals. In 2002 the Asociación de Recicladores de Bogotá (Bogotá Association of Recyclers) filed a suit with the Colombian Constitutional Court against UAESP, claiming that the public entity had excluded the recyclers from competing in public bidding for waste collection contracts and thus "denied their fundamental rights to due process, equality, work, and acts of good faith." The recyclers proposed to enter as a formal company into the bidding process and thus formalize the work of the recyclers and create their own recycling plants.



Clockwise from left: Christmas tree is constructed from plastic bottles; recycler Carlos “La Peluca” works on Avenida Caracas in Bogotá; cleaning Bogotá streets is not an easy task.

Although the Constitutional Court resolved in favor of the recyclers and required their integration into city trash collection services, the problem remained unresolved for many years. The Court issued three more judicial decrees in favor of the recyclers. The city government continuously failed to adequately address the problem.

Petro took dramatic action when he entered office. Contracts with the four private companies ended in December 2012. Several months into his term, Petro announced that he would not renew the contracts and would instead increase the capacity of public entities Empresa Acueducto de Bogotá and its affiliate Aguas de Bogotá, to provide services of waste collection, recycling, water sanitation and street cleaning.

The public entities charged with taking over waste collection were severely underprepared when the handover took place on December 18, 2012. Petro's administration had three months to buy trash compactors, plan routes and hire staff. An overly ambitious endeavor from the beginning, it was also poorly managed.

Petro's proposal defied strong private and political powers. He had meddled in private interests, a "mafia" as he denounced them, that had monopolized waste management for a quarter century and failed to fulfill political mandates. The cost of garbage collection in Bogotá, as well, was very high, something that has changed under public management.

"One of the reasons that it was expensive is because it's a service that was based on a monopoly, a private monopoly that no one challenges, no one pokes," explains Sandra Borda, a political science professor at Universidad de los Andes in Bogotá. "Petro openly challenged this. What has to be known in this case is that these contractors in Bogotá, who control not only the garbage business but also other public services in Bogotá, have close ties to the traditional political class of the country."

Petro sought to reform a public service that had gone under the radar, that no one paid much attention to and merely accept-

ed the costs. The attempt to implement change revealed a powerful core of mixed private and public parties that benefited from an activity that few people recognize as lucrative: garbage collection. Tight-lipped private interests and marginalized recycling population, two contrasting groups, profit greatly from a fundamental public service that remains inconspicuous unless something goes wrong.

THE SCANDAL WITH BOGOTÁ'S MAYOR

Much about waste disposal in Bogotá has been overshadowed by the histrionics of a mayor that many love to hate. Petro, a former leftist militant, has been the favorite piñata for conservative groups and a media scapegoat. Borda characterizes Petro, a former member of the urban guerrilla group M-19, as a political "outsider," someone who has positioned himself constantly against the establishment.

Petro was removed from office a year after the December 18 fiasco by order of Inspector General Alejandro Ordóñez, a bastion of ultra-conservative powers in Colombia, but after six weeks out of office, he was reinstated by President Juan Manuel Santos, just in time for the May 2014 presidential elections. Petro offered his support to the incumbent, an unusual move by someone who often criticized Santos' administration. In the latest rebuff, Petro and several other public officials were slapped with a major fine by the City Superintendence of Industry and Commerce. Petro will have to pay 410 million pesos (more than US\$ 200,000) in restitution for the problems caused by trash collection.

Petro also demonstrated his ideological flexibility when he took office again in April 2014 in exchange for supporting Santos' reelection. Once a champion against corruption, Petro is now being investigated in his handling of the multi-million dollar transactions that switching the waste services required.

WHAT REMAINS

"Today, we can say that the cost of trash collection has decreased. Today, we can say

that 8,000 recyclers are receiving income for collection and transport. Today, we can say that recyclers are collecting 1,500 tons daily of recyclable materials that are not dumped. Today we can say that a public waste collection company has grown. These are advances that if you compare with the situation before are undoubtedly achieving important objectives, but that the traditional propaganda and media deny because, clearly, all this diminishes the income of those who traditionally managed the services," says Argemiro Plaza Crespo, an adviser in the municipal Department of Economic Development and economist who worked for more than twenty years as a community organizer with the recycling populations of several Colombian cities.

In the current administration, Plaza Crespo is working on a plan to build a recycling plant for the recyclers. This recycling plant is meant to benefit those who have normally been excluded from the profits of converting tons of waste materials into new products.

With garbage collection and recycling under public management, several departments in the municipal government collaborate to develop programs to change the culture and system of collection in Bogotá. Chief among these is a program called Basura Cero (Zero Garbage), an international effort in several cities around the world to stymie the environmental impact of waste disposal. Basura Cero seeks to educate the public and provide strategies for reducing solid waste in Bogotá, increasing recycling, separating materials at the source, implementing systems to convert recyclable materials, protecting the environment, and including the vulnerable population of street recyclers into the economic cycle of waste disposal.

Basura Cero seeks solutions for the concerns raised in the 2003 Constitutional Court ruling. UAESP and Basura Cero hope to identify and open a bank account for each of Bogotá's recyclers, paying recyclers not only for the materials they turn in but also for time and transportation. Basura Cero also seeks

to better coordinate routes of collection (which today are subject to the individual recyclers) and also provide better means of transportation (swapping a handheld cart for a pickup truck, for example).

Today, of the 13,694 recyclers counted in a citywide census, around 8,000 are registered with the government and receive pay from public accounts. Receiving and weighing centers for recyclables, bodegas, are required to register with the government to standardize the pay for materials.

Carlos “La Peluca,” a recycler who works a route on the busy Avenida Caracas in downtown Bogotá, can’t remember how long he’s worked as a recycler, decades at least, and he says that many have benefited from the new model. With a crutch and pushing a loaded cart of cardboard and plastics, he says that he hopes to receive around 10,000 pesos (about US\$5) for his haul. He rents a room in a nearby zone for 6,000 pesos a night.

Previously, trash companies received a percentage based on the amount of trash collected. This led to a lack of incentives to separate and recycle trash. Garbage collectors would haul away everything, leaving nothing for the recyclers and disposing tons of recyclable materials in the landfill. These same collectors now receive a fixed monthly rate.

Adriana Gómez Unda, an analyst and educator in Basura Cero, coordinates recycling education programs in local schools. She is enthusiastic about the principles and ideas of Basura Cero, but admits that it has been a difficult administration to work under. It is “visionary,” though also “extremely disorderly.” The recycling population also proved difficult to work with, resistant to changes and wary of what will happen after public management ends. There have been problems with fraud in licensed weighing centers, which receive pay from the government. Although separation of materials is now required by law, bags of recycling still often go to the landfill. Additionally, political processes have often slowed progress: Ordóñez deposed both the director of UAESP and Empre-

sa Acueducto de Bogotá at the same time as Petro.

While the programs implemented under Petro are well-intentioned and forward-looking, both Plaza Crespo and Gómez Unda express similar frustration with the adverse effects of Petro’s political blunders. The conservative political backlash and harsh media interpretations of Petro’s admitted mismanagement negatively impact the entities that are looking for the solutions to larger problems of social inclusion and environmental preservation.

At the heart of the matter is a source of funding. Petro reached into the pockets of several profitable businesses, and now he is paying the consequences politically and financially. The real impact of the imposition of recycling, however, lies in the transformation of a seemingly valueless substance into something of value. The citizens in Bogotá are also participating in a process of cultural transformation, to begin to rethink and recognize the importance and possibilities of recycling.

“We have a lot to do in terms of generating consciousness,” says Plaza Crespo. “We should think about the future, in that dumping trash in the 21st century is not the best practice. Today global society has transformed its practices, its waste management. And we should take advantage of this human advancement, these cultural changes, and integrate them into the practices of our country. It’s a big challenge.”

CULTURAL TRANSFORMATIONS

In December 2013, a year after the handover and as the Inspector General determined his decision to dismiss Petro, a group of artists, in collaboration with 400 municipal employees, mounted a giant Christmas tree constructed from 6,000 PET bottles in front of the Institute of Urban Development. Samuel Córdoba Olier and Catalina López of Fundación Promedio use recycled materials on a variety of artistic, architectural, and educational projects. For four years they have worked together under the princi-

ple that what they make should benefit the place, the planet, the city (Bogotá) where they live.

The Christmas tree was not built in support of the city’s changing politics around recycling. However, over the years Samuel and Catalina have found that their work is “no longer something artistic, but it becomes a model, a pilot or a formula that can be repeated for sustainable behavior.”

The Christmas tree was an attempt to involve employees in the physical transformation of recyclable bottles. Once you take materials out of the trash bin and use them for a different purpose, comments López, people begin to see recycling in a different way.

The challenge is to get citizens to see recycling and garbage differently, as sources of revenue and income for poor and elite alike. Taking advantage of recyclable materials means closing an economic circle, reducing waste and adding value to new, recycled products. To do so requires imagination.

Petro’s model has been far from perfect. His reputation is tarnished by corruption and mishandling, but his fight also demonstrated the dominance of a certain political class and the difficulties of Colombia’s left.

Nevertheless, Bogotá is undergoing a process of transformation. Even once the experiment of public waste management ends, the inclusion of recyclers in the system has become law, trash and recycling are now separated into white and black bags, and separation of materials is mandatory. With the installation of recycling plants, Bogotanos will begin to see the transformation of materials back into products and experience the results of cultural changes underway.

Julia Leitner graduated from Harvard College in 2013 with a degree in History and Literature, certificate in Latin American Studies. She is currently in Colombia conducting research with Cultural Agents program at the Universidad Nacional and working as a community organizer in the coffee region.

BOOK TALK

Breeding Gangs

A REVIEW BY MARCELA VALDES

Blood in the Fields: Ten Years Inside California's Nuestra Familia Gang

by Julia Reynolds (*Chicago Review Press, 2014. 368 pp.*)

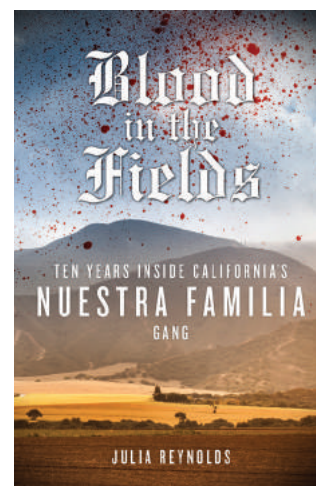
IN 2003, WHEN HIS SON WAS arrested for killing a heroin dealer in Salinas, California, Armando “Big Mando” Frias did what any loving father would do: he intentionally violated his parole so police would send him to prison. There he could help protect “Lil Mando” from gang members who wanted to assassinate him, and he could enjoy time bonding with his boy, who appeared destined to wear a jumpsuit for the remainder of his life. Eventually, guards even let father and son share a cell: Lil Mando slept on the top bunk, while Big Mando wept silently for his family on the bottom. For

Lil Mando had already spent half of his life incarcerated for SEM and its parent criminal organization, Nuestra Familia, i.e. Our Family.

In her debut nonfiction book, *Blood in the Fields: Ten Years Inside California's Nuestra Familia Gang*, Julia Reynolds explains how Nuestra Familia (NF) uses street-level “Norteno” gangs (of which SEM is just one), to run criminal activities in small towns all over the western United States. “Wherever there’s agriculture,” she writes, “this gang seems to lurk.” If you know its members’ characteristic markings—among them, the

are beyond reproach. If boys want to make the jump from Norteno “soldier” to NF officer—and thus pave the way for promotions to “regimental commander” or “captain”—they must not only be sponsored by a current NF member: they must also kill someone for the organization, an excellent technique for weeding out undercover cops.

Obstacles like these make *Blood in the Fields* especially impressive and valuable. A journalist for the *Monterey County Herald* and coproducer of the 2006 PBS documentary “Nuestra Familia, Our Family,” Reynolds is not a particularly graceful writer.



cozy nest. It’s also a stunning account of how the federal prosecution of Nuestra Familia has inadvertently abetted its spread.

If, like me, you do a fair amount of reading about cartels, gangs, and death squads, you know that the killers in these books tend to bear a striking resemblance to sociopaths. Not so in *Blood in the Fields*. Though pathology lurks in the shadows, Reynolds reveals creepy organizational mechanics that marry predatory tactics with inspirational propaganda. First, Nuestra Familia seduces boys from broken homes with visions of cash, excitement, and eternal brotherhood. Then it manipulates their ethics with double talk that suggests robbery, extortion, and drug dealing are merely types of “work” that serve the

Though pathology lurks in the shadows, Reynolds reveals creepy organizational mechanics that marry predatory tactics with inspirational propaganda.

both men, jail was an unusually familiar setting. In his teens, Big Mando had helped found Salinas East Market (SEM), one of Monterey County’s most violent Latino gangs. Consequently, he spent much of Lil Mando’s childhood locked up. The lonely son soon followed in his father’s footsteps, committing his first armed robbery when he was twelve. By twenty-two,

color red, the number 14, and Nebraska Cornhuskers hats—they may be easy to detect. But real understanding requires intimacy, and the group is as welcoming to outsiders as a colony of wasps. Up-and-comers, like Lil Mando, are “schooled” in its secret history, structure, by-laws, and tactics while they serve time in YA prisons, so their criminal bonafides

Her chopped-up story lines and hard-boiled prose read more like preparations for an HBO miniseries than like serious narrative nonfiction. But Reynolds’s reporting is extraordinary, and her book contains disturbing wisdom about why intelligent young men join these groups, why they kill for them, and what, if anything, could make them want to leave criminality’s

noble “Cause” of protecting their communities. Consider this call for Norteño gangs to merge into a corporatized mega-gang that can monopolize the trafficking of heroin and crystal meth:

“Just as knowledge can be the key, there is strength in numbers: therefore, we Norteños can no longer continue to fight against one another. All Norteños must unite with the determination to fight and challenge all those who oppose our unity and advancement towards equal justice.”

NF’s founders pirated the civil rights language from César Chávez’s farm workers’ movement, which has nothing to do with the gang. Yet the sneaky co-optation works. Teenagers who are poor in education and hungry for accomplishment swallow the rhetoric whole, and through this cunning lens see NF

ensure their babies would grow up to be soldiers.” Or, as his father bluntly put it back when Lil Mando still needed the weakness beaten out of him: “Don’t you know you have to learn to be a killer?” In this context, armed robbery at twelve seems almost rather late.

Nuestra Familia’s generals have always run the organization from inside locked cells. The group began as a prison gang in the 1970s, spreading its tentacles (through Norteños) onto the streets only in the 1980s. By the time Reynolds began her reporting in the early 2000s, it routinely operated on instructions smuggled out of California’s highest-security prison, Pelican Bay. There, top NF brass were isolated in one-man cells for twenty-three hours a day, yet still managed to strategize NF’s dominance

NF by bringing down its Salinas regiment and by scattering the Pelican Bay generals across the federal prison system. Though both operations were tainted by moral lapses, Reynolds’s outrage at the blemishes feels somewhat out of place. Yes, federal agents stood by while one Norteño shot another Norteño and his girlfriend because they wanted to improve their chances at trial by catching the gang in the middle of “overt acts.” Yes, an NF turncoat drained the NF piggy bank and tried to deal crystal meth while working for the FBI. Kudos to Reynolds for unearthing such transgressions, but, given the violence and sophistication of the gang under investigation, let’s not pretend that they’re a real surprise. Especially when Reynolds’s true A-bomb is dropped with such aplomb.

Blood in the Fields builds

and then in USP Florence ADMAX prison, Colorado, home of the Unabomber. As if that weren’t enough, back in Monterey County, where the Salinas regiment was scooped up by the FBI’s initial operation, Reyes discovers that the Watsonville regiment has filled the sudden vacancy, and done Salinas one better by forging connections with a Mexican cartel.

This dispiriting coda is the fruit of Reynolds’s tremendous reporting and her residency in Monterey County. Rather than pack her bags and wrap her story when the FBI wrapped its operations, she stayed and watched what little long-term effect they had. For Lil Mando, at least, the more significant transformation sprang from Big Mando’s repentant cell-block crying. Dismayed by his son’s hopeless predicament—had he refused to shoot the NF rival, the NF would have executed him—and for his own role in putting him there, Big Mando vowed to care better for Lil Mando’s baby boy. For if children can be bred into NF soldiers, they can also make soldiers, like Lil Mando himself, decide to quit. The surest weapon against Nuestra Familia, it turns out, may be simply loving family.

Marcela Valdes is an award-winning journalist who specializes in writing about Latin American literature and culture. Her work has appeared in The Nation, The New York Times, The Washington Post, and NPR.org, among other publications. In 2010, she was a Nieman Fellow at Harvard University.

Teenagers who are poor in education and hungry for accomplishment are vulnerable to gang recruitment. They are attracted by the sense of family and a kind of chivalric code.

membership—with its daily grind of dealing, intimidation, and assault—as a kind of chivalric code.

Eventually, the teenagers turn into fathers, whereupon Nuestra Familia presses their wives and girlfriends into functioning as illicit couriers and, in a perfect vicious circle, preys upon their young. Lil Mando is just the kind of man the original NF members dreamed of when they “encouraged members to marry within the gang to

like a game of criminal chess: setting up a fake law firm, carefully coding fake habeas corpus petitions, and smuggling out minuscule notes to pass their orders into the outside world.

In the late 1990s and early 2000s, federal attorney Robert Mueller (later director of the FBI) tried to checkmate the group with two back-to-back investigations, both meticulously detailed in Reynolds’s book. Together the operations aimed to destroy

to the scene when Lil Mando shoots his rival point blank in the head, but its most horrifying moment features a different kind of mental explosion: hardworking Detective Tony Reyes watches two NF generals in an Oakland jail and realizes that the FBI’s “Black Widow” operation has been about as effective as severing a hydra’s head. Rather than destroy the NF headquarters in Pelican Bay, the operation sprouted a second headquarters in Oakland,

Art as Civic Acupuncture

A REVIEW BY PEDRO REINA-PÉREZ

The Work of Art in the World: Civic Agency and Public Humanities by Doris Sommer (Duke University Press, 2014)

WHEN DORIS SOMMER BRIEFED Harvard President Larry Summers in 2006 on her Cultural Agents Initiative (CAI) at Harvard, she expressed concern about the deteriorating state of the humanities on campus—too little attention was given to art and interpretation as a way of approaching complex social problems. Artists, she argued, “help translate good ideas into enduring practices.” Yet humanistic programs such as the Cultural Agents Initiative were not afforded the same pragmatic consideration as economics or medicine, either by students seeking a vocation or by the university. This required a new way of thinking. President Summers stepped down from his post not long after this encounter, but Doris Sommer is still going strong in her quest to prove with philosophical and empirical data that the humanities are indispensable as a means to foster critical thinking, innovation and better civic practices.

The Work of Art in the World: Civic Agency and Public Humanities is the culmination of more than a decade of intellectual inquiry by Sommer, the Ira Jewel Williams Jr. Professor of Romance Languages and Literatures at Harvard University. Draw-

ing from collaborations with scholars, artists and practitioners to build a theoretical foundation for the constitution of cultural agency, she argues for the relevance of engaged art to democracy.

Humanistic training, in Sommer’s words, teaches the skills—context, technique, messages and aesthetics—required for the interpretation of art and the development of disinterested judgment. The first three skills are regularly developed by scholarly means, but aesthetics holds greater potential to train judgment because “deciding if something is beautiful requires responding to an intense experience but obeying no established principles, and this decision is therefore free from prejudice. Aesthetic judgment is an exercise in unbiased evaluation, a knack that science and civics need as much as art does. That is why humanistic training is a fundamental contribution to general research and to social development.”

Sommer’s take on aesthetics is grounded in a careful selection of philosophical texts, beginning with Kant’s *Third Critique of Reason* (1709), which supplements the objective track of reason by introducing an opportunity for judgment. “Withdrawing from reason to judge the sensible and sentimental world of particulars,” writes Kant, “saves human beings from the excess of rule-driven behavior.”

Kant’s work is followed by Friedrich Schiller’s *Letters on the Aesthetic Education of Man* (1794), in which he argued in the midst of the French Revolution that the universal cultivation of judgment in art was fundamental to political freedom because art captures and extends the experience of beauty. Where nature can become habitual, art offers the possibility of surprise. Sommer also uses readings from modern thinkers ranging from Hannah Arendt to John Dewey to Paulo Freire to argue that making art (and thus interpreting it) is constitutive for human beings, and as such offers moments of “freedom unbound from content or rules.” The implications for the improvement of democracy and civic life, derived from this panoply of thinkers, are clearly rendered.

Central to the inspiration of Sommer’s work has been her association with Antanas Mockus, the former Bogotá mayor, who implemented innovative cultural projects to address social challenges and improve civic life in Colombia’s capital city between 1995 and 2003. Mockus sought to develop new paths through art to engage citizens in the formulation of systemic solutions to recurring problems. He put mimes at street intersections to mock traffic infractions, held symbolic vaccination campaigns to inoculate people from domestic aggression, and donned superhero



costumes to walk around the city promoting civic values. His policy methodology was grounded in a solid theoretical and practical framework that allowed results to be measured, while persuading citizens to be active participants in the creative quest for answers. “One important lesson we learn from Mockus is that without pleasure, social reform and political pragmatism shrivel into short-lived, self-defeating pretensions,” Sommer writes. Sommer examines other initiatives in Latin America such as Augusto Boal’s Theatre of the Oppressed and Pedro Reyes’ Guns into Shovels art exhibit, among others, to illustrate how playful citizen complicity can produce meaningful and lasting effects.

At Harvard, she has taught the course Aesthetic and Interpretive Understanding that served as a laboratory of sorts to refine her own thought on creative

social interventions, while persuading students to embark on their own quest for action and meaning. In this regard, the book is both scholarly and personal, combining her readings of major works with her own thoughts and practical experiences. The author's voice is didactic and compelling, crafting an impassioned argument for art as an agent for change.

The text is intimately linked to two of her works: *Bilingual Aesthetics: A New Sentimental Education* (Duke, 2004) and *Cultural Agency in the Americas* (Duke, 2006). In the first, she invites bilingual readers to play games with languages as a metaphor to explore new ways of civic thinking. She calls on citizens to explore and cultivate differences—the building blocks of democracy. The second book, an edited volume, traces the connection between creativity and social change in Latin America, focused on model cases presented by an outstanding group of scholars and practitioners. Thus, *The Work of Art in the World* culminates what the author began in 2004 to revisit creativity, art and thought and to engage in civic exploration, giving democracy a new realm of possibilities.

Collaboration between policy makers and artists is at the center of any effective cultural agency, but the author recognizes that partnerships of this kind may be unconventional. The former normally seek measurable results while the latter will defend art for its own sake. “The discord

between pragmatics and aesthetics is doubly debilitating since the ‘adjacent possible’ counts on a combination of art and science. Development needs the imagination and judgment that the arts cultivate; and the arts thrive on adaptive challenges that throw systems into crisis and require new forms. Tracking hybrid creations means stepping beyond established practices and linking onto creative experiments. I want to encourage interpretation to take risks, to learn a lesson from art-making about getting one’s hands dirty through trial and error.”

The book will speak to readers on many levels. Scholars will ponder its philosophical arguments crafted with passion and wit, while artists inclined to social engagement will interpret its urgent call to expand the dialogue about art and political freedom. Sommer achieves a remarkable feat: to surprise artists and citizens anew into being co-creators of new paths to promote beauty and action. No small thing in these trying times.

Pedro Reina Pérez, a historian, journalist and blogger specializing in contemporary Spanish Caribbean history, was the 2013-14 DRCLAS Wilbur Marvin Visiting Scholar. He is a professor of Humanities and Cultural Agency and Administration at the University of Puerto Rico. Among his books and edited volumes are *Poeta del Paisaje* (2013), *El Arco Prodigioso* (2009) and *La Semilla Que Sembramos* (2003).

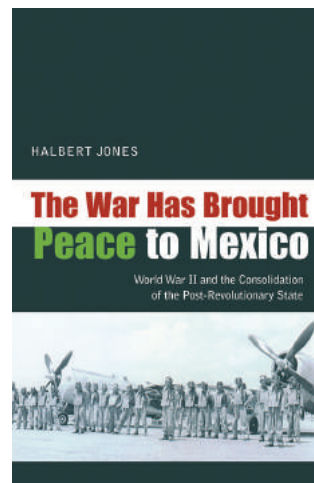
Bringing the War to Mexico

A REVIEW BY ANDREA OÑATE

The War Has Brought Peace to Mexico: World War II and the Consolidation of the Post-Revolutionary State by Halbert Jones (*Albuquerque: University of New Mexico Press, 2014*)

IN NOVEMBER 1945, FIGHTER pilots from Mexico’s Air Force Squadron 201 received a hero’s welcome upon returning home after their brief participation in World War II. While theirs had been an essentially symbolic contribution, fought thousands of miles away in the Pacific, they were greeted by admiring crowds. In the preceding years, President Manuel Ávila Camacho had taken great pains to convince the population of the war’s importance, committing his country to fight alongside the Allies. The crowds at the squadron’s homecoming indicated the president’s success in placing a distant conflict of seemingly little relevance at the forefront of the Mexican imagination.

Halbert Jones brings Mexico’s participation in World War II to life in *The War Has Brought Peace to Mexico*. He uncovers the complex history of how Ávila Camacho’s administration managed to get Mexico to participate in the war—only after convincing a skeptical population



that the war was theirs to fight—and the effect of this involvement in engendering the political system that shaped the country for many decades to come. While the book focuses on a very specific episode of Mexican history, it is above all a story of the relationship between war and state formation, making it of interest to scholars from a variety of disciplines.

Jones conveys how President Ávila Camacho faced a polarized and complex political landscape upon coming to power in 1940. Radical elements on both the left and right enjoyed popular support from key sectors of Mexican society. In the aftermath the large-scale social revolution that began in Mexico in 1910, the Army still maintained considerable political clout while institutions lacked

muscle and experience. During his presidency (1940–46), Ávila Camacho managed to modernize the army and divorce the military from politics, consolidate the power of the executive, appease radical political factions, build a strong security apparatus capable of repressing potentially disruptive activities and bolster Mexico's standing in the international arena.

The Ávila Camacho administration achieved notable accomplishments that paved the way for a strong centralized state. How did the Mexican president manage this substantial list of achievements? And what, if any, relation did it have to a war being fought halfway across the world? These are the questions addressed in *The War Has Brought Peace to Mexico*. Jones asserts that the political transformations unfolding during Ávila Camacho's tenure were inextricably linked to the country's direct participation in the World War II. It was during the war—and because of the war—that President Ávila Camacho was able to neutralize domestic opposition, consolidate executive power, and effect institutional reforms that shaped the Mexican state in subsequent decades, Jones contends.

Mexico officially declared war against the Axis powers on May 28, 1942, elevating Ávila Camacho to the special position of the country's wartime leader. Soon after, he submitted an initiative, swiftly approved by Congress, that granted him the power to suspend a long list of constitutional rights. These actions gave the president's call for

national unity unprecedented moral authority.

The war also propelled the modernization of the armed forces. Investment in military equipment and the prospect of direct engagement in war served to focus the attention of military officers on matters of national defense. Furthermore, when the war ended, the president announced plans to reorganize the Army to allow upward mobility for younger officers with professional military training, while making provisions for the retirement of older and more politically inclined generals. With the country at war, Ávila Camacho expanded the security apparatus and consolidated intelligence and law enforcement under a single ministry. The ministry's authority to investigate all matters related to subversive activity gave the president the unprecedented ability to monitor the opposition and a tighter grip on power both during and after the war.

Undoubtedly, some of the most important transformations of this period occurred in the electoral arena. During the 1943 legislative elections, President Ávila Camacho informed contenders that given that the country was at war, premature agitation and electoral politics should be avoided and campaigning should be limited to fixed dates. Furthermore, El Partido de la Revolución Mexicana (PRM), the incumbent and dominant party, centralized control over the naming of its own candidates, who were then guaranteed election. This procedure, the PRM leadership said, responded to the need to limit agitation dur-

ing a wartime election. Jones argues that after the 1943 elections the PRM's grip on political power was stronger than ever. In this fashion, the war was used by the president to secure his own influence within the party as well as his party's hegemony in the political system. Both factors would play a central role in Mexican political life for many decades to come. A mere three years after these elections, the PRM was reconstituted as el Partido Revolucionario Institucional (PRI), the party that maintained control of Mexico's executive branch until the year 2000.

A significant portion of the book is devoted to examining this process through which the president slowly but efficiently pushed the conflict to the forefront of the popular imagination, convinced key sectors of Mexican society of the war's relevance and the need to engage, and appeased popular fears that greater involvement would mean sending Mexico's youngsters to fight on foreign soil. The media played a prominent role in Mexico's participation in World War II and the centralization of power by gauging and helping to shape public opinion. Thus, periodicals are often at the forefront of Jones' narrative and constitute a cornerstone of his primary-source base. Readers might be surprised to learn about the myriad periodicals and plurality of opinions that circulated in Mexico at the time. Unfortunately, Jones does not give much context to the publications that he cites nor does he address the degree of independence they

might have enjoyed from the government.

Halbert Jones provides an important service by pulling Mexico's involvement in World War II out of the dustbin of history. By elucidating President Ávila Camacho's success in bringing the war to Mexico, Jones shows a president who was not merely the beneficiary of an opportune situation but also an adept politician, capable of molding perceptions of the international situation to further his own ends. The book reminds its readers that while people may well be a product of their times, the times are also the product of the people who shape them. Furthermore, in demonstrating the pivotal importance of World War II in the formation of the modern Mexican state, this work sheds light on the pertinent yet often overlooked reality that the fate of countries is often shaped by how they respond to international crises of seemingly little relevance. Mexico in World War II is merely one in a long list of historical examples of how fighting wars abroad can help leaders consolidate power and advance their policies at home.

Andrea Oñate is a Ph.D. candidate in Latin American history at Princeton University. Her forthcoming dissertation, "Insurgent Diplomacy: The Global Politics of El Salvador's Revolution, 1970–1992," examines the diplomacy of the Salvadoran revolutionary movement (FMLN) in the last decades of the global Cold War.

Tracing Back Marijuana Stigma

A REVIEW BY VIRIDIANA RÍOS

Home grown. *Marijuana and the Origins of Mexico's War on Drugs* by Isaac Campos (*The University of North Carolina Press, Chapel Hill, 2012*)

MARIJUANA IS THE TALK OF THE town, as it has recently been discovered to be innocuous. Researchers have encountered little (if any) medical proof of severe health problems caused by its consumption. The idea of marijuana as an “entry drug” that facilitates the consumption of other, more damaging illegal substances has been mostly debunked. Indeed, marijuana consumption seems to be correlated with higher, rather than lower, income and status.

The more is known about marijuana, the more its repu-

tion (billion-dollar drug war) into one of the many recreational drugs that society is willing to tolerate.

As marijuana rapidly becomes less stigmatized, many questions start begging for answers. When did marijuana's bad reputation first start? When did a substance for which no clear evidence of damaging effects had been empirically proven turn into an illegal drug deserving international prosecution?

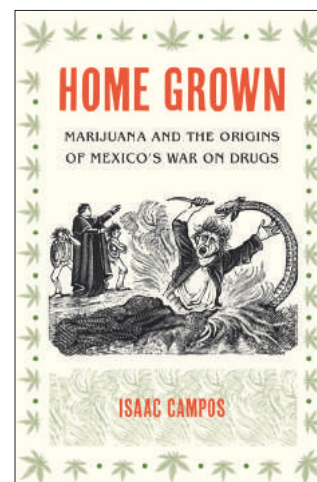
Home Grown, the most recent book by Isaac Campos, offers these and many more answers.

Campos deeply explores the origins of marijuana prohibition to show that the “war against drugs” did not start when President Nixon formally declared it in 1971.

United States.

The argument that Campos makes is sound and simple. The origins of the war against drugs lie in the ideological conception that marijuana is dangerous. Such beliefs first emerged in Mexico, linking the substance to violence and madness. The United States adopted the Mexican narrative, stigmatizing marijuana consumption and eventually conducting a militarized war against the substance.

Overall, Campos's text shows that marijuana was stigmatized not because its effects were particularly pernicious but because it was linked to negatively perceived groups such as prisoners and indigenous people. The effects of marijuana were



the surface” (pg. 152). The author argues that the origin of the war on drugs does not come from marijuana's health effects but from the stigma that surrounded those who used it at an earlier time.

Campos draws on a diversity of historical sources to sustain his claims. As his main source of evidence, the author analyzes 600 newspaper articles (extracted from a survey of 40 thousand issues) from more than a dozen publications that discuss marijuana. The information is filtered and organized into basic descriptive statistics like the distribution of news coverage by newspapers from 1878 to 1920, the frequency of marijuana references, the geography of marijuana use, and even the demographic characteristics of marijuana users and effects as reported by the press.

The story starts around the 16th century, when in 1550 Pedro Quadrado, a

At times, the book is a statistical analysis of journalistic sources. At other moments it feels like a captivating trip into a Latin American literature class.

tation enjoys an extreme makeover. A positive one. Changes in the social perception of marijuana have taken place not only because of marijuana's relatively safe nature, but because of the objectively high costs of its prohibition. In just a few decades, marijuana has gone from being perceived as a clearly damaging substance (one whose eradication was well worth the cost of a

Instead, prohibition gestated well before, in the legal and ideological roots of marijuana stigmatization, which can be traced back to the colonial era in Mexico. Ironically, Campos shows that a war on drugs that is commonly perceived to be the result of U.S. pressure into policies enacted south of the border is, in fact, the result of Mexico's popular beliefs traveling into the

not different from alcohol. Smoking was even less common than drinking. The real problem was that marijuana was linked to indigenous herbalism and oriental traditions, typically perceived as activities that undermined modernity and development. Furthermore, marijuana was said to be consumed by to prisoners as a stimulant that brought its “savagery to

conquistador, first introduced marijuana into Mexico. Back then it was considered a strong fiber, used as hemp for various products. Yet marijuana soon started to be used as a drug and, by the 18th century, it was clearly linked to indigenous traditions, used for divinatory purposes and to produce visions or supernatural encounters.

Because of its effects, marijuana became associated with madness and violence. It was pretty much accepted that marijuana produced severe mental illness and promoted physical violence among those who used it. Interestingly, despite the many similarities between “marijuana delirium” and that produced by other substances like alcohol, the former was frequently distinguished as being especially pernicious.

Both social discourse and literature commonly associated marijuana with negative outcomes. Campos uses extracts from classic Latin American novels like *Los Bandidos del Río Frío*

by Manuel Payno and *El Periquillo Sarniento* by José Joaquín Fernández de Lizardi to show how in Mexico’s daily life, the use of marijuana was linked to soldiers, prisoners and other low elements. For literature lovers, the book provides a delightful compendium of quotes and references from the works of accomplished authors, such as Antonio Salinas y Carbo, José Posada, Federico Gamboa and Heriberto Frías, to Guillermo Prieto, José Juan Tablada, Porfirio Barba Jacob and even Emile Zola and Rubén Darío.

Even Mexico’s 19th-century liberals stigmatized marijuana, the author argues, as a form of political opposition against Porfirio Díaz’s dictatorship (1876-1911). They claimed that the reason why marijuana was used in prisons was because of brutal living conditions. Such conditions were a symbol of “all that was wrong with Díaz’s regime” (pg. 143) and its institutional corruption. As a result, liberals portrayed marijuana as one

of the many negative consequences indirectly linked to the dictatorship.

Home Grown is a historical book par excellence. It is an academic exercise that finds its evidence in literature, narratives and stories carefully gathered by Campos. The author craftily uses these sources to transport the reader from Mexico’s colonial period to U.S. prohibition era. At times, the book is a statistical analysis of journalistic sources. At other moments it feels like a captivating trip into a Latin American literature class. Most of the time it is just a passionate description of Mexico’s daily life, customs and traditions.

Indeed, for those who are not historians or academics, the book may occasionally be arid. The deeply academic nature of *Home Grown* makes it an interesting but difficult reading, sometimes too detailed for a person who does not want to become an expert in the topic. It contains a hundred pages of references, footnotes and appen-

dices, most of them only nuances and revisions of what is being described in the main text. Furthermore, chapters feel somehow disconnected. Statistics and charts presented early in the book are never referenced again when evidence is being described. A postscript about how Mexico’s ideas were transmitted to the United States feels unfinished and less well referenced than others. The first chapter, a literature review of marijuana’s health effects, feels superficial and outdated.

Home Grown is an excellent analysis of the historical perceptions of marijuana and an indispensable lecture for those trying to understand the cultural roots of prohibition. It explores the right topic at the right moment.

Viridiana Ríos has a Ph.D. in Government from Harvard University and is the CEO of *México ¿Cómo Vamos?* a think tank based in Mexico City.



DAVID ROCKEFELLER CENTER
FOR LATIN AMERICAN STUDIES
HARVARD UNIVERSITY

Are you a graduate student from any university planning to go to the Latin American American Studies Association (LASA) meeting in May?

DRCLAS is sponsoring grants from the LASA travel fund with priority to science-related themes such as biodiversity and health. Apply directly to LASA travel fund.

BUILDING BRIDGES

We Make Things Happen

BY MARCELA RENTERÍA

THE DAVID ROCKEFELLER CENTER for Latin American Studies (DRCLAS) celebrated its 20th anniversary in May 2014 during the annual meeting in Cambridge of the DRCLAS Advisory Committee. In a memorable gala, Harvard University President Drew Faust spoke about DRCLAS' positive impact across the University and throughout Latin America, all of which has been made possible by David Rockefeller, the mastermind in the creation of DRCLAS. In a powerful speech at the gala, David Rockefeller shared his original vision when establishing the Center, and emphasized the importance of students having an international experience. In addition, during this celebratory weekend, former Harvard University President Neil Rudenstine and past and present DRCLAS Directors John Coatsworth, Merilee Grindle and Brian Farrell participated in a panel discussion on the history of the Center and its accomplishments in the past 20 years. "The Center has far exceeded—in every conceivable way—all the original purposes and goals that we had imagined at its beginning! I'm especially impressed, not simply by the range of projects undertaken, but by the number of 'outposts' we now have in various countries. I well remember when we began in Chile, wondering whether it

would succeed," remarked Neil Rudenstine after his visit.

The DRCLAS Regional Office (RO) opened its doors in 2002 in Santiago Chile to serve Harvard faculty, students and staff from across the University, becoming the first Harvard overseas office. During more than a decade, the Regional Office has developed long-lasting relationships, built connections and worked in multidisciplinary, collaborative and ongoing projects with a diverse array of partners, including universities, non-profit and private organizations, ministries, local governments, and local community groups. These synergies have resulted in long-term innovative and cutting edge programs with major impact at Harvard and in the region.

A clear example of the Regional Office's collaborative endeavors in the region is Recupera Chile, a multidisciplinary program that focuses on post-disaster recovery. Established in 2011 in collaboration with the Harvard Kennedy School, Harvard Medical School and Harvard Graduate School of Design, Recupera Chile brings together in strong coalitions Harvard faculty, alumni and students, and local academic institutions, and private and public sector organizations. Currently, Recupera Chile is developing international col-

laborations through the new initiative, Farmers of the Sea, which aims to support small-scale aquaculture projects and help recover the coast of Chile from the 2010 tsunami. "The strong partnerships across interests, professions, disciplines, universities and between people from different countries has made Recupera Chile possible," remarks HMS Professor Judy Palfrey, one of the project's leaders.

The Regional Office not only nurtures existing partnerships, it also facilitates the creation of new ones. This past October, the School of Engineering and Applied Sciences and Peru's new technological university, UTEC, signed a historic agreement to establish collaborations in research, innovations in engineering education, and student programs. The Regional Office will be key in supporting the development of that alliance throughout the upcoming years.

Due to its on-the-ground presence, the Regional Office also makes a difference through a wide array of year-round programs in the region for Harvard undergraduates and graduate students, in collaboration with Harvard faculty across the University and local universities. Since its founding, the Regional Office has hosted 1,129 students in academic term studies, internships, clinical

rotations, community and public service, and independent research. Our student blog is a testimony of the transformative experiences our students undergo. However, the Regional Office's impact on students does not end at their graduation. When Andrea Rolla finished her doctorate degree at the Harvard Graduate School of Education, she collaborated in the creation of Un Buen Comienzo (UBC), a multiyear project designed to improve the quality of preschool education in Chile. Rolla reflects, "Without leadership and support from the RO, the project would not have begun. They provide a sounding board for innovation and help get new ideas off the ground, with the conviction that sustainable change will be created... Thousands of at-risk children have benefitted from this."

As we look forward into the future, the Regional Office will continue making a difference by facilitating projects and building collaborations that won't happen unless there is a physical Harvard presence in the region. This is a reality not only in Chile, but also in Argentina, Bolivia, Colombia, Peru and Uruguay, the countries that the Regional Office primarily serves.

Marcela Rentería is the Program Director, DRCLAS Regional Office.