

Salvaged Materials and Ecology in Architecture and the Visual Arts

DANIEL FAORO

Lawrence Technological University

No decent human and natural environment can be created until the real sources of pollution have been eliminated," while the, "mental pollution" of consumerism breeds inaction.¹

—Herbert Marcuse

If I seem to be over-interested in junk, it is because I am and I have a lot of it too - half a garage full of bits and broken pieces . . . My excuse is that in this era of planned obsolescence, when a thing breaks I can usually find something in my collection to repair it - a toilet, or a motor, or a lawn mower.

—John Steinbeck, *Travels with Charley*, 1962

1. CULTURE, COMMERCE, AND POLITICAL VIEWS OF CONSUMPTION.

Daniel Boorstin states that in the early stages of industrial development in America "new and invisible communities were created and preserved by how and what men consumed." According to Boorstin it was the advancement of automation, and industrial production that made mass production and consumption possible.² He states that, "now men were affiliated less by what they believed than by what they consumed."³

This is evident today in the many forms of association or clubs where membership is based on an interest in things, cars, dolls, baseball cards, and various forms of "collectibles." Consuming, as a means of economic recovery Boorstin asserts, was given credence by Franklin D. Roosevelt, during the Great Depression in 1939 when he moved the date of the Thanksgiving holiday from November 30th to the 23rd. in order to expand the number of peak shopping days at the end of the year.

Consumption was fueled by advertising where individuals by purchasing these products were part of a select and special group that the world admired for their 'taste and discerning judgement'. The wealthy, athletes, and celebrities are used in advertisements reinforcing the view of Pope Francis that today "money is the new God and success is the new religion." Today the term used in advertising is 'branding'. Boorstin, echoing the sociologist Emile Durkheim, asserts that the immigrant societies of the late 19th and early 20th century in America found their community ties weakened based on the separation from their former origins. They formed new communities of consumption to compensate for these feelings of loss and alienation. The mentality of collectors or hoarders

perhaps represents the extremes of this condition. In the 1960's artists like Andy Warhol were criticized as 'capitulating to consumerism' as they depicted the products of popular culture in their work. Warhol was raised in a Slovakian immigrant family in Pittsburg and exemplifies Boorstin's US immigrants of the early 20th century. Warhol himself (reinforcing the views of Boorstin) stated that, "What's great about this country is that America started the tradition where the richest consumers buy essentially the same things as the poorest. You can be watching TV and see Coca-Cola, and you know that the President drinks Coca-Cola, Liz Taylor drinks Coca-Cola, and just think, you can drink Coca-Cola, too." Identifying with success or fame comes from not what is earned or talents, skills, and abilities a person has but from what products of consumption you share with the successful or famous. When these products are mass produced and accessible to many these advertising campaigns reinforce the broad accessibility of the "American Dream" regardless of class and income. Consumption hence can make us feel better about ourselves and this became an influential marketing strategy.

The ethic of planned obsolescence advanced the notion of mass consumption and promotes the demand for new products. Americans have been considered the originators of the concept of the "throwaway society" as described by the sociologist Vance Packard.⁴

In contrast, it is this disregard for material goods, as evident in our ready-ness to discard them, which is often cited as a reaction against the "materialism" of the old world (Europe). For Marcuse this process inevitably leads to more consumption and in turn to increased waste.

Arguing along similar lines the noted planner, Kevin Lynch in his final published work "Wasting Away" states that Marxists insist that "capitalism requires a steady acceleration of wasting and abandonment, in order to maintain a scarcity of goods." The boom (growth) and bust (recession/depression) cycles in the economy are fueled by advertising, and changing fashions or styles, when capitalism is connected to the mass market, consumption is therefore inevitable.⁵

While one view is that pre-industrial indigenous societies is that they embodied an inherently sustainable patterns of consumption as they were bound to use only local resources. Anthropologist Dr. William Rathje and Cullen Murphy have studied the pre-Columbian civilizations in South America and believe that repeating patterns of consumption exist, "Over



Figure 1: Five Coke Bottles, by Andy Warhol, 1962. (http://www.adbranch.com/andy-warhols-coca-cola-paintings/coca-cola_andy_warhol_green_bottles/)

time, grand civilizations seem to have moved from efficient scavenging to conspicuous consumption and then back again to the scavenger's efficiency. It is a common story, usually driven by economic realities." The first world, i.e., industrial and post industrial countries, are now perceived by Rathje and Murphy as returning to a "scavenger orientation" after recent periods of conspicuous consumption.⁶ This theory reaches a more ominous conclusion by Jared Diamond in his book, *Collapse*, his observation is the decline and fall of major agrarian civilizations, i.e., the Mayans was a result of over consumption and depletion of natural resources, or deforestation, without efforts to provide renewal of these resources. Advocates for sustainable practices and moderation in consumption use this as an example of a condition that has reached a point of no return where recovery is not possible and lead to catastrophic consequences.

Globalization is understood as the interaction and integration among the people, companies, and governments of different nations, driven by the economic interests of international trade and investment as advanced by digital information technology. This process has effects on the environment, on culture, on political systems, on economic development, and on human physical well-being in societies around the world.⁷ This is expanded by free-market economies, reduction in trade barriers, poor intellectual property enforcement, and open internet based exchange and purchasing.⁴² the social conditions of who benefits and equitable agreements that relieve conditions of poverty are at the core of those concerned for social justice. The benefits of globalization cited are that it allows underdeveloped countries and citizens to develop and raise their standards of living, opponents of globalization assert that the development of international free markets benefits western multinational corporations who profit at the expense of local enterprises, local cultures, and common people.

Efforts to move US companies overseas made possible by globalization and spearhead by major multi-national corporations motivated to provide profits for investors by reducing labor costs. According to the noted US investor Warren Buffet the largest expense associated with business is

labor at approx. 50%. To maximize profits, companies seek out the cheapest labor possible often moving plants from one country to another. To foster international agreements terms are often developed to provide low paid or subsistence level labor. If a nation tries to provide regulatory efforts to improve workers conditions these corporations relocate to other nations where there are less measures in place. Improving working conditions will always be at odds with the cost reduction /profit maximization interest of the large companies. It is not only salary levels that impact locational decisions. In the Midwest auto plants were moving to Canada as companies took advantage of the countries national health care programs to reduce the company's cost for worker health care- estimated at 20% of their salary. Reducing labor costs in auto plants is a strategy for US auto manufacturers who locate plants in South America because they allow for a larger percentage of automated (robotic) manufacturing than in the US. These decisions to reduce labor costs are explained to the consumption oriented public as a means to keep prices down for consumers. As employers of manufacturing in South American locations have experienced low wage workers will move from one company to another as soon as another company moves into an area and pays higher wages setting in place a cycle of increased wage costs for a company. This sets a cycle in motion where corporations eventually in turn attempt to relocate to other countries based on which nation has employees they can pay the lowest wages and offers the most economic incentives to a company.

The resulting resentment expressed in many middle east countries for the United States after the attack on the World Trade Center, some journalists assert has been incited by the poverty experienced in middle east as a result of being left behind by western trade and commerce. Rachel Bowlby author of numerous books on consumer culture states that "a long term result of September 11 will be to further the ethical and political challenge to unreflective shopping that the antiglobalization movement has fostered over the past few years."⁸

According to UNDP (an advisor to the United Nations) it is estimated that 1-2% of the world's population earns a living from the waste of 10-20% of the population. Global recycling efforts are largely the industry of the world's poorest segments of society. In Cairo, Egypt, the Zebaleen sort 80% of the waste from the city's landfills, they literally live with the rubbish they stockpile and sort for resale. In many of the 3rd. world nations, India, Sri Lanka, Calcutta, regions of Asia, and South America scavenging is now a way of life for whole classes of the population and the means in which those countries reduce landfill areas. International aid groups at the request of The United Nations have long been involved in bringing humanitarian aid such as healthcare, education, and basic services to these groups. Research by Martin Medina, Ph.D. indicates that a number of myths surround scavenging activity in Latin America. The low incomes are a result of middlemen and corrupt leaders who charge for scavenging rights, and local industries benefit from the significant amount of raw material that is provided.⁹

2. APPROPRIATION AND THE USE OF DISCARDED MATERIALS IN THE VISUAL ARTS, CRAFT TRADITIONS, AND ARCHITECTURE.

The reuse of materials was a sign of the miserable existence.¹⁰



Figure 2: Zebaleen Children sorting garbage in Cairo rather than attend school. <https://ozziko.wordpress.com/tag/plastic/>

—Dale F. Kinney

Prof. Albers enters the room with a handful of magazines and newspapers. He greets us saying “ladies and gentlemen we are rich not poor and cannot afford to waste time or materials, often we will find that we have more by doing less.

—A student of Joseph Albers, Hannes Beckmann in recalling Albers welcoming address to a collage class at the Bauhaus.

Modern Artists, Picasso and Duchamp used found objects in their works of collage or sculpture and redefined the way in which art work was to be viewed. This was called “Appropriation” where common objects or art objects are incorporated into a work of art by artists with little modification. The emphasis in art shifted from the visual qualities and refinement of the imagery to the concept, (frequently a critique of bourgeois culture) and the process of making.¹¹ This elevated the intellectual status of the work, as the visual arts typically were considered a non-academic subject and of lesser standing than traditional subjects.¹² The artists themselves are now elevated intellectually because of the social and cultural commentary of their work.

The “essential duality” in the works of artists and craftsman who use assemblage and found objects is the duality between the initial use of the object, frequently industrial or mass-produced and utilitarian in origin, and its final or “transformative” image and meaning, which is handmade or crafted and redefined or symbolic in origin.¹³ This quality of multiple associations, when used in works of collage provides

three layers of meaning according to Diane Waldman, the original meaning of the singular object (as it was produced), the new meaning (now in combination with other objects) and metamorphosis (the new meaning it has in the work of art).¹⁴ In the work of the Spanish artist Antoni Tàpies, 1946-47, the “Newspaper cross” exemplifies these layers of meaning, which are visible in at different scales and dimensions, the newspaper clips (of the obituary section of the newspaper, which contain small crosses) are reformed into a larger image of a cross, the symbol of Christianity. The social commentary of the work is realized when political events of the time are understood, completed during the time when Spain was banned from the UN and when General Francisco Franco was elected, the Fascist regime was noted for its anti-Catholic stance reportedly killing a priest in 1936 who refused to renounce his vows. According to Marcuse, “Art cannot change the world, but it can contribute to changing the consciousness ... of the men and women who could change the world.”

In the 1980’s Diane Waldman defines a shift in the Appropriation movement where “The found or appropriated object is not necessarily symbolic, nor is it enhanced by its association with other objects or images.”¹⁵ Frequently these works do have similar compositional characteristics, where the objects of similar size, type, color are used in repetition and they are seemingly less concerned with social commentary as they are with visual or aesthetic value. These artists also have a focus on common or man-made and mass produced objects to introduce ‘the real world’ into their work. The work of Haim Steinbach, Ultra Red no.1, could be seen as perhaps as a commentary on retail design and



Figure 3: Newspaper Cross by Antoni Tàpies, 1946-47.

merchandising displays similar to the work, *New Hoover Convertibles*, by Jeff Koons.

Works by Warhol and others while very literal in replicating objects of everyday life are viewed as “conceptual art”. Prof. Arthur Danto in his essay “The Artworld” attempted to define what makes these conceptual works of art different from the everyday images used in these works. According to Prof. Sylvia Minguzzi in review of his essay states: “Danto coined the term to suggest that it is not possible to understand conceptual art without the help of the artworld, that is, the community of interpreters – critics, art curators, artists, and collectors – within galleries and museums.”

THE USE OF SALVAGED COMPONENTS AND MATERIALS IN ARCHITECTURE.

I have no interest in ‘Green,’ ‘Eco,’ and ‘Environmentally Friendly.’ I just hate wasting things.

—Shigeru Ban, Architect

Architects utilizing these materials face risks and concerns not associated with the use of traditional building materials. Issues of concern

involve material consistency in composition, performance, and dimension. When dimension lumber is reused concern about strength, grade, and species render it difficult to be used with confidence in structural applications, thus it is frequently used in a nonstructural or minimal load applications or as a finish material. Social acceptability of recycled products can be an obstacle to their use. By covering them, refinishing, coating, or painting reused materials can be concealed or given a new identity. In interior design furnishing trends such as “shabby chic,” i.e., advocate decorating with an eclectic orientation based on salvaging furnishings from estate or garage sales. Theme retail establishments also create a demand for salvaged items, utensils and found objects from various sources that reinforce the establishments “theme”, e.g., the fifties, an auto repair garage, an Italian cucina, or Mexican village.¹⁶

Architects tend to exploit the recycled identity of materials or components by allowing them to be viewed and retain their initial physical qualities rather than concealing them. In this manner they have the quality of “spolia” referring to monuments and building components appropriated and displayed as in a military victory, in this case construed as either a victory over the culture wars of “bourgeois materialism,” or the environmental wars of “waste and consumption.”¹⁷ Historian Kenneth Frampton perceives that the practice of architecture is closer to the crafts than the arts or sciences. The use of recycled materials advances this perception as the hand-crafted nature and the unique qualities of the found objects in the work reinforce the craft qualities of the design. Mike Press in his study of design based on salvaged objects refers to the work of David Pye, and asserts, “there is no such thing as “good” or “quality” materials. It is only through the craft of manipulating materials that quality has been revealed in a piece of wood, clay, glass or metal.”¹⁸ The most noted architects and designers working with salvaged materials are Michael Reynolds, Steve Badanes, Dan Rockhill and Samuel Mockabee, FAIA, their work invokes images of vernacular builders reminiscent of Rudofsky’s *Architecture without Architects*. Michael Reynolds’s “Earthships” were widely reported in the early 1980’s. His experimental



Figure 4: *Biotecture*, Michael Reynolds, 2012. https://recycluzz.com/2012/01/08/earthship-biotecture/michael-reynolds_earthship-biotecture003/

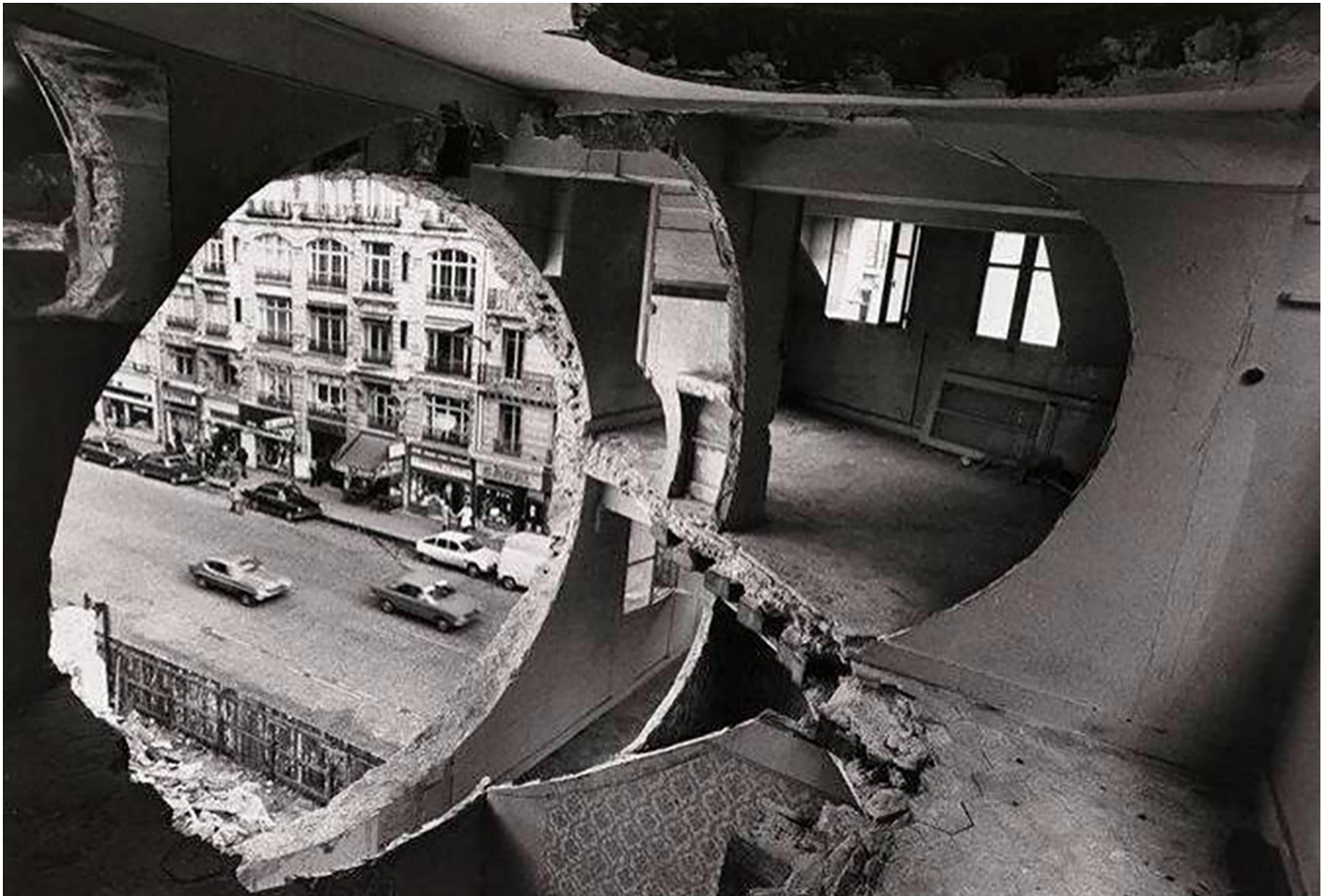


Figure 5: Gordon Matta-Clark. Conical Intersect, 1975. 27-29 Rue Beaubourg, Paris by Gordon Matta Clark.

community of homes, Rolor, near Taos New Mexico advanced alternative energy and the ethic of self-sufficiency. His building materials were often scavenged from the salvage yard, where old tires and aluminum cans became building units mortared together. His critics argued that the materials he was using could be put to better use because they had been produced with energy consuming processes, or they had high amounts of “embodied energy,” today with the increase in recycling products such as tires and aluminum cans can be reused or reformed. Professor’s Steve Badanes and Dan Rockill have implemented projects with students through design build classes at universities. The actual hands on construction aspect of their work illustrates the complexity of working with locally salvaged objects, i.e., You have to consider them at the onset of the design process and be willing to accept the constraints imposed by their size, methods of assembly, aesthetic and their suitability in the design.

Professor Mockabee, who received the AIA Gold Medal posthumously in 2004, is perhaps one of the most recognized for his work at Auburn University’s Rural Studio. The studio and the design build experience for students working with the university’s community outreach initiatives assists the rural poor in the Southern U.S. His work has been noted for its use of salvaged and recycled products, and recognized for its merit in innovative design. An unfortunate observation on the profession of architecture is that his work was recognized by some in the design

field because it demonstrated “good design”- meaning modern, Avant guard and expressionist in nature, as opposed to the more traditional view of service learning programs, i.e., that service to the community at large is how they are recognized and valued. His critics have also questioned his experimental use of these materials regarding their durability, indoor air quality, mold growth, toxicity, and long term performance in building applications which they were not designed for. His recent successor reportedly has chosen to address this issue in their forthcoming projects. In contrast, Andres Duany, FAIA, regarding his firm’s innovations stated “we experiment on the rich.” Questions remain, such as, should architects experiment with the poor or do the poor deserve proven materials? By expressing the original state of salvaged objects are architects demonstrating “honest expression”, or are these buildings degraded in acceptability to the general population (a bourgeois view). What will be the market acceptance of these buildings if sold in the future, will Mockabee’s legacy add to their value?

ARCHITECTURE/ ENVIRONMENTAL ART FROM THE SALVAGE YARD AT THE URBAN SCALE.

I had in my mind to do something big and I did.

—Simon Rodia

The most noted early example of large scale environmental folk art and the creation of a grass roots monument created from found objects is the work of Simon Rodia, an Italian Immigrant living in California. It was created over a period of 33 years, and the Watts Towers consist of nine major forms made of steel and covered with mortar embedded with pieces of ceramic tile, pottery shards, sea shells, and broken glass. Rodia's work embodied the American search for community identity by creating unique art works of a large scale which can be found in many small communities in the Great Plains and the west. His work, *Nuestro Pueblo*, meaning "our town," started in 1921 and completed in 1954 will be preserved as it now has Historical Landmark status.

Gordon Matta-Clark, is considered a member of the avant-garde artists in New York. His work, like European modernists addressed a critique of bourgeois culture. Expressing the "dehumanization of the modern world," through slicing and cutting abandoned buildings with a chainsaw he cut into the structures, "creating unexpected apertures and incisions." In 1974 his work "Slicing" he "operated" on a home in New Jersey slated for demolition, by splitting it down the middle. "The light from the incision invaded the interior and united the rooms with a swath of brilliance. "His photographs attempt to capture "the disorienting experience of the unprecedented destruction."¹⁹ Clark's selective cuts and slices in abandoned buildings created large scale environmental art works which influenced avant guard architects as well. Camilo Vergara has emerged as the chronicler of urban ruins. Unlike the past artists who found compelling images of crumbling roman ruins in picturesque landscapes, today these images are less beautiful in a traditional sense, often they are stark, black and white images showing decay in garbage strewn urban settings. Vergara's interest is, similar to Matta-Clark, is in the human condition and is stimulated by how people reuse, decorate, and live in these environments.

8:THE DOTTY WATTY HOUSE AND THE DOT MOBILE, PART OF THE HEIDELBERG PROJECT.

Detroit Environmental artist Tyree Guyton made national news with his Heidelberg Project in Detroit. Guyton's work established the as with the same landmark status of Simon Rodia, advancing the abandoned house medium of Gordon Matta-Clark. His work invoked the rural folk craft imagery of decorated dwellings to combine as large scale monumental urban art work with abandoned buildings and salvaged objects. After much disagreement with the residents in the neighborhood he agreed to dismantle his work in August of 1998.²⁰

Bradley Taylor, a member of the Heidelberg Project board said Guyton's installation was a community-focused museum with historic roots dating to the late-19th Century and museum pioneer John Cotton Dana, who championed his Newark Museum in New Jersey as a public library-like institution that valued community over collection building.

"In the case of the Heidelberg Project, this has shown itself both in the selection of the very materials used in the creation of the artwork on the street and in Guyton's advocacy for social change," said Taylor. He noted that Guyton took city government and the local church community to



Figure 6: The Dotty Watty House and the Dot Mobile, part of the Heidelberg Project.

task for their shortcomings in addressing the needs of Detroit's poorest citizens.

CONCLUDING COMMENTS

Malcolm Miles states that Marcuse In his last book, *The Aesthetic Dimension* (1978), "argued that a concern for aesthetics is justified when political change is unlikely". In contrast these works and projects based on their aesthetic image and identity demonstrate how art can overcome the obstructions to political change by bringing attention to a social or political conditions to provide them public exposure and in-turn benefit disadvantaged communities and individuals . They do this by means that repurpose and recycle products and found objects to combat the excess of waste and challenge commercial notions of consumption. The prevention of what Marcuse calls 'ecocide' relies on the adoption of a new lifestyle based on the idea of ecological conversion and ecological citizenship to preserve the ability of the earth to continue to sustain life.

ENDNOTES

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