

MAIN SECTION

Making with Repurpose: Finding Architectural Value between Waste and Landfill

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ABSTRACT

This project rethinks architectural work in the context of waste. Fourth-year students designed and built a mobile maker-space at the Repurpose Project, a last stop for cast-off materials before the landfill. This essay argues that the material ecologies found in such places provide a critical context for understanding architectural work as a collective body of knowledge and practical know-how. The rejected and scrapped materials themselves had agency, carrying legacies and future potentialities, not just for the project but also for the larger collaborative project of evaluating and addressing work and waste in and out of academia and the architectural profession. Building the maker-space recast the process of making as a series of critical ecological acts and explored the Repurpose Project model as a knowledge commons for alternative architectural practices.

KEYWORDS

Architecture; Design/Build; Pedagogy; Making; Technology/Science.

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The Work of Valuation

How much do you want to pay? That's what you're asked when you approach the cashier at Repurpose Project. At first, this is disarming, then liberating, and finally the question elicits the work of valuation. But only after you have combed aisles, piles, stacks, and rolls. From areas of porcelain, pink, white, and beige, spilling into rafts of tiles and signs, across hoops of laminate stripping, sheaves of PVC pipe (one is painted as a clown's cannon), onto pressed tin shingles, which are so many fish scales across the ground, an attic of chair frames (an upholsterer was the building's previous tenant), bolts of fabric from the 1980s, a rococo mashup of wood moldings, mounds of thoracic x-rays, hillocks of floppy discs, heaps of colored film, waves of spools, magazines of brackets. All is for sale, all negotiable. [Fig. 1- 2]

The Repurpose Project is located in a university town in Florida's north central region, an area between the American Deep South and the southern part of the state. Anchored by the University of Florida, the town of Gainesville is known as a place of creative music makers, writers, nature-lovers; it is a liberal bubble within conservative old Florida—a student town with international connections, a place for innovation and aspiration. A small city with a large disparity in the ownership of wealth and material goods, it has the widest academic achievement gap between local White and Black children in the state. A town now awakened to its legacy of slavery and Jim Crow, it is place of young leadership, optimism and growth. The Repurpose Project has become an important resource in Gainesville, and with our project for the Maker Space, we sought further, even more diverse connections between the town's citizens and its discarded objects and materials.

The Repurpose Project, often referred to simply as "Repurpose," is a place that explicitly promotes reuse of materials in order to diminish the amount of waste in the local landfill, and, in doing so, empowers a diverse community to make things for themselves and to combat pervasive consumer culture. Founded in 2012 by artist Sarah Goff and environmentalist and building de-constructor Mike Myers, Repurpose currently takes the form of a compound. It includes an indoor area comprised of a large and seemingly patched together warehouse space, with a second floor loft filled with the relics of the warehouse's furniture-making past—chair and couch frames, table legs, chair legs, webbing for seats, and other odds and ends from furniture repair and maintenance. The outdoor area of Repurpose is a series of yards of sometimes inexplicably arranged waste materials. It is an array of fragments, from raw materials like wood and steel to cast-off fixtures like sinks and toilets to groupings of building fragments like cornices, sheets of roofing and vents. Located in a light industrial zone, fumes from the neighboring paint factory are in the air, and occasionally loud noises emanate from the metal shop nearby. The staff of Repurpose



FIG. 1 Salvaged and stockpiled air-conditioning vents at the Repurpose Project

includes the founders and other artists and student volunteers who share a vision for an expanded physical space and a broadened role in the local community. Despite skirting the edge of zoning laws and building codes, Repurpose has expanded its retail area and salvage yard and continued an ambitious series of building phases to service the community: lumber yard, art gallery, community workshop, public cinema, music venue, and plans for the Maker Space.

These indoor and outdoor areas of Repurpose are filled with refuse, available to anyone who searches. The search itself takes on the feel of a hunt. Each day as we began work, we set out on what we called “walkabouts.” Walking through piles of materials and objects, our eye moved quickly, sending images to our minds that fed our imagination with new possibilities. Design/build is inherently a heuristic method of teaching and learning. Designing as well as actually building, we all learn by touching and testing a piece, lifting it, moving it, bending and breaking it, throwing it back, picking another. Students and faculty regularly walked the grounds on material “hunting” or “fishing” expeditions. The walks were meditative,



FIG. 2 Materials for sale at the Repurpose Project

daily roves. Could this piece, rotated from its normal orientation, connect to another found object that is also transformed—will this piece answer the need? On any given day, we came across a surprising number and variety of people who were also drifting through the yard, each in a private trance, which was broken only with an “Aha!” when the right piece for the project was found.

The Repurpose Project, this Spatial Common, is a topsy-turvy place where there is no normal. It makes no sense to store things outside in Florida. Relentless sub-tropical humidity ensures imminent decay of practically everything. Over time, all materials break down, first paper dissolves, then metal rusts, wood rots, and even porcelain and tiles crack and chip away. Glass resists rot, but often scratches and shatters. The moist crevices within the piles and stacks provide habitats for new life: insects, small animals, and also our imagination.

Our studio joined the Repurpose Project to design and build a mobile maker-space: an all-in-one fix-it shop, art-room, and puppet-stage. Occupying

an acre-and-a-half lot and thirteen-thousand-square-foot warehouse, Repurpose was founded as a “non-profit junk shop” that works at “salvaging valuable resources left behind by traditional reuse markets” in a niche between “second hand stores” and the landfill. Repurpose is a form of counterculture, serving to contest throwaway consumer culture, a project most have abandoned in the current age of social media. It operates under extreme financial constraints—requiring efficiency—and therefore offers a useful introduction to design for efficiency and re-valuation of all the costs of building. Like customers asked to name a price, architecture students were challenged by Repurpose to determine how to use what consumer culture has jettisoned.

Our use of the term “counterculture” links the Repurpose Project to the tensions between individual agency and self-sufficiency and passive consumption, particularly in a consumer culture that has only expanded since the term’s early uses to describe a late modern subculture in the 1960s and 1970s. The *Whole Earth Catalog* provides a significant step in the genealogy of this counterculture and its particular connections to the use and reuse of objects and tools. Initiated by Stewart Brand in 1968, the *Whole Earth Catalog* was divided into nine sections, including “Community,” “Land Use,” “Shelter” and “Craft.” The low-cost publication included not only products but also essays that addressed themes of ecology, invention, and do-it-yourself projects. The catalog’s stated function, in particular, provides an important link between the Repurpose Project’s current goals and the legacies of the earlier counterculture’s objectives: “The Whole Earth Catalog functions as an evaluation and access device. With it, the user should know better what is worth getting and where and how to do the getting.” Like the Repurpose Project, the catalog’s project established a framework for education, ethics of use, and independent living. Also like Repurpose, the catalog advocated the repurposing of old technologies for new uses so that readers, and makers, could “find [their] own inspiration, shape [their] own environment, and share [their] adventure with whoever is interested.”¹

Between Waste and Landfill: A Space of the Common Object

In the so-called waste stream, Repurpose constitutes a kind of last storm grate before the landfill. The Project has a landfill’s jumble but none of its attempts to make waste invisible; the debris yields a kind of clarity, lifting the hood on society’s cast-offs and its economic engine of planned

1. For the full text of this “Purpose” statement as well as the “Function” statement quoted above, refer to page one of any *Whole Earth Catalog* published between 1968 and 1972. For additional discussion of counterculture and the *Whole Earth Catalog*, see Fred Turner, *From Counterculture to Cyberculture* (Chicago: University of Chicago Press, 2006) and Raymond Malewitz, *The Practice of Misuse: Rugged Consumerism in Contemporary American Culture*, 1 edition (Stanford, CA: Stanford University Press, 2014).

obsolescence. The politics of value play out in the many exchanges that take place here: between staff and customers, staff and stuff, customers and things, and among things themselves. There is a tangible materiality. The things speak, wait, and move—surprisingly often, they are picked up and dropped here and there. Each item has agency, and this place is a laboratory where political theorist Jane Bennett might continue testing the vibrancy of matter, philosopher of science Bruno Latour could convene another parliament of things, even French philosopher Henri Bergson might glean further insights on *élan vital* and the role of indeterminacy.²

Exceedingly practical and technologically defined endpoints within the traditional waste stream, landfills have recently been framed theoretically and sociologically. Kevin Hetherington analyzed the waste stream as a ritual that he compares to burial practices. In the process, the landfill is a “second burial” after an initial interment in a storage area, whether that is a domestic site like bookshelves or outbuilding sheds, or a technologically defined place like the recycle bin of a computer.³ Hetherington, and Thompson before him, provide important examples of how the waste stream, of which the landfill and sites like the Repurpose Project are a part, has a “spatial dimension” and is in fact a system of spaces, where objects are “placed” rather than merely “disposed.”⁴ Building on Hetherington’s work, Bahar Emgin notes the importance of the interval between the two burials for the process of re-valuation and for the concept of “trashion,” which adapts and repurposes objects that have been previously disposed of. Emgin deploys design as a “conduit of disposal,” building on Thompson’s original idea that rubbish is not merely an object but is the entire process of disposal; and consequently design has the power to reintroduce “rubbish as objects of distinction.”⁵ Landfills have also been proposed as underpinnings for new, polemical strategies of urbanism. Building on Alan Berger’s *Drosscape*, Daniel Weissman suggests landfill urbanism as the site for a hybrid solution to repurpose waste: “The Sorted Project...may allow for a higher return on waste materials, combining the emergent potentials of the junk-yard with the rigorous industrial process

2. See Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham and London: Duke University Press, 2010); Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, MA: Harvard Univ Press, 1993), 142–145.; and Joshua Reno, “Your Trash Is Someone’s Treasure: The Politics of Value at a Michigan Landfill,” *Journal of Material Culture* 14, no. 1 (March 1, 2009): 29–46. Joshua Reno, “Toward a New Theory of Waste: From ‘Matter out of Place’ to Signs of Life,” *Theory, Culture & Society* 31, no. 6 (November 1, 2014): 3–27. also offers insightful discussion of the politics of value in landfills and waste management. See also Henri Bergson, *Matter and Memory*, trans. N. M. Paul and W. S. Palmer (New York: Zone Books, 1990); and Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (New York: Dover Publications, 1998).

3. See Kevin Hetherington, “Secondhandedness: Consumption, Disposal, and Absent Presence;,” *Environment and Planning D: Society and Space*, February 1, 2004.

4. *Ibid.*, 66. and Michael Thompson, *Rubbish Theory: The Creation and Destruction of Value* (Oxford and New York: Oxford University Press, 1979), 159.

5. Bahar Emgin, “Trashion: The Return of the Disposed,” *Design Issues* 28, no. 1 (January 2012): 70–71.

of the recycling center.”⁶ The Repurpose Project, although it is not located on or adjacent to a landfill, parallels Weismann’s proposal.

Scrap yards and the processes associated with them entail what is often referred to as “material recovery.” When combined with deliberate design activities, such as those included in “open maker” projects, this “recovery” begets “discovery.” This process of discovery includes the simultaneously systematic exploration *for* and serendipitous finding *of* new use values for objects and material assemblies recovered from the waste stream. We are familiar with thrift shops filled with shelves of goods, including housewares, toys, tools and oddities; shops for the sale of previously owned clothing, both “designer” and un-designed; and virtual marketplaces for everything that can be sold. But Repurpose has a different vision. As Goff states, “Anything accepted here has likely been rejected from ordinary thrift shops. This is not simply a second-hand store because most things cannot be picked up and used in their current state. Here the donations must be reimagined, must be made into something, else.”⁷ The Repurpose Project synthesizes scrap yard and recycle center with alternative conventional second hand shops, just as it occupies a unique place between waste and landfill.

What manner of building shall we build?

Immersed in this landscape of things, our work meshed with the owners and volunteers who spend much of the day sorting donations and other acquired materials. Two logics played out: one of classification and sorting (based on shape, material, and previous use) and another of aleatory discoveries and the unexpected associations they might bring. Here, the usual specifying and purchasing took the form of sorting, touching, weighing, lugging, cannibalizing and incorporating. We mined a repository of disposed materials and components to identify their latent utility and aesthetic value and to imagine how they could be recombined to produce new architectural value. Our process tapped into a multivalent taxonomy: recycling (re-using as feedstock into something new), upcycling (converting into a new material status), repurposing (using for a different function), resynthesis (combining components into new assemblages), cannibalization (removing parts to repair or maintain something else), and bricolage (making something by means of something else). One rule framed this ecology of work: everything had to come from Repurpose. [Fig. 3 - 4 - 5]

6. Daniel Weissman, “Landfill as Urbanism,” *Soiled: Groundscrapers* 1, no. 1 (2011): 37–38. See also Alan Berger, *Drosscape: Wasting Land in Urban America* (New York: Princeton Architectural Press, 2006); and Pierre Belanger, *Landscape as Infrastructure: A Base Primer* (Abingdon-on-Thames and New York, NY: Routledge, 2016).

7. Sarah Goff, “What we are,” The Repurpose Project, accessed October 24, 2019, <http://www.repurposeproject.org/about/what-we-are/>.



FIG. 3 Preliminary design study for the Maker Space for presentation to the community and to staff at the Repurpose Project



FIG. 4 Preliminary collage of materials and materiality by students in the design/build studio



FIG. 5 Students engaging in a process of "resynthesis" during the construction of the Maker Space. This collage made by the students also demonstrates their process of reflection during construction.

Construction began with deconstruction. Students disassembled a donated Scotty travel trailer, returning its component parts to Repurpose and leaving a dual-axle chassis on which to build. [Fig. 6 - 7] In the next step, tongue-and-groove timber roof decking (recently removed from a 19th century building across the street from the university) became the floor, and salvaged cedar provided framing for wall and roof. Throughout this process, even in the conventions of these early stages, Wallace Stevens' question was our question, haunting us, prodding us about the "manner of building"—how to classify what we were doing in a place that defied easy classification but went to the core of economies of production and why we design and build.⁸

8. Our collaboration with Marsha Bryant's poetry class led us to Wallace Stevens' poem "Architecture," in *Opus Posthumous*, (New York: Vintage, 1990), 37–39.



FIG. 6-7 Travel trailer used as the base for the Maker Space, in the process of disassembly

As we shifted to the building envelope, the cedar frame became a scaffold for shelves, storage, and sheathing and a substrate for countless mock-ups, testy debates, and sometimes, quite simply, the hard work of fastening, cutting, and binding. Each work day began with “walk-about” through Repurpose to discover new materials and, with them, new ideas but also new complexities, new problems. For some, the gleaned materials were animate with possibilities of light, reflection, and texture—actual examples of what Bennett has called “thing-power.”⁹ For others, found objects—whether HVAC duct collars, steel shelving, or wooden chair legs—became tokens around which compositions were established and debates played out. These were as social as they were material, and not unlike

9. Bennett, *Vibrant Matter*, 2.



FIG. 8 Exploring material studies as the project is framed out

Latour's "quasi-objects," they drew relations between groups of students, Repurpose staff, and students visiting from the poetry class or the anthropology seminar with whom we collaborated. And others embraced the spontaneity of the place, relishing a Bergsonian indeterminacy in the materials as they composed joints and corners. Our assembled Repurpose Project, simplistic and reductivist, perhaps idealistic and nearly all-powerful, was a form of escape from constraints of socioeconomic apparatus. [Fig. 8]

The Dump is full of images

In this project, we were rethinking the work of an architect in the context of waste. "On the dump" like the restive poet Stevens depicts, we also struggled to materialize a project in a localized, disorienting swirl of materials left behind by far-flung systems of production, obsolescence, and waste.¹⁰ Conferring with Repurpose's owners and the Trash Princess who will perform and run clinics in the mobile trailer, the students dubbed their project the "Trash Castle," but the things at Repurpose might be closer to Mary Douglas' definition of dirt as "matter out of place"¹¹ than they are to waste because they haven't officially crossed that threshold to the rubbish tip, although people do treat the Project's side entrance as an ad hoc dumping ground and the items on display do indicate society's wastefulness, and the material for sale might appear to some as so much garbage. But students also found the materials at Repurpose to be a kind of "generative waste," particularly as it is used by Ron Eglash to describe maker culture

10. Wallace Stevens, "The Man on the Dump," in *The Collected Poems* (New York: Knopf, 1990), 201–202.. This section's title comes from that poem.

11. Mary Douglas, *Purity and Danger An Analysis of Concepts of Pollution and Taboo* (Westport, CT: Frederick A. Praeger, 1969), 36.



FIG. 9 Maker Space nearing completion, on site at the Repurpose Project

in Africa.¹² Here, the idea is that waste can have an inherent value that can help “generate” process and production, specifically, in our case, architectural production. A critical point for us is that such “generative waste” aligns with a post-capitalist project that seeks to avoid exploiting people, materials, and ecosystems. [Fig. 9]

The Repurpose Project itself is already a new type of architectural system. When Douglas wrote “[w]here there is dirt there is system,” she made clear that dirt is the “by-product” of a classification in the process of rejecting what is no longer pure, but here at Repurpose new potential systems emerged with the sorting and then repurposing, within the riot of what has been rejected.¹³ These things were cast off, but then found a place in the junk shop and are now in the Trash Castle. Not so much the differences between purity and dirt, but more in the contrasting terms of operative and defunct. So that what might no longer work in one setting could very well function in the new assemblages. Students found systems in disused objects, and their production of images, collaged during and after the project, open up other “junk shops” of architectural possibilities. [Fig. 10]

Maker Space in the City

Sourcing parts and materials exclusively at Repurpose, students understood architects as participant-partners—not apart from society, but highly engaged, hyper-active members of society, working alongside

12. Ron Eglash and Ellen Foster, “On the Politics of Generative Justice: African Traditions and Maker Communities,” in *What Do Science, Technology, and Innovation Mean from Africa*, ed. C. Mavhunga (Cambridge, MA: The MIT Press, 2017), 117–136.

13. Douglas, *Purity and Danger*, 36.



FIG. 10 Maker Space nearing completion, on site at the Repurpose Project

non-specialists. The recycled elements served to mediate conversations among students and even more significantly served as intermediaries between students and their clients at Repurpose. Students worked with Repurpose to reassign meaning to cast-off objects. The fact that the objects were already full-scale and readily available on site made this process dynamic and tangible, and it occurred in “real-time” unlike more conventional designer-client interactions that use scale models, drawings, and phases to design a project.

This experience of co-creation has value. And just as the component parts of the assemblage performed their legacies of use and re-use throughout the studio’s process, the Trash Castle will itself hold future performances.¹⁴ More broadly, the project at Repurpose took a modest step toward understanding architecture as a collective body of knowledge and practical know-how—a knowledge commons that includes material ecologies and cultures of reusable technology amid interstices of the waste stream in and out of both academia and the profession.

A mindset of making is the only way to engage with the space. The Repurpose mission is twofold: first, limit material sent directly to the land-fill by providing another chance for its use, and second, perhaps even more ambitious, provide hands-on education to ensure that local residents have knowledge, skills, and imagination to make what they need from the abundance of refuse available here. The ground is literally the store, and the refuse is now the stock. As a mobile extension of Repurpose, the Maker

14. What Bennett calls “attentive encounters between people-materialities and thing-materialities.” Bennett, *Vibrant Matter*, viii.

Space will become the schoolhouse where all ages can learn how to fix and build using the unexpectedly available stock of the day—the common objects discarded by society.

One unexpected part of our experience, along with our students, was that the more we made with our hands, the less we valued our early architectural drawings and models as projections of the possible outcomes of the project. The normative pedagogical and design tools native to the design studio (such as computer modeling, printed drawings, pin-up boards) were devalued in the context of Repurpose's scrap yard. The early, beautifully rendered compositional production that was plotted on large format posters were themselves discarded. The physical objects sourced from Repurpose, and the Maker Space itself, as a kind of full-scale model, were the new focal points of the design process. We witnessed a shift in the utility of design tools and objects with respect to the students' process of designing and building architecture: Why work on the drawing, when the physical object is at hand?

The Repurpose Project plans to send the Maker Space into the city. The trailer's mobility means that Repurpose can expand the reach of their mission and provide access to knowledge and materials to a diverse population across the city's public spaces. The Maker Space is a tool of learning that also, quite literally, provides access to necessary tools and common objects, which might empower makers throughout the city. As a heuristic device, it assists the process of learning about the waste stream and about ways to use discarded materials. In the city, the mobile Maker Space is also a significant tool for dialogues about waste and valuation.

As it curates junk, like the Repurpose Project's home base, the Maker Space provides a forum for regeneration and change in the city. As a catalyst for innovation and creativity, it occupies what Thompson termed a "region of flexibility" between objects that are transient and durable. But there is an important difference. As Thompson notes, "access to innovation and creativity is not freely available to all members of our society," but the Maker Space's mobility and the Repurpose Project's mission to offer hands-on education to all citizens begin to bridge this gap of access.¹⁵ If the Repurpose Project models a knowledge commons for alternative architectural practices, then the Maker Space extends this commons out into the city, where residents might reconsider the value of common objects within an educational setting designed and built through a similar process of valuation and making.

15. Thompson, *Rubbish Theory*, 25–26..

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Charlie Hailey is Professor of Architecture and Distinguished Teaching Scholar in the School of Architecture at the University of Florida. A registered architect, Hailey has received numerous awards and grants including a Guggenheim Fellowship, Fulbright Scholarship, and Graham Foundation grant. He is the author of *Design/Build with Jersey Devil* (Princeton Architectural Press, 2016), *Spoil Island: Reading the Makeshift Archipelago* (Rowman & Littlefield, 2013), *Camps: A Guide to 21st-Century Space* (MIT Press, 2009), *Campsite: Architectures of Duration and Place* (LSU Press, 2008), and most recently *Slab City: Dispatches from the Last Free Place* (MIT Press, 2018) with photographer Donovan Wylie.

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Bibliography

- Belanger, Pierre. *Landscape as Infrastructure: A Base Primer*. Abingdon-on-Thames and New York, NY: Routledge, 2016. <https://doi.org/10.4324/9781315629155>.
- Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Durham and London: Duke University Press, 2010. <https://doi.org/10.1215/9780822391623>.
- Berger, Alan. *Drosscape: Wasting Land in Urban America*. New York: Princeton Architectural Press, 2006.
- Bergson, Henri. *Creative Evolution*. Translated by Arthur Mitchell. New York: Dover Publications, 1998.
- . *Matter and Memory*. Translated by N. M. Paul and W. S. Palmer. New York: Zone Books, 1990.
- Douglas, Mary. *Purity and Danger An Analysis of Concepts of Polution and Taboo*. Westport, CT: Frederick A. Praeger, 1969.
- Eglash, Ron, and Ellen Foster. "On the Politics of Generative Justice: African Traditions and Maker Communities." In *What Do Science, Technology, and Innovation Mean from Africa*, edited by C. Mavhunga, 117–136. Cambridge, MA: The MIT Press, 2017.
- Emgin, Bahar. "Trashion: The Return of the Disposed." *Design Issues* 28, no. 1 (January 2012): 63–71. https://doi.org/10.1162/DESI_a_00124.
- Hetherington, Kevin. "Secondhandedness: Consumption, Disposal, and Absent Presence." *Environment and Planning D: Society and Space*, February 1, 2004. <https://doi.org/10.1068/d315t>.
- Latour, Bruno. *We Have Never Been Modern*. Translated by Catherine Porter. Cambridge, MA: Harvard Univ Press, 1993.
- Malewitz, Raymond. *The Practice of Misuse: Rugged Consumerism in Contemporary American Culture*. Stanford, CA: Stanford University Press, 2014. <https://doi.org/10.11126/stanford/9780804791960.003.0001>.
- Reno, Joshua. "Toward a New Theory of Waste: From 'Matter out of Place' to Signs of Life." *Theory, Culture & Society* 31, no. 6 (November 1, 2014): 3–27. <https://doi.org/10.1177/0263276413500999>.
- . "Your Trash Is Someone's Treasure: The Politics of Value at a Michigan Landfill." *Journal of Material Culture* 14, no. 1 (March 1, 2009): 29–46. <https://doi.org/10.1177/1359183508100007>.
- Stevens, Wallace. *Opus Posthumous*. New York: Vintage, 1990.
- . *The Collected Poems*. New York: Knopf, 1990.
- Thompson, Michael. *Rubbish Theory: The Creation and Destruction of Value*. Oxford and New York: Oxford University Press, 1979.
- Turner, Fred. *From Counterculture to Cyberculture*. Chicago: University of Chicago Press, 2006. <https://doi.org/10.7208/chicago/9780226817439.001.0001>.
- Weissman, Daniel. "Landfill as Urbanism." *Soiled: Groundscrapers* 1, no. 1 (2011): 28–41.