

ARCHITECTURAL REFLECTIONS OF AMERICAN COUNTERCULTURE IN THE  
LONG SIXTIES: CASES OF ANT FARM AND DROP CITY

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**1960’LAR AMERİKAN KARŞI KÜLTÜRÜNÜN MİMARİ YANSIMALARI: ANT FARM  
VE DROP CITY ÖRNEKLERİ**

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## **ABSTRACT**

While each architectural movement is a protest against the aesthetic values of previous movements, there have not been many instances of architects denouncing traditional social values completely. This study was initiated with the assumption that the transformative political uprisings of the 1960s and '70s in the United States led not only to the questioning of the social norms but also architects to criticize conventional architectural practices. While American policymakers attempted to mold mainstream American society and conventional American culture into isolated suburban settlements through consumerism, patriotism, racism, and patriarchy all neatly packaged as the American Dream; countercultural activists and architects challenged these policies by proposing alternative communal settlements. The countercultural architects of the period have questioned conventional architecture; condemned mainstream society; protested against mainstream media and engaged with environmental deterioration. Although there have been countless architectural collectives and communes in this period now called the Long Sixties, these four aspects of countercultural architecture will be analyzed through the artistic productions of Drop City and Ant Farm. These two cases were selected as they portray the reflections of the countercultural, utopian atmosphere of the Long Sixties; and as they sufficiently answer the thesis question of "Are there other ways of doing architecture"?

The study will first describe the political societal construction in postwar America; suburbanization as the socio-spatial organization; and space colonies as technological complements to suburbs. Secondly, the political explosion of liberation movements, namely the racial equality movement, women's liberation movement and the environmental movement will be introduced; followed by communal settlements as socio-spatial organization; and the Whole Earth Catalog as techno-utopian complements to communes. Then, Ant Farm and Drop City will be analyzed through the four aspects of unconventional architecture; anti-mainstream society; anti-mainstream media and ecological concerns. Lastly, concluding remarks will be given.

## ÖZET

Her mimari hareket bir öncekinin estetik değerlerine karşı bir protesto olarak ortaya çıkmış olsa da, mimarların geleneksel sosyal değerlere tamamen karşı koyduğu durumlar pek sık görülmemiştir. Bu araştırma, Amerika Birleşik Devletleri'nde 1960'ların ve 70'lerin büyük değişimlere yol açan politik ayaklanmalarının; sosyal normların sorgulanmasının ötesinde aynı zamanda mimarların da geleneksel mimari pratikleri sorgulamalarına sebep olduğu varsayımı üzerine kurulmuştur. Amerikan devlet politikasını belirleyenler; ana akım Amerikan toplumunu ve geleneksel Amerikan kültürünü içine kapamık ve izole banliyölerde, tüketicilik, vatanseverlik, ırkçılık ve patriyarkal ideallerini Amerikan Rüyası olarak paketleyerek şekillendirmeye çalışırken; karşı-kültürel aktivistler ve mimarlar bu baskıcı politikalara başkaldırmak adına alternatif komünel yerleşkeler önermişlerdir. Dönemin karşı-kültürel mimarları geleneksel mimariyi sorgulamış, ana akım toplumu kınamış, ana akım medyaya karşı çıkmış ve çevresel bozulmayla ilgilenmişlerdir. Uzun Altmışlar (Long Sixties) olarak da adlandırılan bu dönemde çok sayıda mimari kolektif ve komün ortaya çıkmış olsa da, kontrakültürel mimarinin bu dört özelliği Drop City ve Ant Farm'ın sanatsal üretimleri üzerinden incelenecektir. Bu iki kolektif, dönemin karşı-kültürel ve ütöpik atmosferini yansıttıkları için, ve tezin bağlamını kuran "Alışılmadık mimari üretim mümkün müdür?" araştırma sorusuna uygun bir cevap verdikleri için seçilmişlerdir.

Bu araştırma öncelikle savaş sonrası Amerikan politik toplumsal yapılaşmasını; sosyo-mekansal organizasyon olarak banliyöleşmeyi; ve banliyölerin teknolojik yansımaları olarak uzay kolonilerini inceleyecektir. Devamında ise özellikle ırksal eşitlik hareketi, kadın özgürlük hareketi ve çevre hareketi gibi özgürlük hareketlerinin politik tezahürlerini tanıtacak; ardından sosyo-mekansal planlama olarak komün yerleşkelerini ve komünlerin tekno-ütöpik karşılığı olan Whole Earth Catalog'u sunacaktır. Sonrasında, Ant Farm ve Drop City kolektiflerinin alışılmadık mimari anlayışları; ana akım topluma ve medyaya karşı tutumları; ve üretimlerinde sergiledikleri ekolojik kaygılar üzerinden incelemeler yapılacaktır. En sonunda sonuç ve yorumlar verilecektir.

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## 1. INTRODUCTION

Each utopia is imagined following a disappointment in the current reality and is an attempt to change the way things are. When Thomas More wrote *Utopia* in 1516, he dedicated the first half of his seminal book to the political ills of the 16<sup>th</sup> century England. The non-existent island of Utopia was only introduced and described in the second half (More, 2009). Mid-20<sup>th</sup> century United States followed a similar path to More's structure. Similar to More's Utopia, the political ills of postwar America were followed by a utopian atmosphere of countercultural uprisings.

Although World War II had devastated Europe and Asia, it was deemed 'the Good War' by the American public and government alike. The war had enabled massive economic growth and subsequently created a post-scarcity leisure society. With the economic growth, United States replaced Great Britain as the global superpower in the years that followed the war. Armed with this new title, those in charge set out to mold the mainstream society under the name of the American Dream. This model was based on colonialist thinking and favored white, heterosexual, middle-class citizens and excluded those that did not fit the description. Those that fit the norm consequently settled in isolated and exclusive suburban settlements.

The construction techniques adopted to mold the mainstream society were most commonly patriotism; consumerism, or more commonly anti-communism and capitalism; racism, and misogyny. The victory and the economic prosperity following the "Good War" strengthened the mainstream society's confidence in the government. With the patriotic spirit of the period, mainstream society embraced the consumerist agenda of the American Dream. The American Dream implied that consumerism was the only *raison d'être*. The introduction of this myth was essentially a synonym for the explosion of capitalism and vigorous consumerism. The postwar economic prosperity and the American Dream stimulated a "Great Acceleration" of industrial production and mass consumerism, consequently furthering environmental deterioration.

The term 'society' is used throughout this study as an umbrella term. In order to discuss the ways in which counterculture opposed 'society', it would be prudent to borrow Fredric Jameson's compiled description. Jameson refers to "media society"; Guy Debord's "society of the spectacle"; "consumer society"; Henri Lefebvre's "bureaucratic society of controlled

consumption” and finally Daniel Bell’s “postindustrial society” to describe what he calls “a new social and economic moment” (Jameson, 1984). Galbraith’s (1998) “affluent society” and the countercultural term of “straight society” are used as well. All of these descriptions are grouped in this study under ‘mainstream society’.

Displeased with this cultural imposition in the postwar years, an alternative sect of American youth came together under “counterculture” in the late 1960s and 1970s, a period now called the Long Sixties. Counterculture advocated that the cultural practices of the time were unjust and suppressive. Inspired by the racial equality movement and women’s liberation of the late 1960s, counterculture protested the social exclusion and othering of black people, women, and minorities.

Counterculture also assumed an anti-consumerist attitude, albeit without a comprehensive understanding of the underlying issues of capitalism. The postwar post-scarcity had led counterculture to assume that gainful employment would become obsolete. Therefore, countercultural figures often enjoyed the same privileges as the post-scarcity leisure society. Their affluent backgrounds enabled countercultural youth to perform poverty in what will be referred to as “poverty playgrounds” in this study.

In one of the most comprehensive studies regarding the counterculture movement of the Long Sixties, former president of the International Communal Studies Association Timothy Miller (1999) rhetorically asks why communes, and the overall “cultural revolution” called the sixties had become extraordinarily popular in the 1960s American setting. He deduces, inescapably, that the answer is subjective, that only some historical events can be traced in hopes of understanding the decade and the artistic productions to which it bore, which is what this research precisely aims to do: to highlight and analyze the key events that converged to create the kaleidoscopic collage that is the communal architectural landscape of the 1960s America.

This study therefore hypothesizes both the social model of the 1950s and the countercultural atmosphere of the Long Sixties resemble utopias in their own right. The mainstream society was a top-down utopia, whereas counterculture was a bottom-up utopia. The concept of utopia proposes an ideal that cannot be realistically achieved and is inherently autocratic. Neither the

construction of a mainstream American society nor the countercultural uprising were realistically achievable; and both utopias crumbled over time.

The study also assumes that the ecological crisis we are currently facing is a reverberation of the period that is now called “The Great Acceleration” caused by accelerated industrialization and mass consumerism; and hypothesizes that counterculture attempted to halt this acceleration yet due to their poor grasp of systematic issues, failed to achieve that goal.

This research into the counterculture of the Long Sixties was initiated with the simple question of “Are there other ways of doing architecture than the ones we have grown accustomed to?” The study therefore aims to uncover how the American utopian architectural and artistic representations of the Long Sixties were reflections of the social and political atmosphere of the counterculture; and were a means of rioting against conventional architecture and oppressive American politics and social norms. In order to argue this, this research focuses on the artistic productions of the two most prominent American architectural collectives formed in the Long Sixties, Ant Farm and Drop City. The two main cases will be analyzed through their adoption of unconventional architectural design practices; their disdain towards mainstream society; aversion to mainstream media; and their solutions to environmental issues.

Many of the architectural productions of the Long Sixties can be viewed as creative explosions burst out of growing political tensions, overwhelming technological improvements, and newfound economic prosperity. Therefore, the first part of the study is focused on the transgressions of the political setting; suburbanization and automobilization as the physical spatial outcomes in postwar America; and space colonization as the utopian spatial reflections of the technological improvements of the decade. The second part of the study will delve into the countercultural liberation movements that created the setting for the spatial and artistic productions born out of this context; and argue how and why they represent the atmosphere of the period.

It is a challenging task to separate the demand for equality during the postwar years and the liberation movements of the Long Sixties. The division between the two periods is drawn by identifying the inequality that people who were left out of the norm of “white, middle-class,



heterosexual male” faced in the 1950s; and the cultural transformation that followed in the later decades. The second part will outline three of the leading political utopias of liberation movements, namely the racial equality movement, women’s liberation movement and the environmental movement. It will then introduce communes that gained popularity during this decade as an alternative to suburbanization; and present the inspirations communes drew from architect and theorist R. Buckminster Fuller. Stewart Brand and the *Whole Earth Catalog* will be discussed in the last part of this second chapter, as a complementing techno-utopia to the communes. The study will then introduce the case studies of Ant Farm and Drop City in depth. The artistic and architectural productions of the two cases will be analyzed through the political, spatial, and technological aspects of both postwar America and the Long Sixties.

Both Ant Farm and Drop City have produced spatial and artistic artworks that are either amorphous and irregular in form or atypical and unexpected in architectural program. Both collectives resorted to unusual building materials in their productions. Their unusual artistic productions offer a symbolic answer to the research question that initiated this study. This symbolic answer is outlined in the concluding chapter under “Questioning Conventional Architecture”.

Both collectives were also founded on the basis of criticism of American society, or rather the building blocks that were adopted to create said society. This criticism coincides with the values of the liberation movements of the Long Sixties. The concluding part will therefore focus on to what extent counterculture and the two case studies outlined in this study achieved the values they drew from liberation movements.

Critique of society also extends to a criticism of mainstream media. In the postwar years, both print media and television were building techniques adopted by American policymakers to mold the mainstream society. While the collectives’ “Anti-Mainstream Society” outlook was a direct criticism of the society that failed to question the policies of social engineering; their “Anti-Mainstream Media” attitude was directed instead at the technique itself.

The period of the Long Sixties coincided with the first instances of widespread environmental awareness. Both Ant Farm and Drop City were founded with concerns of ecological devastation

in mind. The conclusion will also address these collectives' insights on environmental awareness under "Ecological Concerns". Ant Farm and Drop City's environmentalism were rooted in anti-consumerism, therefore their involvement in the environmentalist movement is by extension a critique of mainstream society as well.

The methodology adopted in this research is primary and secondary literary review. The primary literature in this case are interviews, newspaper articles written at the time, "little magazines" that gained popularity during the decade, artists' own writings and artworks and video performances. The cases selected for this study rarely appear in popular architectural history but have been written about extensively by architectural historians focused on alternative architectural practices, Felicity D. Scott (2006, 2007, 2008, 2016, 2019); Timothy Miller (1992, 1999, 2002, 2019); Simon Sadler (2006, 2008); and Andrew G. Kirk (2001; 2002, 2007), all of which have served as the basis for secondary literary review.

Research on counterculture within the architectural context is fairly recent and has only become popularized within the last decade through exhibitions and documentaries. Specifically, the exhibitions of "Clip/Stamp/Fold 6" curated by Beatriz Colomina for CAG in 2010; "West of Center" curated by Elissa Auther and Adam for MCA Denver Lerner in 2011-2012; and "Hippie Modernism" curated by Andrew Blauvelt for Walker Art Center in 2015-2016 have been crucial in introducing counterculture to the context of architectural history. Similarly, Joan Grossman's documentary on Drop City of the same name (2012) and Elizabeth Federici and Laura Harrison's documentary on Ant Farm called "Space, Land and Time" (2011) have been the most helpful for this study.

This research is a preliminary introduction to counterculture and explores counterculture through the case studies of Ant Farm and Drop City; and through the elements of American culture to which counterculture protested against. The study is structured specifically to highlight the explosive nature of counterculture by comparing mainstream American culture and counterculture. Further and broader information on counterculture can be found in the exhibition catalogs of "Clip/Stamp/Fold" (Colomina & Buckley, 2010); "West of Center: Art and the Counterculture Experiment in America" (Auther & Lerner, 2011); and "Hippie Modernism: Struggle for Utopia" (Blauvelt, 2015); and in "Imagine Nation: The American

Counterculture of the 1960s and '70s" (Braunstein & Doyle, 2002a). Furthermore, the writings of R. Buckminster Fuller (1963, 1964, 1968, 1969, 1973, 1976, 1981) serve as a basis for understanding the effect technological advancements had on society; whereas architectural critic Reyner Banham's (1969, 1971, 1976, 1981) writings from the period offer the most in-depth account of both counterculture and nomadic architecture.

In his seminal book "Guerrilla Television" Michael Shamberg (1971) asks, "Would our culture be so rigid today if early school designers had been hip to living spaces likes domes and inflatables?" This question does not have a simple or definite answer, as the enigmatic figures of the counterculture and specifically the members of the collectives researched for this study, were often overlooked not only in architectural history but also in mainstream American media. They were, perhaps not so mistakenly, seen as psychedelic-abusing nomads, yet most were university educated architects or artists, who showed little regard for such views of themselves. The do-it-yourself culture embraced by these architects, in a way, represents their abandonment of the "architect's ego", designing only for the sake of benefitting community. Jane Alison writes in "Future City" (2007), that "Architects must continue to reclaim the city, even if it is only on paper". While the collectives of the '60s may not have succeeded in changing American culture the way they initially intended to, or may have lacked solutions to environmental problems, they were some of the pioneers of environmental awareness, even if only for sounding out the problem. After all, "a problem adequately stated is a problem solved" (Fuller, 1965).

## 2. CULTURE and UTOPIAS of POSTWAR AMERICA

As an architect who grew up in the postwar baby boom years, Michael Sorkin (2001b) wrote that postwar America's "embrace of the evils of the war as a national project resulted in a discourse that was not so much banal as bizarre". Intrigued by the technological advancements and the economic prosperity that the war granted; American policymakers set out to mold mainstream American society. This chapter on the Culture and Utopias of Postwar America will identify and illustrate the three ways that postwar American culture was constructed. Political administration and government policies come at the forefront of the societal construction, followed by suburbanization and automobilization as the spatial reflections of the policies in place; and finally, space colonies as images of technological advancements achieved in the Second World War.

The tensions that served to create the basis for most of the events and therefore the artistic outputs of the Long Sixties in America, trace back to the aftermath of the Second World War.<sup>1</sup> Although the term "The Empire on which the Sun Never Sets" was popularly used to describe the Great Britain in the 18<sup>th</sup> and 19<sup>th</sup> centuries, by the 20<sup>th</sup> century it was adapted for the United States. While American imperialism was not as outspread as British imperialism in terms of physically conquering and colonizing faraway territories, it was nevertheless as effective in influencing other cultures under the name of Americanization or American cultural imperialism<sup>2</sup> (Paul, 2013). The involvement and the performance of the U.S. in World War II solidified its position as the leading global superpower. With the war against fascism won overseas in the 1940s, white middle-class Americans had gained the freedom to enjoy economic prosperity at home in the 1950s. Yet with the war overseas won, those in charge of the newly asserted superpower had started another war, this time within the U.S. borders. This so-called war had been fought in various battlefronts, namely under patriotism, anti-communism, racism, and

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<sup>1</sup> Some of the events that served the basis of the decade can actually be traced back to the colonial founding of the United States, but those specificities are beyond the scope of this research.

<sup>2</sup> While Americanization referred to "full assimilation to Anglo-Saxon culture" in the early 20<sup>th</sup> century, the term now refers more widely to the export of American culture to other nations, mainly by means of popular culture and media.

patriarchy. The subchapter of Political Climate of Post-War America will therefore identify the main policies of social engineering carried out by the American, subdivided in strategies mentioned above.

Another way in which the Second World War shaped the American society came in the form of the suburbs and the lifestyle that came attached with them. As American veterans returned from war to a shortage in housing stock, residential developers were faced with the obstacle of housing millions of veterans and their families, quickly and economically. Fast and cheap housing tucked away in low-density areas away from cities quickly became breeding ground for segregation, both racial and social, as physical embodiments of government policies. The second subchapter of Spatial Utopias of Post-War America will therefore focus on suburbanization and as an extent, automobilization.

Space colonies reflected the postwar technologies as they were, for the most part, cosmic counterparts of both colonial policies carried out in the postwar period to shape the ideal American society and the suburban organization. Two cases of space colonies will be introduced under the subchapter of Technological Post-War America. The first case to be introduced is *Project Horizon* designed by the U.S. Armed Forces in 1957 as part of the American efforts to subdue space before USSR during the Cold War. This case is a compelling one as it showcases the American war policies and patriotism during Cold War, almost like an outer space analogy of the political climate. The second case is the *O'Neill Colonies*, designed by physicist Gerard K. O'Neill in mid-1970s. The project was originally born out of environmental concerns, hoping to house a percentage of the American population in space in order to lighten the burden on Earth. While the intention behind the project was mostly pure and authentic, its execution was more similar to lunar suburbs.

## **2.1. POLITICAL CLIMATE of POST-WAR AMERICA**

The government policies to mold the mainstream society, as mentioned above, were mainly anti-communism, patriotism, racism, and misogyny. Anti-communism was a policy adopted to assert capitalism as a liberating regime. By chastising communists and sympathizers at home and abroad, the American government ensured that the systemic oppression of the capitalist regime would not come under scrutiny. Communism was proclaimed as a war on individual freedom and traditional American values. The anti-communist policies also established that the American Dream could be achieved only through consumerism. Anti-communism suggested that to realize the American Dream, the American society had to be gainfully employed to consume new technology, thus strengthening the economy.

Patriotism, by extent, ensured that the policies of the American government would not be questioned. In this context, patriotism is coupled with othering. Those who obeyed governmental policies would be deemed patriots, whereas those that opposed the government would be shoved into a container of “the Other”. Patriotism and othering established that the views of the opposition were not a perspective to be taken seriously. The Other also implied the existence of a norm, which in this case was white, middle-class, heterosexual people that were favored by the government. As the government was composed of people who were in line with such a norm, the norm was seen as “Us”, leaving everyone else to be confined to “Them”. By diminishing the point of the view of “Them”, the perspective of “Us” was strengthened.

Black people, who had been oppressed since the founding of the United States, had the tools to question American politics. Civil rights movement led by black people in the 1950s increasingly questioned the validity of the American policies such as segregation. While there were milestones achieved in this decade for the liberation of black people such as desegregation of public institutions, these political achievements were granted by the government at a controlled and slow rate. Incremental policy changes put in place were meant to suppress black people into satisfaction, yet often the laws were not even enforced. Even after desegregation, systemic racism kept black people out of white-dominated spaces. While white veterans were offered loans to purchase suburban homes, black people were not granted the same opportunities and systematically pushed out of mainstream American society.

Misogyny was also adopted to ensure women did not interrupt the social engineering of mainstream society. With the majority of men of working age drafted in the Second World War, a historically high number of women had entered the workforce. To open up space for returning veterans after the war ended, women were systemically excluded out of employment and forced back into patriarchal gender roles. Forcing women to embrace their earlier role of mothers and housewives ensured that straight society would remain male-dominated. White women were often confined to the suburbs and black women were kept outside at urban sprawls.

Mainstream media was a powerful tool to ensure these policies would not be questioned. Propagandic language used in media strengthened the animosity the norm had against communists and the Other. Through the hold media had over American society, anti-communism and patriotism have become ingrained in American culture. By contrast, racism, and misogyny, while also still overwhelmingly present, sparked the liberation movements in later decades.

### **Anti-communism**

When the rising tension in the Korean peninsula erupted into the Korean War in 1950 as part of the Cold War, so did the American war to contain communism within the Asian region. To prevent the possible domino-effect of the communist regime reaching the United States, American policymakers declared a silent war under the name of McCarthyism. This unofficial battle on communism was not fought overseas, but instead as an internal affairs mission (Marwick, 2005). Communism in the USSR, and in parts of Asia, was believed to be a real threat to capitalism and American values (Strain, 2017). American politicians and elected officials created an unspoken division between citizens by indoctrinating the masses against communists and sympathizers. These groups were systemically exposed in order to halt the awareness communism would create of the oppressive nature of capitalism.

The *House Un-American Activities Committee*, originally established under the name of *Overman Committee* in 1918 following the Russian Revolution of 1917, had already become a permanent committee in 1945 as the Red Scare grew. The *Overman Committee* had already been

surveilling and investigating American citizens with so-called communist tendencies. The name of the *House Un-American Activities Committee* suggested that there was only one way to be American. Citizens who did not abide by that singular way to be American would subsequently be deemed un-American and be subjected to prosecution. The Red Scare grew even more when the Vietnam War erupted between South Vietnam and the communist North Vietnam in 1955. Although the United States did not enter the Vietnam War until a decade after it had started, being against the war was one way the committee deemed un-American. If one were to be against the war, one would inescapably be conceived as an enemy of the state and therefore be subject to a witch hunt (Braunstein & Doyle, 2002b). To emphasize the “grave danger that was communism”, then-presidential candidate Senator John F. Kennedy (1960) warned the American public in a speech by announcing, “the enemy is the communist system itself – implacable, insatiable, unceasing in its drive for world domination. [...] This is a struggle for supremacy between two conflicting ideologies: freedom under God versus ruthless, godless tyranny”. The propagandic language of designating capitalism as “freedom under God” and communism a “ruthless tyranny” would be replicated in media, as well. The harsh language scared people into denouncing communism so much that in order to avoid being labeled as socialists, most liberals went as far as to avoid egalitarian suggestions of universal health care (Isserman & Kazin, 2000). Such propaganda, therefore, implied that even simply advocating for equal rights and opportunities would be un-American.

While the committee itself only investigated communists, a nationwide propaganda was put in place by the government that instructed white middle-class men to strive for higher education and climb up the corporate ladder. Higher education would grant middle-class men to earn enough money to consume luxury goods such as automobiles, jewelry and state-of-the-art appliances. Consuming and seeking any means necessary to earn more money to spend more money was a dependable strategy that would strengthen capitalism and create means to ridicule communism. In other words, if earning and spending could become the reason for existence in the American community, communism could become obsolete. Those who disobeyed this reason to live were excluded from the mainstream society. They could also eventually raise suspicion to be found guilty of communist beliefs. Thanks to the affluence afforded by the postwar economic prosperity and because of the aforementioned autocratic policies, the



majority of the American population was oblivious and apathetic to the possibility of a non-capitalist regime. The affluence led to a New York Times reporter in 1960 to question, “How can a nation drowning in a sea of luxury and mesmerized by the trivialities of the television screen have the faintest prospect of comprehending the plight of hundreds of millions in this world for whom a full stomach is a rare experience?” (“Turn of the Decade,” 1960). Scaring Americans into ignorance and distancing them from any attempts at questioning anti-communist beliefs or the American capitalist regime seemed to have worked for a while, until the liberation movements of the 1960s were set off. Even then, it was not capitalism or anti-communism that was denounced, but consumerism instead. McCarthyism was such a successful governmental policy that it obscured the relationship between capitalism and consumerism.

### **Us v. Them: Patriotism and the Other**

The more extreme end of scare tactics against anti-communist beliefs was the promotion of patriotism and the exclusion of citizens with un-American tendencies. Patriotism had ensured that governmental policies would not be questioned. Highlighting the double standard for which the values and practices of extreme patriotism and nationalism would be scrutinized under any other name, sociologist Herbert Spencer (1873) wrote more than a hundred years ago:

“For, while an excess of egotism is everywhere regarded as a fault, excess of patriotism is nowhere regarded as a fault. A man who recognizes his own errors of conduct and his own deficiencies of faculty, shows a trait of character considered praiseworthy: but to admit that our doings toward other nations have been wrong is reprobated as unpatriotic” (p. 710).

Patriotism, however, had become the main policy adopted by the U.S. government to mold the American society into a predetermined shape. This policy was administered through a series of strategies, from chastising any activity deemed un-capitalist to limiting higher education and job opportunities to white middle-class men. These strategies also aimed to alienate anyone who did not fit into what was seen as the norm of “white, middle-class, non-disabled, heterosexual, Christian male” and instead forced women, people of color, queer people, or disabled people into an umbrella of “the Other”. The theory of the Other or Otherness, was introduced into

philosophical discourse by Hegel in the late 18<sup>th</sup> century as a division of the Self (Berenson, 1982; Hegel, 2018). With the institutionalization of European colonialism by the end of the 19<sup>th</sup> century, the concept evolved into a more societal division rather than a split in Self. Geographers, who were fascinated by the colonized cultures, began documenting the differences between Western civilization, which was accepted as the norm and the cultures and the communities they newly discovered. This fascination with what was eccentric to the Western world created the dichotomy of “us and them” (Staszak, 2009). In the early 1950s, this divide of “us and them” was examined through gender binaries by Simone de Beauvoir, writing, in *The Second Sex* (1949) that “He is the Subject, he is the Absolute – she is the Other”. De Beauvoir broadened the discourse of the Other by including the previously less discussed issue of gender.

The theory of the Other is studied perhaps most extensively by philosopher Michel Foucault, especially in regards to marginalized groups of prisoners and homosexual youth of France in the 1960s and 1970s (Peters & Besley, 2014). His work also delves into how patriotism, nationalism and discipline are linked to exclusionary strategies (Foucault, 1981):

“In every society the production of discourse is at once controlled, selected, organised and redistributed by a certain number of procedures whose role is to ward off its powers and dangers, to gain mastery over its chance of events [...] In every society like ours, the procedures of exclusion are well known. The most obvious and familiar is the prohibition. We know quite well that we do not have the right to say everything, that we cannot speak of just anything in any circumstances whatever, and that not everyone has the right to speak of anything whatever” (p. 52).

Preclusion of speech is one of the main strategies in which authorities hold control over society. By oppressing certain groups by way of silencing, those in charge can assert their power with the confidence that their strategies will not be questioned. In “Modernity and Ambivalence” Zygmunt Bauman (1991) noted that through classification and segregation, the “world consists of discrete and distinctive entities” that are “opposed to some other entities”. In the same vein, Bauman also notes that the Other is necessary for the norm to assert themselves in their positions of power. As the mid-20<sup>th</sup> century American leaders and policymakers consisted of white, middle-class, non-disabled, heterosexual, Christian males themselves, they could easily unite under “us” and classify and segregate those outside of “us” as “them”. The concept of the Other

is therefore important to consider within the context of the Long Sixties as the civil rights movements and the artistic productions that followed them was, in a way, a series of acts of rebellion on the part of the Other against “the norm”. Much like a pressure cooker, the disorder, and the turmoil of the uprisings of the racial equality movement and the feminist movement among others, were inevitable in the Long Sixties. As Bauman explained (1991), “the other of order is not another order: chaos is its only alternative [...] Without the negativity of chaos, there is no positivity of order; without chaos, no order” (p. 7).

Enraged at the way the authorities were suppressing them in the 1950s, the marginalized groups collected under the umbrella term of the Other would unite to launch the liberation movements of the 1960s. The division was felt in every group of society: “Whites versus blacks, liberals versus conservatives (as well as liberals versus radicals), young versus old, men versus women, hawks versus doves, rich versus poor, taxpayers versus welfare recipients, the religious versus the secular, the hip versus the straight, the gay versus the straight” (Isserman & Kazin, 2000) and would continue to be felt for the decades to come. While counterculture adopted a holistic “We Are all One” approach, the divisions would be felt through countercultural circles as well.

## **Racism**

Racism in the United States is a difficult and complicated issue that is beyond the scope of this thesis, and it dates back to the colonial establishment of the United States in the 15<sup>th</sup> century, and to slavery of African Americans in the 17<sup>th</sup> and 18<sup>th</sup> century. It is, however, an imperative and embedded component of the American history and the postwar period marks a remarkable shift in systemic racism.

When President Abraham Lincoln abolished slavery and “involuntary servitude” as part of the Thirteenth Amendment in 1865 following the American Civil War, the instated laws failed to protect the newly freed slaves by initiating the so-called Jim Crow laws instead. Jim Crow laws authorized an “equal but segregated” understanding, in which public institutions remained segregated and favored white people (Woodward, 2002). While black people were legally equal to their white counterparts on paper, they were excluded from conveniences afforded to white

people. Interracial marriage was illegal under Jim Crow Laws and while voting rights for black men had been established in the 19<sup>th</sup> century, many could not practice their right to vote due to voter literacy tests (Higginbotham, 2013).

When the Supreme Court found racial segregation, termed the “separate but equal” approach against racial minorities in public educational facilities unlawful and unconstitutional in the historic *Brown v. Board of Education of Topeka* case in 1954, another war broke out, this time between white supremacists and black people (Strain, 2017). The case ruled that black children could attend public schools intended for white children, which led to some white parents to withdraw their children from mixed schools to instead send them to all-white schools.

Public transportation was segregated as well. The discrimination led to one of the longest boycotts in civil rights history when Rosa Parks famously refused to give up her seat in the white-designated area on a public bus in 1955. Parks’ boycott of the bus system that lasted 381 days led to segregated seating being ruled unconstitutional by Supreme Court in 1956 (Evans, 2009). While white racists felt free to wreak havoc on the streets against anyone who they deemed were challenging either their supremacist beliefs or American capitalist values, lawmakers and law enforcement were indeterminate to intervene in the bloodshed. The carnage spread like wildfire among major urban areas across the country (Kuklick, 1993). The devastated state of American cities in the 1950s, according to Braunstein and Doyle (2002b), resembled that of European and Asian urban centers during World War II.

White supremacists in the United States failed to see how their beliefs were similar to Nazism they fought against during World War II. Full confidence in governmental policies obscured the judgment of society. Racism, however, was and is still ingrained in American society. Racism can be argued to be rooted in colonialism as well, as both practices seek to assert power over the Other. The political achievements of the civil rights movements of the 1950s, however, created a shift in racist policies; and later sparked the racial equality movement in the 1960s and ‘70s. While the civil rights movements highlighted the discriminatory laws, the later more mature and organized movement highlighted how deep racism was ingrained in the system.

## **Misogyny**

A much less violent yet conspicuous means to suppress society on the part of the American officeholders was administered by asserting patriarchal control over women. The unspoken operation put pressure on middle class women to remain uneducated or drop out of higher education, quit their jobs, get married with no other goal in life than to become mothers and care for their children (Braunstein & Doyle, 2002b). The campaign to confine women within patriarchal borders found itself materialize in the form of suburban development where public space and therefore opportunities for communal activities were limited (Marwick, 2005).

Women who had been deemed too docile or unskilled to work in “men’s jobs” until World War II, were mobilized to join the workforce during the war. As Sarah Killingsworth, who was one of the hundred people Studs Terkel interviewed in “The Good War”, said (Killingsworth; Terkel, 1984): “The war started and jobs kinda opened up for women that the men had” (p. 110). She continued:

“I was in the house one day and all of a sudden they started yellin’ about the war, war, war. Roosevelt had declared war. Well, they know that when there’s a war, somebody’s gonna get a job. This was during the Depression, so I think people were kinda glad the war had started” (p. 112).

Between 1940 and 1945, percentage of women that joined the workforce increased by 50 per cent. While prior to the war, women’s ratio in the automobile industry was 1-to-10, the percentage of women that joined the automobile industry, for instance, increased by 600 per cent (Milkman, 1982). Although women were often performing the same jobs as men, their wages were much lower. Women were encouraged to join the workforce through the concept of the “home front” propagandic posters with the likes Rosie the Riveter (Campbell, 1993; Summerfield, 1997). The “home front” suggested that women could fight in the war by joining the work force.

Sex discrimination in employment, however, was still upheld by distinguishing between “light work”, i.e. women’s jobs; and “heavy work” which were thought to be “men’s jobs”. Women were still discriminated against, with most companies hiring women as a last resort (Anderson, 1982). Once the war was over, women were systemically excluded from the workforce and

pushed back into domesticity. The baby boom of the postwar years reasserted women as mothers and housewives; and low-density, private, and isolated suburbs had become women's domain (Miller et al., 1991). Television and print media were partly responsible in inducing this forced domesticity. Situation comedies on television depicted women as happy, unquestioning suburban housewives, suggesting that women should be satisfied with their role. Advertisements and commercials were heavily aimed at women, while rarely ever featuring working women (Courtney & Lockeretz, 1971). These advertisements often painted women as docile, unskilled, and unintelligent beings in desperate need of men's help. Wherever men's help was not available, as they would be at work, earning money to provide for their family, advertisements suggested, women should resort to electronic home goods (Figure 1). This propaganda dictated that by actively participating in consumerism, women would be appealing to men. Through media, women were systemically relegated from figures of production to consumers.



**Figure 1.** Live Better Electronically advertisement in Better Homes, 1967 (*Promotional Practices by Public Utilities and Their Impact Upon Small Business* 1968).

The hold the media held over women would lose its power if women's consciousness increased through interaction and socialization in public spaces. The model American society could collapse if women had access to public spaces, as they would begin to question patriarchy. Therefore, confining women within the suburbs ensured their consciousness to remain suppressed. Excluding women from public spaces also ensured they would not request their own space outside the boundaries of the suburbs.

Public spaces in this context also included public institutions. If women had access to the same education white men had, could earn their own money, or apply for loans, they could soon declare their independence from their roles as housewives and mothers. In the opening pages of her book, "The World Split Open", Ruth Rosen (2006) summarized the position of women in public institutions as:

"Before the revolution, during the 1950s, the president of Harvard University saw no reason to increase the number of female undergraduates because the university's mission was to "train leaders," and Harvard's Lamont Library was off-limits to women for fear they would distract male students. Newspaper ads separated jobs by sex; employers paid women less than men for the same work. Bars often refused to serve women; banks routinely denied women credit or loans. [...] Radio producers considered women's voices too abrasive to be on air; television executives believed they didn't have enough credibility to anchor the news..." (p. xi).

The exclusion of women from public institutions and spaces where they could socialize also ensured that women would feel guilty if they questioned their role in society. Women who were not satisfied with their roles as housewives and mothers could not openly discuss their dissatisfaction as they believed they would be chastised. The scare tactics of McCarthyism, which had been so ingrained in the collective consciousness of Americans, had covertly scared women into accepting their role as well. With no physical place to discuss their dissatisfaction and no mental space to question patriarchy, depression became a common issue inside the suburban home over time. Poet Anne Sexton spoke of her deteriorating mental health in the suburbs in 1960 (Rosen, 2006):

"I was a victim of the American Dream, the bourgeois, middle-class dream. All I wanted was a little piece of life, to be married, to have children. I thought the nightmares, the visions, the demons would go away if there enough love to put

them down. I was trying my damndest to lead a conventional life, for that was how I was brought up, and it was what my husband wanted of me. But one can't build little white picket fences to keep nightmares out" (p. 3).

Three years later Sylvia Plath, poet, and friend to Sexton, would commit suicide in her suburban home. Although Sexton and Plath suffered from major depression regardless of where they lived, despair caused by isolation of the suburbs was such a prevalent topic that it had become a popular genre in fiction literature. Depressed, isolated, detached housewives of the suburbs were featured in works of fiction, most of which were written by white men, such as John Keats' *The Crack in the Picture Windows* (1957); Katherine and Richard Gordon's *The Split Level-Trap* (1961); Richard Yates' *Revolutionary Road* (1961).

Actual experiences of a suburban housewife would be materialized in Betty Friedan's (1963) seminal non-fiction book *The Feminine Mystique*. Simone de Beauvoir's *The Second Sex* (1949) was translated to English and published in the United States a decade before but was only circulated between educated women. De Beauvoir was one of the first writers to address women's problems, or at least her account was the most popular one. Shocking for its time, it awakened the depression women felt collectively but silently, yet due to its low circulation, did not elicit an uproar the same way Friedan did (Rosen, 2006). Friedan's research was composed of results of surveys and interviews she conducted in 1957 with fellow suburban mothers, which she originally submitted to magazines *McCall's*, *Ladies' Home Journal* and later to *Redbook*. All three magazines, editors of which were all male, she noted, rejected her article, stating that it was unrealistic. Friedan recalled in the introduction to her book that *Redbook's* editor told her agent "Betty has gone off her rocker. She has always done a good job for us, but this time only the most neurotic housewife could identify" (Friedan, 1963).

The prevalent common theme throughout the book is the guilt suburban housewives felt for not feeling fulfilled or content enough as mothers and wives. Interviewees remain anonymous in the book for that reason; identified only by their age and the number of children they have. While the era of McCarthyism had ended years before Friedan surveyed her fellow housewives, the aura of fear that it had created was another reason women were driven into anonymity (Rosen, 2006). One anonymous mother of four is quoted in the opening pages:



“I’ve tried everything women are supposed to do – hobbies, gardening, pickling, canning, being very social with my neighbors, joining committees, running PTA teas. I can do it all, and I like it, but it doesn’t leave you anything to think about – any feeling of who you are. [...] I begin to feel I have no personality. I’m a server of food and putter-on of pants and a bedmaker, somebody who can be called on when you want something. But who am I?” (p. 17).

The contemplative question would arise in the interviews with several other women as well. The overall theme of the book was the dissatisfaction women felt by reduced to wives to men and mothers to children; and the guilt they felt for that dissatisfaction. Media had convinced them they were supposed to be happy in their designated role. McCarthyism had dictated if they questioned the system, they would be un-American. Patriotism had ensured that to be un-American would be an atrocity. *The Feminine Mystique*, in a way, opened up space for women to speculate on such constraints.

The shared sentiment of dissatisfaction and guilt in *The Feminine Mystique* would lay the groundwork for women’s liberation movement in later years. Friedan herself would become an influential figure in the movement, advocating for the abolition of sex discrimination in employment. The women’s liberation movement would come under scrutiny as well, for failing to be inclusive of women of color, which were completely overlooked in the 1950s as well.

### **The Aftermath of Postwar Political Climate**

The suppressive policies adopted by the American government in postwar years would come to be questioned in the later decade. By the end of the 1950s, McCarthyism lost its strength, and the practice was abandoned altogether through a series of court decisions. Similarly, the *House Un-American Activities Committee* came to be reprehended by the general public and American government alike. In 1959, President Harry S. Truman likened the witch-hunt-like practice of McCarthyism to Salem Witch Trials (Truman, 1959); and declared the *House Un-American Activities Committee* to be “the most un-American thing in the country” at the time (Whitfield, 1991). In 1969, the committee was converted to *House Committee on Internal Security* and abolished completely by 1975.

Patriotism or othering, by contrast, are not concepts that could be abolished; and both are still prevalent in not just United States but the rest of the world as well. The sense of patriotism in the United States was asserted during World War II, as the American public watched U.S. military defeat the evils that were Nazism and Fascism. Postwar technological advancements and the economic growth had intensified this feeling. Yet the televised images of the brutal war in Vietnam caused patriotism to lose its strength. While World War II was a cause for celebration for the American public, Vietnam War seemed unnecessarily vicious and inhumane. With the newfound disappointment in government policies, patriotism would lose its reach and intensity.

Violence in the streets against black people contributed to this disappointment as well. Within the next decade, the racial equality movement highlighted the issues that institutionalized racism had created through a series of protests. Led by Martin Luther King, Jr. and Malcolm X among other influential figures, the racial equality movement influenced a myriad of other liberation movements, such as women's liberation movement. Both movements were transformative and sparked a paradigm shift in social oppression.

Women's liberation movement split into many streaks over the next decade. One of these streaks was materialist feminism led by *The Feminine Mystique* author Betty Friedan. Materialist feminism highlighted the systemic suppression of women in employment and in public institutions. Another prominent streak was radical feminism that focused on dismantling societal expectations on women. Radical feminism would adopt consciousness-raising as a practice to raise women's awareness of their issues, much like *The Feminine Mystique* did inadvertently. First examples of eco-feminist protests would also appear within the next decade.

These liberation movements and the events that followed the governmental policies of social engineering to mold mainstream society will be analyzed in depth later in this study under "Political Utopias: Liberation Movements".

## 2.2. SPATIAL UTOPIAS of POST-WAR AMERICA: SUBURBANIZATION

While the Second World War had devastated the economy and nearly every major urban center across Europe and Asia due to exhaustive air raids, it inevitably strengthened the economy and therefore sense of patriotism in the United States, for which the battles were fought mostly overseas. While European and Asian nations were looking to rebuild their historic war-torn cities in the fastest, most cost-efficient ways as possible, the United States could enjoy the victory at home without having to reconstruct cities for physical damage. The mandatory physical reconstruction could be seen to have had its benefits: it was a chance for the countries to reinvent their economic centers and building stocks. In the most robustly damaged cities, heavy industry in and around the urban centers were relocated, infrastructure was improved, new architectural languages and social housing were introduced. While there was little to no physical damage to rehabilitate in the United States, there was still an influx of veterans returning from war that needed to be housed. Yet with wartime construction industry focusing heavily on airplane production rather than building stock, there was a lack of housing available (Hanlon, 2010). American leaders seeking to shape mainstream society after the war, adopted suburbanization as the urban medium for this newly booming population to be housed, or rather, *contained* in.

While the first suburb in the United States is often cited as Levittown , built in 1947 in Long Island for the purposes of housing the massive influx of veterans, traces of American suburbia lead back to 1760s in the outskirts of Boston and Philadelphia (Farley, 1964). What is striking, however, is the rapid growth in postwar suburban populations. In the years between 1950 and 1970, the population of American suburbs grew to 85 million people from 35 million whereas the population of central cities grew only by 10 million people (Baldassare, 1992; Fishman, 1987). Fishman notes that if the 19<sup>th</sup> century is the Age of Great Cities, postwar America would be the Age of Great Suburbs. Among the many reasons suburban areas came to flourish after the war, the two most prominent, or at least, quantifiable, were the increasingly widespread usage of automobiles - a fascination also harbored by Drop City and Ant Farm, although for entirely different, satirical reasons that will be discussed later - and the affordable costs of mass-produced housing within the suburbs. By the end of the Korean War, it had become

economically feasible to install steel frames for rapid assembly on site, and often with little time spared for design, houses could be replicated quickly and economically (Larson, 1993). Automobiles becoming more accessible allowed for longer commuting distances: middle-class office workers were no longer bound to live close to where they worked. As the construction of a vast network of highways and freeways connected suburbanites to the city, Federal Housing Administration (FHA) made mortgages and loans available at low rates for white families and veterans, facilitating the mass migration (Lane, 2016). Up until the war, as a consequence of the Great Depression of 1929, many Americans lived at home with their parents. The economic boom and the prosperity that followed the war allowed, for the first time, for massive private homeownership, thanks to widespread government interventions.

The regular suburban house as a typology could be replicated anywhere in the United States, without much concern for design parameters such as natural features or climate. In the local scale, too, in any given suburban development, mass-produced cookie-cutter type houses were reproduced seemingly endlessly along roads without sidewalks and quality open spaces for the residents to socialize. Referred to as “tract housing” (Figure 2), this visual can be likened to the assembly line production under Fordism (Figure 3), or a plantation (Figure 4).



**Figure 2.** Aerial view of Levittown, NY, 1949 (Levittown Public Library 1949).



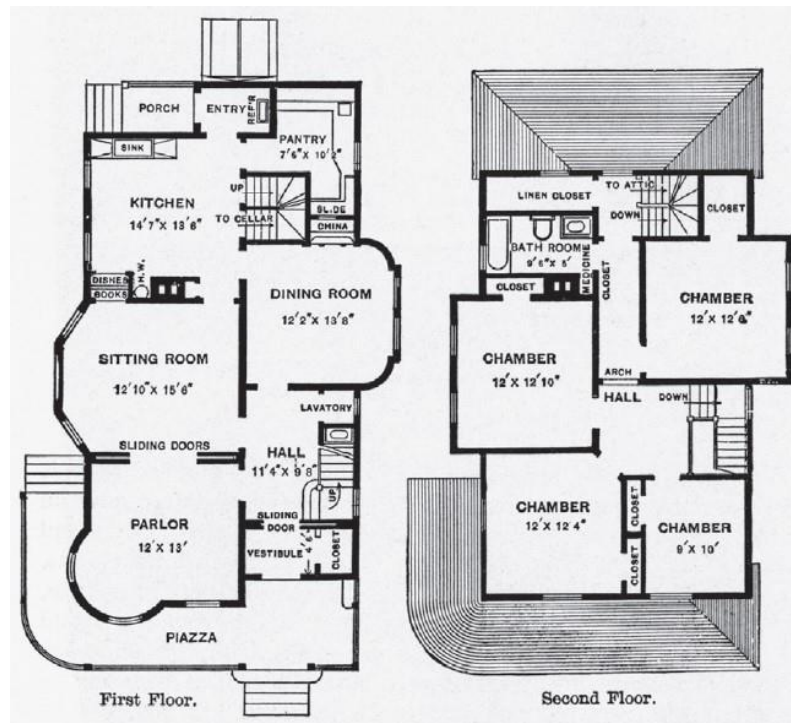
**Figure 4.** Radio set assembly line, Atwater, PA, 1925 (National Photo Company 1925).



**Figure 3.** “The Cotton Plantation”, painting by William Aiken Walker, oil on canvas, 1881 (Walker 1881).

The 1950s suburban house differed greatly from that of the archetype of a middle-class American home at the beginning of the 20<sup>th</sup> century in size, elevation, interior plan schemes. Usually standing at two or three levels, as opposed to the one- or two-level suburban house, the early 20<sup>th</sup> century house usually featured four to six bedrooms (Figure 5). The exterior had no relationship with the interior arrangement. Although privacy was a valued asset of the 1950s

suburban house, too, seclusion and introversion in early 20<sup>th</sup> century house were of the utmost importance. In order to reach the actual living spaces, a visitor would enter the lawn through fences or hedges, a feature that was found in some suburban developments but not all – and reach the porch. If welcomed inside, one would encounter several layers of privacy in the form of formal spaces such as the parlor and the sitting room, where guests would be entertained. Often called the “polite plan”, this interior arrangement was revised to be much more flexible and minimal in the 1950s suburban setting (Figure 6).



**Figure 6.** The “Polite Plan” of the Kingston House, Worcester, MA, 1897 (Lane 2016).



**Figure 5.** Plan of “The Crest”, Campanelli Brothers, Brockton, MA, 1957 (Lane 2016).



In most suburban initiatives, developers offered potential buyers three to four standardized types that would feature two to three bedrooms that would perfectly encapsulate the nuclear family. The demureness of the new suburban house was a means to force domesticity on the society. The kitchen, no longer the domain of the servant but now of the housewife, was not hidden away at the back of the house but was easily accessible from the living room. There was no gradience in privacy, meaning the portal that would separate the outside world from the interiors was reduced down to the exterior door and to large windows called “picture windows”, in an attempt to connect the interiors with the street (Lane, 2016). In the case of Levittown, the houses were placed strategically in order to prevent windows of opposing houses to see one another (Perkins, 2018). The modest houses were designed as openly as possible in plan to be customized by the owner, yet in line with the principles of assembly line production, there was little up to the homeowner to customize. Even landscaping options offered were limited to three (Figure 7).

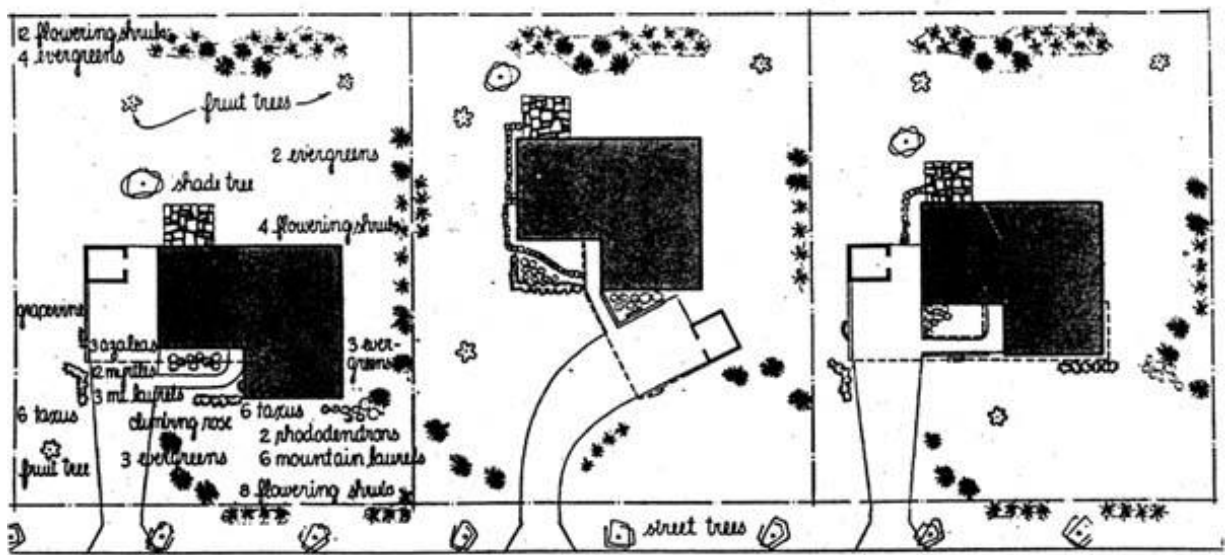
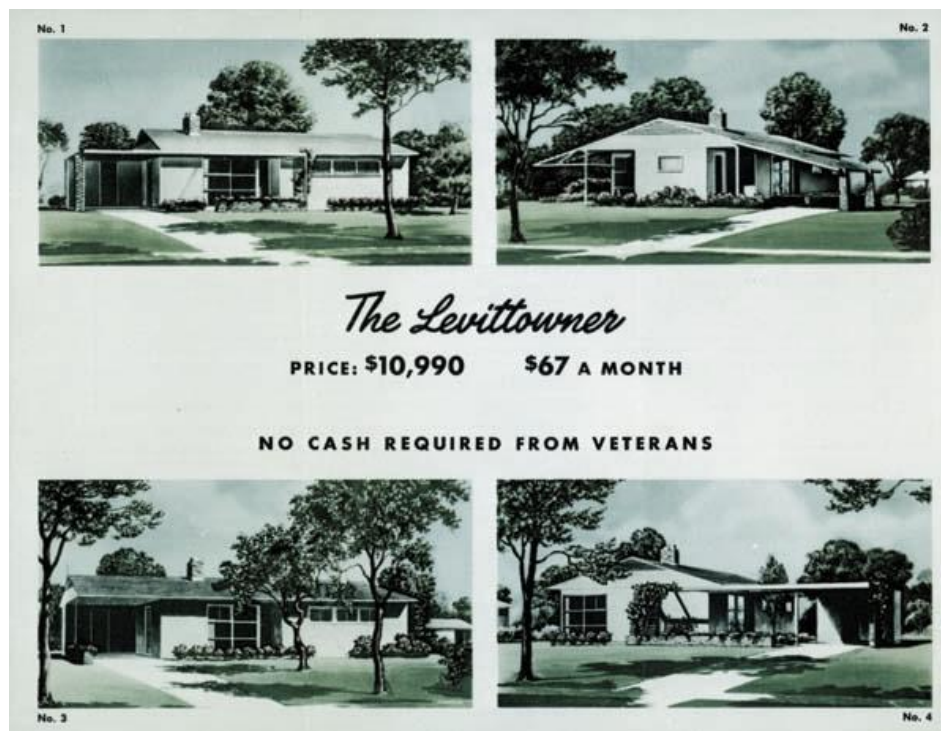


Figure 7. Landscaping options offered at Levittown, Phil Smyte, 1953 (Smyte 1953).



**Figure 8.** Sales flyer for the Levittowner, 1951 (Levittown Public Library 1951).

The modesty of the early suburban houses would be replaced in three decades by unnecessarily large, cheaply constructed single-family houses referred to as “McMansions”, both due to their massive sizes and “cultural ubiquity” (Mullen, 2007). Seen as a symbol of new wealth, the rise of the McMansion coincides with that of the decline of suburbs, in both terms of urban sprawl and the decline in economic wealth of the average middle-class suburban family.

Private ownership of unnecessarily large properties and widespread ownership of automobiles may have been affordable for the ordinary suburban family in terms of finances, yet the external environmental costs associated with land consumption and vehicle mileage were unsurprisingly overlooked at the time. While it is nearly impossible, and certainly beyond the scope of this study, to analyze and pinpoint the exact environmental impact of suburbanization and automobile usage in the 1950s, it is still possible to make educated estimations on the possible effects. The estimations can also be supported by recent research on the carbon footprint released per household in the American suburbs (Goldstein et al., 2020; Kahn, 2000). The average city dweller in the 1950s would most likely live in an apartment building with multiple units, occupying less land and commute to work using public transportation, whereas a



suburbanite would drive long distances in fuel-inefficient private vehicles and occupy twice as much land as that of a city dweller (Kahn, 2000). Unlike in cities where commerce often consists of small to medium mom-and-pop stores spread in walkable distances, suburban families would have to do their shopping in massive, air-conditioned shopping malls, or “pyramids to the boom years” in Joan Didion’s words (1979) in driving distances. By the 1970s, 82 per cent of all American households owned at least one car while approximately one in five families owned two or more (Kopecky & Suen, 2010). Inserting that many automobiles into the infrastructure, instead of using public transportation which was simply not available in the suburbs, meant constructing more roads and freeways to avoid congestion. Building more roads inevitably meant using up more resources.

As early as the 1920s, American households were encouraged to consume as much electricity as possible in order to keep costs down. Since each house in the suburbs were powered individually, this policy would gain higher emphasis by the 1950s. In the 1930s, however, with construction of dams of monumental sizes in the US, hydroelectricity was on its way to replace coal-fired power. In fact, from the 1920s to 1950s, while half of all US power came from coal, as much as one third of US power came from hydroelectricity, according to the US Energy Information Administration (Fernholz, 2016). Even Henry Ford (1922) wrote of renewable energy, specifically of hydroelectric power:

“If you can image a world in which the source of supply will be so plentiful that people will worry about not using enough of it, instead of worrying as we do now about using too much, you will have a picture of the world that is soon to be. [...] We are entering an era when we shall create resources which shall be so constantly renewed that the only loss will be not to use them”.

The rate of renewable energy fell tremendously however, as oil production and consumption doubled between 1950 and 1960 (Krymm, 1973). 1950 saw a dramatic shift in the primary source of power with coal-fueled power being replaced almost entirely by petroleum instead, a factor that would contribute to the US involvement in the Vietnam War a decade later (*History of Energy Consumption in the United States, 1775-2009*, 2011). In order to keep the demand up, electricity corporations General Electric and Westinghouse launched the “Live Better Electrically” campaign in 1956, with commercials featuring then actor and future president

Ronald Reagan (Figure 9). As part of the LBE campaign, GE also launched the “Medallion Homes” campaign, in which the goal was to construct and sell 20,000 all-electric suburban homes by 1958 in all over U.S., a number that would rise to 100,000 in two years and to almost a million homes by 1970 (Wedner, 2001). The Medallion Homes were powered by natural gas energy, and while technically cleaner than coal, natural gas is another type of fossil fuel and a greenhouse gas, that is non-renewable and non-sustainable. Use of natural gases for power, in simple terms, pollute the air and contaminate the groundwater surrounding the power plants and consume immense volumes of water.

**Newest guide for home buyers – the Live Better Electrically MEDALLION**

This new Medallion assures you a home has been inspected by the local electric utility... meets modern standards for wiring, appliances and lighting. Look for the Medallion. It means a wonderful new way of life for you and your family!

**Betty Furness**  
WESTINGHOUSE

**Ronald Reagan**  
GENERAL ELECTRIC

**Fran Allison**  
WHIRLPOOL

**What Sterling is to silver... that's what this Medallion is to a new home! It's the new national symbol of the future in electrical living. Let these three top TV stars, speaking here for the electrical industry, tell how you save trouble, time, and money by choosing a home that wears the Live Better Electrically Medallion.**

**BETTY:** In a Medallion home, you start right off with a modern electric range, plus at least 5 additional major appliances, maybe more. They're installed, ready to go to work the day you move in! Appliances are easier to pay for this way.

**RONNIE:** The lighting in every Medallion home is specially planned, too. It provides better light for better sight, plus new beauty for your home. You also get full Housepower. This means enough power, wiring, circuits, switches, and outlets to handle all the appliances you want to use.

**FRAN:** You'll be glad all your life you bought a Medallion home. Read below what a few of the thousands of new Medallion home owners think of them. Then go see the Medallion homes in your neighborhood. Your electric utility will tell you where they are.

**New Ideas for Better Living**

The new Medallion is backed up by home builders, electric utilities, and electrical manufacturers (Frigidaire, General Electric, Hotpoint, Kelvinator, Thermador, Westinghouse, Whirlpool, and others). This year, utilities will award Medallions to 100,000 new homes—in every style and price range across the country. You'll see lots of new ideas in the Medallion homes on display now!

**Figure 9.** Advertisement in *Better Homes and Gardens* for the Medallion Homes as part of the Live Better Economically Campaign, 1958 (*Promotional Practices by Public Utilities and Their Impact Upon Small Business* 1968).

The basis of the suburban housing development was just as much about exclusion of those that did not adhere to the “ideal American family” as it was about providing humane living spaces to those that did. A prominent reason the suburbs were inherently exclusionary and segregated was caused by their spatial aspects. As noted by journalist and activist of the time Jane Jacobs (1993), suburban life lacked maybe one of the most important aspects of city life: the sidewalk. Seemingly innocuous, sidewalks are the physical correspondent of community and equally importantly, integration and tolerance within the community. Just as domes were deep-rooted as a concept within the rural communal life in the ‘60s, so were the sidewalks for cities, lack of which meant the society had no means or need to get to know each other and thus care for each other. The absence for this need inevitably widened the gap between races and classes, and compelled suburbanites into conformity. Jacobs likened suburbs to a collective when compared

to the city in that, there is no public life in Garden City planning but only varying degrees of privacy as residents were pressured to do social activities together and therefore exclude the residents that were different from the majority. Lewis Mumford (1938), too, described suburbia as “a collective attempt to live a private life”. The lack of social and racial diversity is mimicked in the lack of diversity in architectural styles and an absence of distinct vernacular language, as well in policies that would discourage or prevent non-white buyers.

Americans’ enthusiasm with automobiles also led to the invention of new type of public space: drive-thru diners (Figure 10), drive-in movie theaters (Figure 11) and less commonly known drive-in churches (Figure 12) or funeral homes (Berger, 2001) and drive-in shoe repair shops and drive-in banks (Moore, 1965). These places, while public spaces at their core, supported the individualistic and segregated nature of suburbanization as visitors did not need to leave their vehicles in order to participate in social activities. They could socialize without interacting with others outside of their own worlds. As part of the four ecologies of Los Angeles, critic Reyner Banham (Banham, 1971) wrote of “autopia”, in which he noted that “coming off the freeway is coming in from outdoors,” referring to the vast realm of freeways and the built environment around it as more than an infrastructure but public space instead. Among the public spaces intended for cars, rather than the people in them, ironically comes Frank Lloyd Wright’s 770<sup>th</sup> and final commission of Marin County Civic Center designed in 1957, which includes a drive-in theater home to the San Francisco Opera. Just as the suburban home is the domain of the isolated white family, so is the automobile, so much so that Charles Moore (1965) likened private vehicles to mobile homes not only due to the privacy and isolation they afford the owners but because they lack identity. Moore wrote in reference to the suburbs of Los Angeles, “The houses are not tied down to any *place* much more than the trailer homes are, or the automobiles. They are adrift in the suburban sea, not so mobile as the cars, but just as unattached”, unattached from the public and culturally and historically rootless.



**Figure 11.** Car-hop in California, 1945 (Leen 1945).



**Figure 10.** Drive-in movie theater, Chicago, 1951 (Miller 1951).



**Figure 12.** Drive-in Church (Crane 1968).

Robert Fishman (1987) argued that no matter how unassuming the regular suburban house is, the notion of suburbia is a representation of “collective assertion of class wealth and privilege”, much like that of a medieval castle. Although Ebenezer Howard (1902), the founding father of the Garden City movement of the early 20<sup>th</sup> century, which was the precursor of the modern suburbs, advocated that Garden Cities would provide humane living spaces and a return to nature for the working class, when adopted in the setting of postwar America, suburbs became mostly occupied by white middle-class families.

Thus, while there was an influx of white families moving into segregated suburban areas, there was also a simultaneous outpour of white families from cities that were becoming increasingly racially diverse. This migration phenomenon called “white flight” was one of the prototypes of racial segregation and systemic racism in mid-century America. Although segregation had been legally abandoned in the *Brown v. Board of Education of Topeka* case in 1954, the job opportunities presented to middle-class white people differed from that of people of color, resulting in social exclusion. According to Fishman (1987), the suburbs, which he called “bourgeois utopias” were inherently built on the foundation of exclusion, in which “work was



excluded from the family residence; middle-class villas were segregated from working-class housing; the greenery of suburbia stood in contrast to a gray, polluted urban environment”.

This unconstitutional act of segregation or exclusion was not accidental as it was both supported by public policies such as the Housing Act of 1949 under President Harry S. Truman and the spatial aspects of the suburban development practices. The policy was the foundation for postwar slum clearance and urban renewal and while it was a cause for optimism for the dwellers of the decaying cities, urban slums were mostly occupied by black people and non-white immigrants (Hirsch, 2000). The Federal Housing Administration (FHA) did not afford the same loans to black and immigrant families as they did to white families. Destruction of slums meant displacing the black and minority residents and driving them into the newly constructed suburbs yet without the added financial security, they were forced to purchase housing at much higher prices than their white counterparts (Rothstein, 2017). The policymakers behind the legislation, not surprisingly, failed to take into account the racial issues that would arise.

While unlawful, developers looked for ways to limit the sale of houses to white people only. One of the developers of Levittown, William Levitt stated, “We can solve a housing problem, or we can try to solve a racial problem. But we cannot combine the two” (Hanlon, 2010). What Levitt deliberately ignored was that two issues were clearly interconnected. As David Harvey highlighted in “Social Justice and the City”, the decay of urban areas are strongly interlinked with social justice and how people approach it (Bell & de-Shalit, 2011; Harvey, 1973 [2009]).

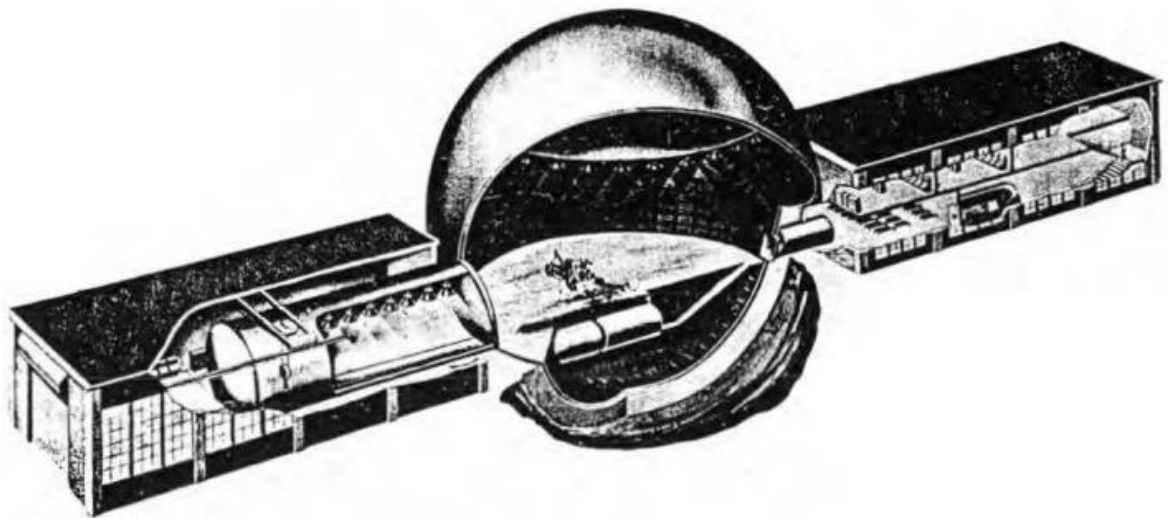
César Daly wrote of Parisian suburbia in 1864: “Our suburban architecture reveals the spirit and character of modern civilization, just as the temples of Egypt and Greece, the baths and amphitheaters of Rome, and the cathedrals and castles of the Middle Ages to help us comprehend and penetrate the spirit of previous civilizations” (Daly, 1864). While nowhere as monumental in size nor in architectural language, Daly was correct in that the spatiality of suburban planning revealed the social aspects of suburban life just as the baths informed of the social life in ancient Rome. The suburbs were, in that case, the epitome of an American culture based on exclusion, segregation, and homogenization packaged in pastel-colored little boxes sparsely scattered in perfectly mowed greenery, each powered by consumerism and reached only by automobiles.

### 2.3. TECHNOLOGICAL POST-WAR UTOPIAS: SPACE COLONIES

The technological and economical advancements the U.S. government acquired after the Second World War would soon exceed planetary bounds and translate instead to intergalactic domains. Approximately a decade after an immense victory against Fascism and Nazism; during a battle against communism; and exactly a decade before the first man on moon, the U.S. military would transfer the battlegrounds to the surface of the moon with a project aptly titled Project Horizon in 1959 (Figure 13). With a haste following the Soviet Union's launch of the first artificial satellite, Sputnik I, into space in 1957, the U.S. Army and the U.S. Air Force joined forces to build a military base on the moon that they expected would be the first installment of an American lunar colony. The project itself can be read as an anxious and retaliatory manifesto of Cold War policies as both the Soviet and the U.S. governments saw the war technologies as the key to space exploration and space colonization as the key to winning the Cold War. In a recently declassified four-volume report on the specifications of the project, there are numerous statements regarding the concern that if the Soviet Union were to reach the final frontier before the U.S., they would not only block access to interplanetary dimensions to the U.S. but to the rest of the nations. The United States, "[sought] to prevent war at any place and in any dimension" as stated ironically in the report, while the U.S. was at war at the time (Trudeau, 1959). The report also states, "To be second to the Soviet Union in establishing an outpost on the moon would be disastrous to our nation's prestige and in turn to our democratic philosophy." If the U.S. were to build an outpost after the Soviet Union did, the report claims "a subsequent attempt to establish an outpost by the United States might be considered and propagandized as a hostile act" (Trudeau, 1959). Given the authors of the report and because regular weaponry invented for earth-normal gravity would not function in space, development of supposedly necessary weaponry is emphasized throughout the report, while the logistics of power or energy sources are mentioned secondly.

The project was to be completed by 1966 since the propaganda publications and broadcasts of the USSR declared that the 50<sup>th</sup> anniversary of the Soviet administration would be celebrated on the moon in 1967. According to the report, the first stage of the construction required sending fifteen astronauts to the moon to explore and determine a location for the settlement, after which

essential construction materials could be shipped. The second step would be to build a nuclear reactor to provide electric power for the rovers that were to act as construction vehicles. The dates on which the report was written also coincides with the first nuclear plant built and started operation in the U.S. The final step was to construct the cylinder-shaped living spaces, although it is stated that the actual design was up for revisions. Water was to be obtained through condensing the moisture in the atmosphere and food production would be with a hydroponic biodome, in which algae would provide nutrients for the produce, the waste of which could feed the poultry that was also to be transported from the Earth. The plan even included a medical center that featured isolation rooms for psychological relief, since the facilities would be designed with the smallest dimensions possible for efficiency. The base was planned to be partially underground, even though how that would be possible was not completely worked out then. The army also hoped to include surveillance devices from within the base. The cost of the project totaled up to an estimated 6 billion U.S. dollars. Even the report admitted that the technology was not yet sufficiently advanced at the time, eventually being handed over to the civilian agency NASA. Due to the lack of necessary technology, the project never even surpassed the concept phase.



**Figure 13.** Cross section of the main facility for Project Horizon complete with a hydroponic biodome where food would be produced, 1959 (Trudeau, 1959).



The project was designed along the principles of *Existenzminimum*, even though technically the buildable land area extended to the entire surface of the moon: there was no scarcity in terms of available space to build. The project potentially being built with the absolute minimum dimensions was of course a means to keep costs down, but it was also, perhaps subconsciously, means to single out only the most durable of soldiers. In a project where the technical elements were barely worked out, psychological and physiological effects the design might constitute on the humans it was meant to house, or the animals that would be brought from Earth to serve those humans for that matter, were overlooked. The project, albeit essentially a bunker, was not designed for people, but for the machinery that was ultimately the physical equivalency of wartime practices and violence.

Michael Sorkin wrote of postwar America that “the notion that the war was something to be looked back upon sanctioned in its artifacts. Such reverence for raw instrumentality is very American” (Sorkin, 2001b). In fact, war and brutality were inherently American just as the grounds on which America was founded were colonial. Colonialism is embedded in American culture, advertised in the 19<sup>th</sup> century as “Manifest Destiny”, a widely held belief that the U.S. was destined by God to expand and conquer. Expanding its dominion to space, especially before an almost equally powerful nation did, was therefore a 20<sup>th</sup> century model of Manifest Destiny. Sorkin also wrote that the “fallout shelter was a malignant inversion of the historic modernist housing fantasy, the notion of a guaranteed *Existenzminimum* for every worker”.

Although the project was never realized and it was kept confidential until recently, the ambition never died and was instead actualized in the form of the moon landing in 1969. Despite President John F. Kennedy’s (1962) famous speech “We choose to go to the moon” or in its official title “Address at Rice University on Nation’s Space Effort”, in which he announced to the nation:

“We choose to go to the moon. We choose to go to the moon in this decade and do the other things, not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win, and the others, too”.

Logsdon reported from the Science Advisory Committee chair Jerome Wiesner that Kennedy was not interested in space. Wiesner noted that when asked by President Kennedy “Why don’t

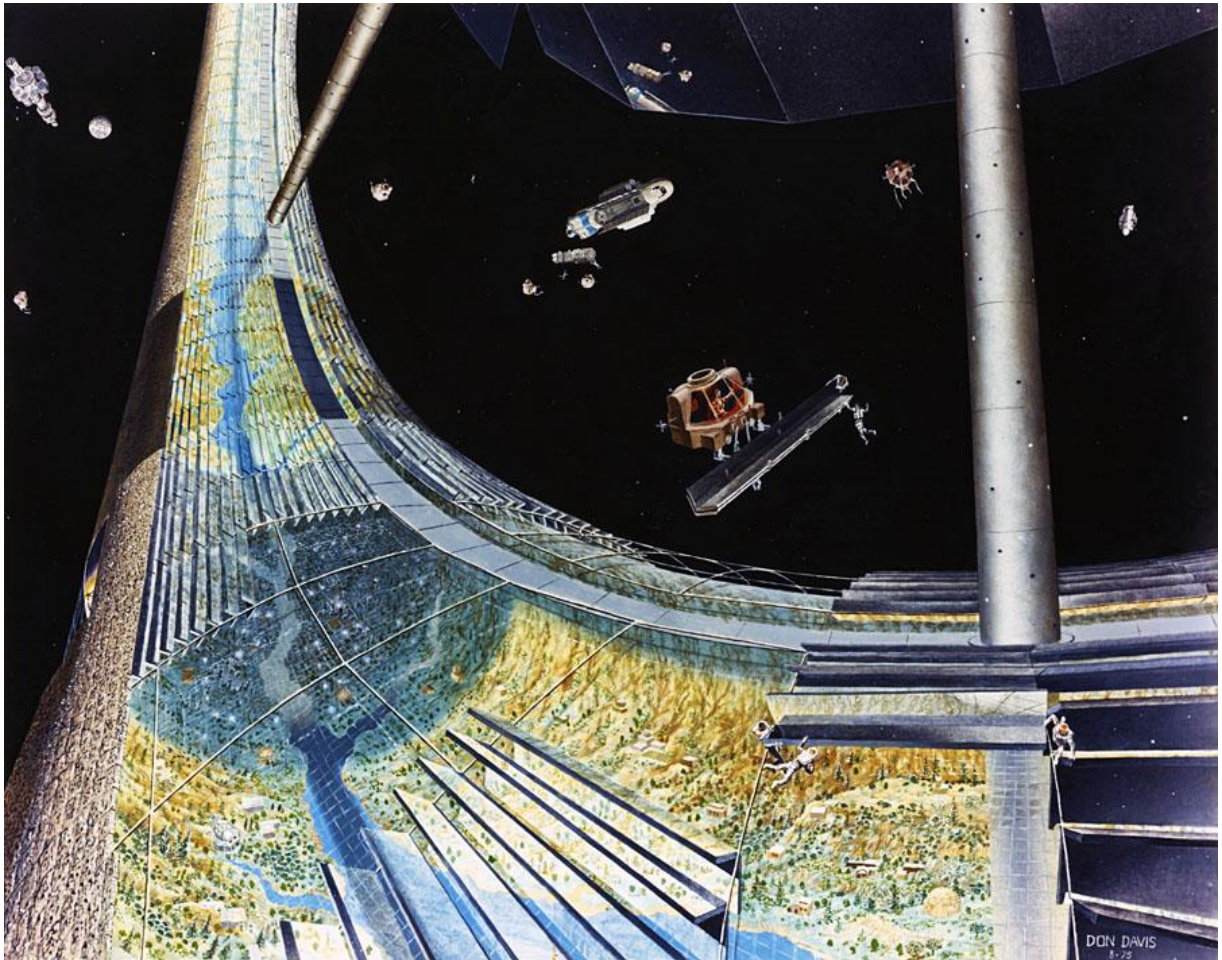
you find something else we can do?”, he said they simply could not, that “space was the only thing [they] could do that would show off [their] military power” (Logsdon, 2010).

While with the first steps on the moon in 1969 the governmental excitement – and the dedicated budget, for further space exploration may have dwindled, the possibilities for space colonization in the eyes of the American population never did. Interest in science fiction publications peaked in the 1960s, partially due to governmental interest in space and in part due to environmental concerns. Less than a year before the Apollo 11 mission, three astronauts were sent on Apollo 8 to orbit around the moon to collect more information and snap photographs. One of the images, famously known as *Earthrise* (Figure 14) taken by astronaut William Anders, instantly became a sensation and is often cited as one of the marks of the inception of the environmentalist movement of the Long Sixties (Kilgore, 2003; Lazier, 2011; Lekan, 2014; Logan et al., 2020; Maher, 2004; McCray, 2013; Schoon, 2016). It was the first time that the Earth was seen by the masses as one small speck. As Carl Sagan (1997) would write in his book, “Pale Blue Dot”, “Earth is the only world known so far to harbor life. There is nowhere else, at least in the near future, to which our species could migrate. [...] the only home we [have] ever known”.



**Figure 14.** “Earthrise” (Anders 1968).

Three decades before Sagan would reach the above conclusion, however, a group of scientists under the leadership of Princeton University professor of physics Gerard K. O'Neill in 1969, would attempt to lighten the burden of the world population on Earth by transferring a small number of people into our space to settle in a project vaguely named "O'Neill Colonies".



**Figure 15.** Construction of the Stanford Torus, illustration by Don Davis, 1975, courtesy of NASA Ames Research Center (Davis 1975a).

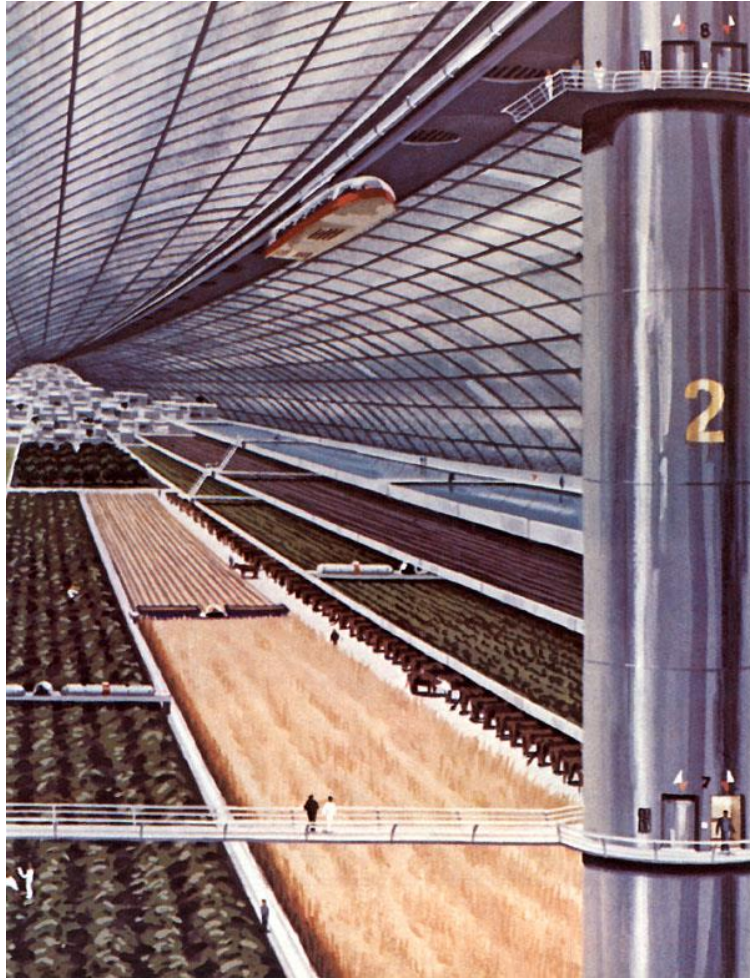
O'Neill was inspired by the findings of Club of Rome, which will be introduced in depth later. Club of Rome was composed of a group of scientists, architects and activists, who were burdened by overpopulation and depletion of resources caused by the over-consumption of the West (McCray, 2013). Along with a team of researchers from MIT, the Club of Rome implemented a forecast report that outlined when the human population and the resources per capita would reach their peak, followed by unavoidable decline if no actions were taken, which coincidentally, they found would be in the year 2020. Using software that was complex for its

time, they published the data under a book called *The Limits to Growth* in 1972. According to the report, the “survival of human society [depended] on the speed and effectiveness with which the world responded to” the issue of environmental destruction (Meadows et al., 1972).

The findings grabbed the attention and struck another nerve of academics and science fiction writers alike, many of which pointed out that the report overlooked the possibility of procuring resources from the rest of the solar system, much like what the U.S. Army had planned for Project Horizon a decade earlier. Following the arguments, Gerard O’Neill gathered a group of his students from Princeton University and started working on experiments for space colonization, except, as a self-claimed space activist, he was using the term “space humanization” instead (Kilgore, 2003). O’Neill and his students found that to survive in space, humans did not need to build entire infrastructures to settle on planetary surfaces other than Earth, most of which would be inhospitable due to the lack of natural resources and gravity but could instead thrive in free-floating spatial structures in a close distance to Earth. In, what they were informally calling the O’Neill Cylinder, normal earth gravity would be produced through high speed, centrifugal rotation within a self-contained cylinder, which contained breathable air.

The unrestrained location of the cylinder meant easier access to ordinary materials such as steel, aluminum and glass, 98 per cent of which, O’Neill noted in a 1975 TV interview alongside biochemist and science fiction writer Isaac Asimov, would be obtained from the surface of the moon and from asteroids (O’Neill & Asimov, 1975). As more and more modules would be constructed in time, the remaining 2 per cent of the materials would be shipped from within the colonies, rather than the Earth, as that would be extremely costly. Due to the artificial nature of the cylinder that is at a similar distance to the Sun as the Earth, weather would be stable, with ordinary amounts of sunlight that would be let in through windows on the façade of the structure. To mimic the earth-like atmosphere, such as the color of the sky, the inside surfaces of the cylinders would be partially covered in mirrors. The colonies were to alleviate the heavyweight industry off the Earth and as the modules, or “islands” as O’Neill often called them, could be multiplied as many times as necessary, industrial activities could be contained in one island, while residential ones would be in another. Some islands would be occupied entirely by self-operational machinery and some would be made up of agricultural areas (O’Neill, 1978).

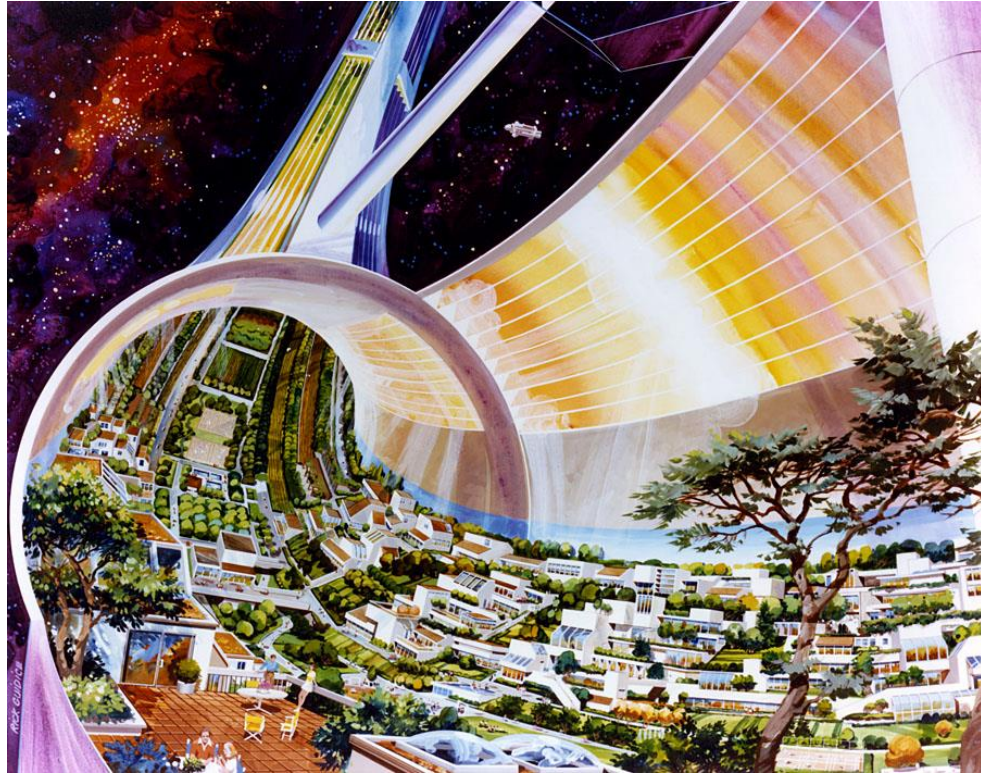




**Figure 16.** Agriculture in Stanford Torus, 1975 (NASA 1975).

Although O'Neill desired to highlight science's possible contributions to social problems, he failed, by overlooking the depth of the social problems. One of the members of the Club of Rome and co-author of the *Limits to Growth*, Dennis Meadows, too, found the solution of using up sources to build settlements in space for a small number of people inefficient. According to him what was "needed to solve these problems on Earth is different values and institutions – a better attitude toward equity, a loss of the growth ethic, and so forth. I would rather work at the root of the problem here." (Kilgore, 2003; *Space Colonies: A CoEvolution Book*, 1977). Proposal of strictly air-controlled humanmade structures in space is evident of seeing nature as a separate entity from humankind and instead promotes the ideals of early colonizers that believed in Manifest Destiny. O'Neill's views on environmentalism read as if humans had no hand in the deterioration of the planet and repeating previous habits in urban design would not

lead to the same fate. The project is also primitive in that it ignored the complex and sophisticated innerworkings of nature such as the nitrogen cycle and microorganisms necessary for the ecosystem (Clarke, 2015).



**Figure 17.** Stanford Torus cutaway view showing the suburban settlements, illustration by Rick Guidice, 1975, courtesy of NASA Ames Research Center (Guidice 1975b).

Each island was planned to house 10,000 residents, similar to a small suburban town (Figure 17). Arguably, building numerous megastructures that would house 10,000 residents each was not the efficient answer needed to tackle overpopulation, given the technology, resources and capital that would be required per each structure. O'Neill described the settlements within the islands as being “mainly in the form of low-rise, terraced apartments, shopping walkways, and small parks. Many services, light industries, and shops are located underground” (Figure 18) (O'Neill, 1978). Since each island is essentially a climate-controlled megastructure featuring shops with services buried underground, set in distances that can only be travelled by spaceflight, the structures are reminiscent of shopping malls in low-density suburban settlements of America.





**Figure 19.** Stanford Torus interior partially showing underground services, illustration by Don Davis, 1975, courtesy of NASA Ames Research Center (Davis 1975b).



**Figure 18.** Bernal sphere interior, illustration by Rick Guidice, 1975, courtesy of NASA Ames Research Center (Guidice 1975a).

Not limited to American suburbs, some renderings depicted pristine simulations of the Californian Coast, South France and small Italian towns (Figure 19) – all vacation destinations of privileged American families (Scott, 2016). O’Neill was not an architectural designer but a physicist and a science fiction aficionado and to him, designing low-density towns in space was purely by choice. The project was developed by a group of scientists and no architects were invited to contribute in what was meant to be the human settlements of the future.

The pastoral, suburban nature within the structures is inarguably meant to provide comfort in the non-familiar, low-gravity, hostile environment that is outer space. To whom the suburbs would offer comfort is up to debate. O’Neill stated that he saw diversity as the key to human survival and that the project would celebrate diversity, yet it was still based on the ideals of the white, middle-class, nuclear American family. Moreover, diversity becomes a hollow concept within the context of space colonization, reduced to race or gender and stripped off its inclusion of people with disabilities, the elderly, and people of poor physical or mental health. No matter how many acres of green spaces are allocated per person in a space colony, floating in space in artificial structures would most likely be physically and mentally detrimental to the majority of people. The project could therefore offer an escape from our deteriorating planet for only a small group of people, creating a division not too dissimilar to “utopian ideals” of Nazism or white supremacy (Scott, 2016).

In the initial presentation of the project in 1975, O’Neill ended his speech by drawing attention to the difference between the space colonization and early American colonialism and the genocide associated with it: “In contrast to our experience with expanding civilizations on Earth, in space colonization there would be no destruction of indigenous primitive populations; nothing corresponding to the Indian wars of 19<sup>th</sup> century America.” (O’Neill, 1975; Scott, 2016) As a physicist and not a sociologist, O’Neill should not be faulted entirely for the naiveté of his vision. He believed, however, that the majority of people who chose to settle in space would be “strongly motivated toward peaceful cooperation and constructive hard work,” and admittance



of those who were likely to commit criminal activities or *to revolt* should be restricted<sup>3</sup> (Kilgore, 2003). Even if there was no genocide committed in space, restriction on who should be saved from a dying planet goes against the promise of a diverse heaven and caused the project, and its designer, to lose credibility. Despite being approved and funded by NASA for further development, the project remained unrealized, not only due to the lack of technology needed but because it was deemed too utopian – both in the sense that it was unrealistic, and it was too oppressive (DeGroot, 2006).

O'Neill also wrote that each island would feature “four small cinemas, quite a few good small restaurants, and many amateur theatrical and musical groups” (O'Neill, 1978). Details such as the specificity of the number of cinemas that would be available in each structure and O'Neill's language throughout the book is similar to that of Thomas More in “Utopia” (More, 2009). The report, similar to “Utopia”, is written in the first-person and the elements of the New World outlaid in both publications are described and detailed in such a way that both places, although non-existent, seem authentic. While More's “Utopia” is satirical and is meant to convince its readers of its authenticity, O'Neill's utopia is meant to be a scientific report but instead reads as an otherworldly work of fiction. In “Utopia's Ghost”, Reinhold Martin (2010) noted “Utopia is a special type of project, since it threatens to replace what exists in its entirety. Thus the messianic overtones of many utopianisms, as well as the barely disguised nostalgia for some long-lost wholeness or state of nature that they often exhibit”. Much like More's fictionalized letters to and from real non-Utopian Peter Gilles that preludes his novel, O'Neill has written “fictionalized letters home from colonists in an orbiting habitat” (Kapell, 2016). O'Neill's use of the word “home” is interesting in this context and hints at his devotion to Earth and why he is trying to replicate the regular American suburb in a highly technological space capsule. Throughout “The High Frontier”, however, O'Neill is very specific in his distaste towards the word “utopian” and cites negative connotations the word carries as his reasoning (O'Neill,

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<sup>3</sup> Kilgore also reports, as an academic O'Neill was sympathetic to the student revolts of the late '60s but not a supporter of counterculture.

1978). Kapell (2016) disagrees and points out that the belief that O'Neill's vision will end all problems that the Earth is facing is a classical motif in utopian literature.

Paul Ehrlich (1978) asserted that “we can't ship our surplus to the stars”. When he first wrote the *Population Bomb* in 1968, O'Neill Colonies had not yet been established. Ehrlich's criticism was instead directed at Professor Garrett Hardin, who had similar fantasies to Gerard O'Neill. Unlike O'Neill's project, Hardin's proposal was hypothetical. He suggested that Americans should set aside the majority of their capital for planetary migration. Ehrlich pleaded, in return, that “we would have to export our responsible people, leaving the irresponsible at home on Earth to breed”, highlighting the inequality of spatial migration.

While O'Neill's Colonies' social shortcomings has been evident for some decades, it rose to public attention again in 2019. The founder of the e-commerce company Amazon, Jeff Bezos, who is also the richest person alive at the time of writing, resurrected O'Neill's Colonies for his *Blue Origin* project. At the initial presentation, Bezos (2019) gave a brief introduction on the projected consequences of population explosion; industrialization; and ironically, mass consumerism. He contended that Earth is “the best planet in the Solar System” yet that it can no longer sustain its population. Introducing updated renders of O'Neill's Colonies, Bezos rhetorically asked his audience: “What does architecture even look like when it no longer has its primary purpose of shelter”? While this statement alluded to architecture being solely for shelter, Bezos showed renders of his colonies that replicated historical and architecturally renowned towns of Florence, Italy, and the Forbidden City of Beijing (Figure 20).



**Figure 20.** Jeff Bezos' human settlements in space, rendering showing the city of Florence with the Forbidden City visible in the background, 2019 (Silverman, 2019).

According to Sorkin, “We like science fiction because it makes what is normal extreme.” (Sorkin, 1999) What the O’Neill Colonies project essentially did was that it combined what was normal at the time, with the extremity of outer space. While the project was technically advanced, it lacked a social understanding, which could have been tolerable at the time. Bezos repeating O’Neill Colonies’ shortcomings four decades later, however, is telling of humans’ desire to control not just nature on Earth but the entire universe. As an enabler of consumerism, Bezos could very well attempt to solve the issues he stated were no longer solvable. O’Neill’s project, by comparison was a more naïve attempt at salvation. It, however, failed to take into account the majority of the world population; and showed little remorse for the planet humankind was supposedly destroying. This cathartic human-centered approach inevitably obscures our perception of environmental, social, and political issues. While American counterculture of the ‘60s attempted to reset these perceptions, it still reproduced the very culture it hoped to escape from, just like O’Neill hoped to create a diverse society while failing to include members that would construct said diverse society.

### 3. AMERICAN COUNTERCULTURE and UTOPIAS of the LONG SIXTIES

The ways in which policymakers attempted social engineering within an autocratic utopia in the 1950s backfired and established the backbone of the counterculture movement in the Long Sixties. The term Long Sixties refers to the period between the formation of the Warsaw Pact of Cold War in 1955 to Watergate in 1973. Counterculture refers to the lifestyle of mostly young people who reject society's traditional values based on capitalism, patriotism, racism, and misogyny discussed in the previous chapter of Political Climate of Post-War Utopia.

The term first appeared in Talcott Parsons' book "The Social System" (Parsons, 1951), however it was in 1960 that the term gained an actual definition, when John Milton Yinger (1960) published the article *Contraculture and Subculture* in *American Sociological Review*. Yinger suggested the term contraculture so as to "distinguish between normative systems of sub-societies and emergent norms that appear in conflict situations". When researching the preoccupation of the 1950s with social deviance, which, much like counterculture, refers to behavior that violates social norms, Yinger chose to use the term to separate it as a "sociological phenomenon" from the term "subculture" (Braunstein & Doyle, 2002b).

It was, however, Theodore Roszak (1968) who popularized the term to be associated with the youth of the 1960s in his book *The Making of Counter Culture* in 1968 at the height of the student movements. Roszak argued that the counterculture referred to a "change of consciousness" among young people yet the movement was "inherently anti-technology and anti-science", a claim that would be debunked by counterculture historians later (Farber, 2016). Farber notes that Roszak's account of counterculture does not dwell on investigating why the change of consciousness in young people occurred in the first place, but rather focuses on convincing mainstream society that only a change is happening. While the term counterculture is often associated with or used interchangeably with the hippie movement, in reality it refers to a broader body of values; and includes the Beatnik Generation of the 1950s; Civil Rights Movement of the 1960s, Liberation movements of the 1970s. While 1950s can be deemed dormant when compared to what followed after, the quest for liberation and the spirit of protest were born with the Civil Rights Acts of late-1950s and early 1960s (Kuklick, 1993).

Although it would be difficult and somewhat disregardful to confine the counterculture in chronological and categorical boxes due to its amorphous nature, there are two distinct periods in which there seems to be a paradigm shift in the counterculture movement. According to Braunstein and Doyle, the first phase is the more naïve and utopian “Flower Children” period, which began roughly around the time when the Beatles started touring around the United States in 1964, reached its peak in 1967-1968 and died down with Nixon’s election to presidency in 1968 (Braunstein & Doyle, 2002b; Duncan, 2013). While Braunstein and Doyle associate the importance of 1964 with the Beatles, 1964 also marks when the Civil Rights Act of 1964 was passed into law and *Student Nonviolent Coordinating Committee* (SNCC) organized *Freedom Summer*, which was a voter registration drive to increase the number of black voters.

The dreamy attitude of this first phase, that is often associated with the hippie movement and the entire decade, was mainly due to the booming economic prosperity and employment possibilities. The post-scarcity American society, having witnessed how advanced war technologies had become in the past decade, had come to believe that the United States was reaching “full automation” and economic growth so massive that soon there would no longer be any need to work. The formation of a post-scarcity society with limitless leisure time was an idea that a vast number of the population, from President Lyndon B. Johnson to the hippies that retired from societal values, assumed would become reality. Acclaimed Beatnik Alan Watts anticipated that once United States reached full automation, the system of taxation would be reversed, and people would be paid “for the work machines do for them” (Braunstein & Doyle, 2002b). For the hippie movement, then, capitalism was not an issue to revolt against and abolish altogether, but a regime that could be revolutionized, which is essentially what separates the counterculture from the hippie movement.

The affluence among the hippie community was not a coincidence. Unlike the counterculture movement, the hippie movement consisted mainly of children of white, middle to upper class families. Hippies appropriated poverty from less privileged communities; and practiced it in “fantasy ghettos” of black, Hispanic or immigrant neighborhoods. These “fantasy ghettos” acted as poverty playgrounds for hippies to play in, which they could leave behind whenever they pleased. Material comfort for hippies was something they could take for granted. A prominent

example is when two notable faces of the hippie community, Abbie Hoffman and Jerry Rubin, both college-educated, white males, burned dollar bills to gather media attention (Braunstein & Doyle, 2002b). Such “media events” or “happenings” would be performed later by Ant Farm as well. While parents of countercultural youth grew up during the Depression Era and Second World War, Flower Children or countercultural youth were brought up during the post-war economic prosperity era. Material comfort, therefore, afforded the youth of 1960s the luxury to question the enforced culture of previous decades (Bawer, 2004). As there were relentless restrictions on individualistic self-expression throughout the 1950s, Flower Children of the 1960s were rebelling first and foremost against their parents, then the war on individualism and not necessarily against the actual regime that caused uneven distribution of wealth and racial injustice in America. Meanwhile, the tumultuous years of the late 1960s was a pastiche of various liberation movements, most notable for attempting to eradicate racial injustice, gender inequality, discrimination on gay people; and less written about but equally important, for educational reform and homelessness (Marwick, 2005).

The utopian and dreamy atmosphere created by the hippie movement started to dwindle after 1969, when the economic growth plateaued and then President Richard Nixon started campaigns against the counterculture movement (Miller, 2002). Utopianism, like communism, was something to be feared for the American politicians, and much like communism, had to be disrupted before it reached the masses (Kuklick, 1993). In return, what followed the first phase the counterculture movement was a more mature, better informed, and focused set of liberation movements with substance. This phase, too, slowly died down as the Vietnam War lasted too long for the movement to stay mobilized against and protest vigilantly. Along with the fatigue of transgression, there was significantly less anger over the war as Nixon reduced the number of American troops drafted overseas.

The first subchapter regarding the counterculture, Political Utopias of the Long Sixties, will therefore focus on liberation movements that set the tone during this decade. Racial equality movement, women’s liberation movement, and environmental movement all emerged in this decade as contrast to the culture enforced on American society outlined in the chapter of Political Climate of Post-War America. While there are other lesser known yet just as significant

movements during this period, the main three discussed in this chapter have all played crucial roles in freedoms that we have the privilege to enjoy today. To summarize the tumultuous issues of this decade is a challenging task therefore this study will only focus on some of the key events. The three movements were also chosen specifically because their protests inspired the visual language of this decade.

The second subchapter of Spatial Utopias will introduce communes and artistic collectives as the architectural complements of liberation movements mentioned previously and the countercultural correspondent to the suburb analyzed above in the chapter of Spatial Utopias of Post-War America. The chapter will also introduce R. Buckminster Fuller's role in the communal practice, more specifically on the geodesic dome adopted by most communes as the main architectural language.

Finally, the third subchapter of Technological Utopia will concentrate on *Whole Earth Catalog* published by Stewart Brand. Similar to space colonies being planetary equivalents of the suburbs, the *Whole Earth Catalog* was the virtual supplement to communes. Stewart Brand's *Whole Earth Catalog* as the first step in the invention of the internet. Both Buckminster Fuller and Stewart Brand play important roles in the formation of Ant Farm and Drop City, that will be discussed later in the chapter of Case Studies.

### **3.1. POLITICAL UTOPIAS: LIBERATION MOVEMENTS**

#### **Racial Equality Movement**

While early 1960s are cited as the climax of civil rights movements, call for racial equality was sparked as early as 1950s, when "equal but separate" understanding of segregation was fought against in court in the 1954 *Brown v. Topeka* case. The early civil rights movement for racial equality is discussed in more detail in Political Climate of Post-War America. This chapter will

focus on the more established liberation movement which was concerned with the political and cultural repercussions caused by systemic racism of the previous decades. The civil rights movement of the '50s ensured equal rights to some degree constitutionally and on paper, yet there were still policies in place that acted as loopholes to prevent equality. Systematically ensuring that black people could not access education or job opportunities that white men, and to some extent white women, enjoyed was one of the main ways in which black people were oppressed. What separates the civil movement of the '50s from the liberation movements of the '60s and '70s is mainly the way those freedoms were obtained. In the former, freedom was handed from above by U.S. Supreme Court whereas in the latter, justice and equality were won by protesting (Evans, 2009). In the 1960s and '70s, the movement was headed not by governmental decisions and nameless, faceless people but by influential figures remembered today through revolutionary speeches and images of marches (Patel & Price, 2016). Along with crowds of people demanding justice, both underground publications and mainstream media, as condemned as it was, helped to spread awareness of what was happening.

Equal rights being acquired through protests is particularly important as rights that were handed by the government were only incremental. For instance, while Rosa Parks' peaceful demonstration of 1955 may have led to public buses being desegregated in 1956 in Montgomery, Alabama, the law was often not enforced. Interstate bus terminals, too, still remained segregated. Another Supreme Court landmark decision, *Boynton v. Virginia*, outlawed segregation at bus terminals in 1960 but was neglected in Southern states. To challenge the failure to enforce the law, a group called *The Freedom Riders*, made up of both young black and white people, went on a tour of Southern United States on interstate buses. The peaceful protest was countered by extreme violence, police brutality and jailing for trespassing "white-only" zones. Violence went as far as a bus being bombed and police forces cooperating with Ku Klux Klan in Birmingham, Alabama (Catsam, 2009). *Freedom Rides* marked a momentous point in the civil rights movement. The protests gained international attention and forced the Kennedy administration and the entire Congress to take notice (Salmond, 2013).

Direct action and protesting to acquire rights also proved evident in the historic March on Washington in 1963. President John F. Kennedy believed that while civil rights protests were



important, he feared protests would end in violence and therefore found the march to be “ill-timed”. In a meeting with Martin Luther King Jr. and A. Phillip Randolph who were organizing the march, he said: “We want success in Congress, not just a big show at the Capital. Some of these people are looking for an excuse to be against us. I don’t want to give any of them a chance to say ‘Yes, I’m for the bill, but I’m damned if I will vote for it at the point of a gun” (Levingston, 2017). Kennedy’s fears were not exactly misguided, as violence in Birmingham, Alabama was growing. After having collaborated with the KKK in 1961, Birmingham police was ordered to use dogs and firehoses on demonstrators by Eugene “Bull” Connor, commissioner for Public Safety for Birmingham and member of the Democratic Party (Chapman, 1990). King, responded to JFK, “Frankly, I have never engaged in any direct-action movement which did not seem ill-timed” (Levingston, 2017). Officially called the *March on Washington for Jobs and Freedom*, the event was attended by quarter of a million people. The peaceful march of August 28 ended with King’s iconic “I Have a Dream” speech, in which he insisted that potential employees be “judged not on the color of their skin but the content of their character” (King, 1963). The march had started with a speech by Randolph, in which he would say: “We here today are only the first wave. When we leave, it will be to carry the civil rights revolution home with us into every nook and cranny of the land, and we shall return again and again to Washington in ever growing numbers until total freedom is ours” (Randolph, 1963). Randolph was correct in that the peaceful protest was only the first step on the way to achieve equality and liberation. A year later, Congress would pass the Civil Rights Act of 1964, which proscribed discrimination on the basis of not only race, but color, gender, and religion too. The extensive law also helped in enforcing desegregation in public schools (“Civil Rights Act,” 1964). As racism was both systemic and embedded in American culture, the act alone was not sufficient in deescalating racial tensions or in enforcing laws.

Due to high concentrations of black people in the state, Alabama was central in the civil rights movement. More than half of the population of the state was composed of black people, with only two per cent registered to vote. White supremacists of Alabama were disturbed by the voting rights granted to black people through the Civil Rights Act of 1964 (Burrow, 2014). Suppressing black people’s right to vote turned violent, too, when a white police officer murdered activist Jimmie Lee Jackson. To protest the brutal murder and the failure to instate

voting rights, *Dallas County Voters League* (DVCL) joined forces with *Student Nonviolent Coordinating Committee* (SNCC) and held three marches from Selma to state capital Montgomery. The peaceful protests were met with police brutality once again. Led by KKK, police trampled the demonstrators and violence was televised for the entire nation to witness “Bloody Sunday”. The event that took place in Selma in 1965 was one of the first instances of violence being televised, preceded only by JFK’s assassination a year before, and the publicity of the brutal event led to the passing of Voting Rights Act of 1965. Black men were given the right to vote in 1870, but most could not do so due to voter literacy tests. U.S. Supreme Court ruled voter literacy tests unconstitutional under the newly instated law, which also allowed black women to vote for the first time ever. 1965 marked a historic year for the rest of the United States, too, as the U.S. got involved in the Vietnam War. In other words, America’s involvement in the war came at the apex of the civil rights movement. In the early years of the war, black people’s attention was diverted to protests for voting rights and to what was happening in Selma (Lucks, 2014). As James Forman, a prominent member of the SNCC and later of *Black Panther Party*, recalled: “Most of us had considered the war not irrelevant, but simply remote. Its importance to black people had not come home to us” (Forman, 2000).

While the Civil Rights Act and Voting Rights Act afforded some equality to educated and skilled black people, those in poverty and less fortunate did not enjoy the same benefits. Malcolm X noted in a speech in 1963 that “wealthy, educated Black bourgeoisie” who could escape poverty thanks to the victories in court, “never reach back and pull the rest of our people with them. The Black masses remain trapped in slums” (X, 1963b). Fights for higher minimum wage did not elicit the necessary traction previous protests did either, mainly because proposals to raise minimum wage equaled to the annual budget of the moon landing. Cold War enthusiasts of capitalist America were more interested in the space race than in those living in poverty (Evans, 2009). The war diverted the attention of white liberals, too, who deemed that protesting had achieved what it was supposed to. Malcolm X blamed the weakening of the civil rights movement on the involvement of white liberals, calling them the “real criminal” and “the political hypocrite” (X, 1963b). Assimilating people into a whitewashed domain and subsequently eradicating their culture is an embedded part of American colonialism and in turn, of white liberalism. The colonial imposition of authorities could only be eliminated through

protests, as Amílcar Cabral put it best by saying: “it is generally in culture that the seed of protest, leading to the emergence and development of the liberation movement, is found” (Cabral, 1974). Malcolm X not only blamed white involvement in the civil rights movement but the nonviolence displayed by black leaders as well. In a later speech in 1963, he criticized both American involvement in war and nonviolence of the movement by saying: “If violence is wrong in America, violence is wrong abroad” (X, 1963a). He believed the government and “white liberals who have been posing as [their] friends failed” them (X, 1964). Malcolm X argued that white liberals were enamored with symbolic gestures, a belief that would be validated in 1964 when Martin Luther King Jr. received the Nobel Peace Prize. Contrarily, Malcolm X’s black nationalist stance was not welcomed by all, and he was assassinated a year later under suspicious circumstances.

Malcolm X’s viewpoint of eradicating poverty of black people and the Voting Rights Act of 1965 motivated the formation of the *Black Panther Party* (BPP) in 1966. While *Black Panthers*, adorning a universally recognizable uniform of black berets and leather jackets, became a target of the government with their armed self-defense politics, they were more involved in social programs to eradicate poverty within black communities (Jones & Edwin, 1998). Protesting police brutality by “cop-watching” and advocating for armed protection drew the attention of the media, as well, with newspapers suggesting that they were controlled by Communists (Endicott, 1970). While the media controlled the narrative of BPP and vilified them as violent and militant, BPP’s programs to abolish poverty ranged from free food to underprivileged school children to free pest control or free plumbing services for poor households. They were also concerned with medical health education of black people, who might have been denied health services (Davenport, 2010; Evans, 2009; Jones & Edwin, 1998). BPP’s policies were reminiscent of Malcolm X’s call for a “self-help program, a do-it-yourself philosophy” as the government and white liberals failed them (X, 1964). Erroneous reporting was not entirely due to white-owned mainstream media’s antipathy towards racial equality but also because of different strategies employed by branches in the party. Similar to King’s pacifist stance, the East Coast branch of BPP were organized through low-profile underground operations that did not challenge the U.S. government. Contrarily, the West Coast Panthers aligned themselves more with Malcolm X and believed change could only be achieved if the movement spread not only

throughout America but also around the world (Davenport, 2010). Although nonviolence in civil rights movement died down with King's assassination in 1968, the party's earlier nonviolent efforts were ignored as well. The discrepancies within the civil rights movement were evident within the party. White liberalism was also a means of state repression and therefore, failed the movement in that regard, too. Had there been more political spaces that allowed for black presence, conflicting ideas about liberation would not have to be gathered under a single roof. Inconsistency in their policies and media's portrayal overshadowed the party's later efforts in 1970s to prohibit discrimination on housing, employment and child adoption for the gay community (Alkebulan, 2007).

Evans argues that in the early 1960s, liberal anti-communism allowed political reach for racial equality movement activists throughout the U.S. yet American involvement in the Vietnam War in 1965 marked an end to the "liberal symbiosis between justice for African Americans and the war on communism" (Evans, 2009). Malcolm X's worries proved true in the 1970s, as protests dwindled and were instead replaced by symbolic gestures to include black people in congress, Supreme Court, and the United Nations. The government's last gesture for the civil rights movement came in 1968 with the Fair Housing Act, when President Lyndon B. Johnson argued the law would be an appropriate testament to the recently assassinated King and his legacy (Massey, 2015). The act, much like its predecessors, outlawed racial discrimination in housing. By the time the bill was passed, majority of American neighborhoods, especially suburban communities, were already segregated due to disproportional migration of white people a decade earlier. This phenomenon called "white flight" had ensured the formation of urban decay that was populated mostly by black people in poverty (Hirsch, 2000).

Despite the many achievements of the civil rights movement, racial privilege afforded to white people and institutionalized, systemic racism could not be eradicated. Racial tension, although subdued to some extent, continue to this day. What the movement achieved, however it first and foremost highlighted the injustices of institutionalized racism so strongly that they could no longer be overlooked. The movement also sparked a myriad of other liberation efforts, such as the women's liberation movement.

## **Women's Liberation Movement**

The misogynistic and suppressive policies put in place by policymakers and media on women in the 1950s, that were outlined in this study under Political Climate of Post-War America, backfired in mid-1960s. Middle-class women who were employed in jobs that were previously deemed suitable for men during the Second World War, were being systemically excluded from the workforce and pushed back into suburban homes. Those who could remain employed were paid much less than their male counterparts for performing the exact same tasks (Evans, 2004). Repressed housewives imprisoned in the suburbs by government policies and media came to realize that their depression was not exclusive to them but instead a collective one when Betty Friedan published *The Feminine Mystique* in 1963 (Friedan, 1963).

Women's liberation efforts were not solely carried out by housewives of the '50s but also their daughters who had grown up during a time that "celebrated capitalism, vilified communism, and idealized the feminine mystique" who wanted to avoid "becoming like their mothers" (Friedan, 1963; Rosen, 2006). Those women who had to privilege to access higher education also reached a higher social awareness that challenged the understanding that women were "naturally docile, domestic, and subordinate" (Evans, 2004). Women were increasingly becoming aware of their potential as not just mothers or wives but as political figures as well. While *The Feminine Mystique* was an important step towards women's liberation, the first concrete steps were taken in 1961 when the *Society for Humane Abortion* was founded and birth control pills were approved by U.S. Food and Drug Administration (FDA) (Rosen, 2006).

It is impossible to lay out every key event that happened during this time, as well as the factors that led to the events, thus this subchapter will merely attempt to paint a general picture of the turbulent decade, drawing information from the writings of Betty Friedan (Friedan, 1963, 1998), Ruth Rosen (Rosen, 2006), Gloria Steinem (Steinem, 2012), Estelle B. Freedman (Freedman, 2006), Sara M. Evans (Evans, 1980, 2004), Linda LaRue (La Rue, 1970) and bell hooks (hooks, 1982). Drawing information from such writers' accounts is similar to the practice of consciousness-raising employed by feminist collectives of the Long Sixties. Consciousness-raising, a term coined by Kathie Sarachild, was a method used to raise women's awareness of their common problems by sharing personal experiences (Ahmed, 2017; Freedman, 2006;

Sarachild, 1970). Many CR groups were formed during the '60s to help women recognize their issues, who were previously suppressed into ignoring their problems. Gloria Steinem, one of the most prominent and controversial figures of second-wave feminism, wrote that women would gather and “make analogies with other groups marked for subservient roles in order to assist blocked imaginations” (Steinem, 2012).

Another boost that sparked the women's liberation movement came from President Kennedy, who believed unequal pay between genders was not only bad for women but for the whole economy. Supporting women's liberation would therefore both help his political campaign and be beneficial to capitalism. By passing laws, liberal politics also controlled how much freedom women - and black people - were given. Aware that women's votes helped him getting elected into office in 1960, Kennedy founded the *President's Commission on the Status of Women* and appointed Eleanor Roosevelt as chair in 1961 (Rosen, 2006). The commission issued reports that documented gender inequalities in employment and education, and consequently helped in the gender clause being included in the Civil Rights Act of 1964 (Zeitz, 2008). According to Title VII of the act ("Civil Rights Act," 1964), it was deemed unconstitutional to refuse employment or discriminate against applicants for their race, religion, or gender. Under Title VII, *Equal Employment Opportunity Commission* (EEOC) was created, directed by Herman Edelsberg. To women's dismay, Edelsberg ridiculed sex discrimination in employment and advocated that it distracted from the more important issue of racial discrimination (Rosen, 2006). While women demanded equal job opportunities, white men were concerned about losing their jobs to women. A *New York Times* article in 1965 suggested “de-sexing of the job market” was disadvantageous for women as well, as maids and Playboy bunnies would lose their jobs to men ("De-Sexing the Job Market," 1965). The government failing to enforce the law sparked the formation of *National Organization for Women* (NOW) by Betty Friedan in 1966. Friedan would later note that it was “more than a historical fluke that the organization of the women's movement was ignited by that law, never meant to be enforced, against sex discrimination in employment” (Friedan, 1998). NOW was deemed “the first high-level consciousness group” by co-founder Pauli Murray (Collins, 2009; Hartmann, 1989). By contrast, other members of NOW were not as keen on consciousness-raising as they believed change would not be achieved through talking but through action (Rosen, 2006).

It is difficult to separate the liberation movements of 1960s and '70s into different subheadings as they mostly fueled each other. According to Rosen and Friedan, "separate but equal" policy was not exclusive to racial segregation but to segregation between the sexes as well (Friedan, 1998; Rosen, 2006). NOW's protests of the EEOC were incidentally the first time the term "second-wave feminism" was used. Martha Weinman Lear coined the term in a *New York Times* article when she reported that members of NOW intruded a hearing of the EEOC, dressed in cocktail attires and holding up signs that read "A Chicken in Every Pot, A Whore in Every Home" (Lear, 1968). The women challenged that newspapers upheld gender inequality by separating the classifieds section and therefore ascribing certain jobs to men and others to women. They advocated that preserving such a division was against Title VII of Civil Rights Act of 1964.

The road for the second-wave feminists to protest sex discrimination at work was therefore paved through the racial equality movement. Although not as historically epochal as King's speech on the same day, Randolph said in his speech during March on Washington in 1963 that the revolution would not be confined to black people "nor is it confined to civil rights for our white allies know that they cannot be free while we are not" (Randolph, 1963). His sentiments read true in that, under American capitalism, no one could be free until everyone was free. In some ways, demand for racial equality was a demand for all sects of the population to be equal and inspired the rest of the liberation movements.

Another much grimmer reason WLM followed the racial equality movement was the misogyny women faced within the civil rights sphere. Rosen describes women's exclusion from civil rights movements as a result of increased anger and frustration. Faced with violent images of the Vietnam War on television and angered by the assassinations of John F. Kennedy, Malcolm X, Martin Luther King Jr., and Robert Kennedy, the civil rights and student movements would take a more militant turn and men of the social movements would often turn their anger towards women. Women were also often denied the stand in anti-war or racial equality demonstrations (Rosen, 2006). When Mary King and Casey Hayden, both white women and staff members at the SNCC, anonymously submitted a paper on women's role within the movement, chairman of the committee Stokely Carmichael tastelessly and infamously responded, "The position of

women in SNCC is prone” (Zeitzi, 2008). As the paper was anonymous, it was first thought to be written by black women. While women’s role in the SNCC was overlooked, Evans reported from an SNCC member that in every community there was an “out-spoken, understanding, militant mama” who was in charge of organizing voter registration drives and housing and feeding volunteers. Community “mamas” were usually black women and they often found themselves in the position to do “housework” for the community (Evans, 2004). In 1964, King and Hayden would circulate what they called “A Kind of Memo” that was focused on the issues and injustices regarding gender within the movement to women all around the country. By publishing the memo, that was also incidentally one of the first examples of underground media publishing, they separated themselves from the civil rights movement for racial equality (Evans, 1980).

As white women pulled themselves out of the racial equality movement, black women remained in between issue of race and gender. They were not deemed feminine enough by their white counterparts to be involved in the second-wave feminist movement and they were not seen as equals to black men either (Evans, 1980). Black women’s struggles were different than that of white women, who had better opportunities than women of color. Women’s liberation movement, therefore, had its shortcomings when it came to inclusion of women of color or poor women. While white women were fighting to be seen as equal to white men, black women had to fight oppression on two fronts. Unlike first-wave feminism, which was concerned mainly with voting rights, second-wave feminism was associated with a range of issues from demand for equal job opportunities to men, abolition of housework and abortion rights. To Linda La Rue, these were insufficient reasons to protest as she highlighted the difference as “the suffering and depravity of the *real* oppression blacks have experienced – can only be minimized in an alliance with women who heretofore suffered little more than boredom, genteel repression, and dishpan hands” (La Rue, 1970). La Rue wrote that while abortion was a matter of convenience for white middle-class women, to poor women, it was a decision on “the prudence of bringing into a world of already scarce resources, another mouth to feed.” When women living under different circumstances are boxed into a single category, the struggles of women of color, immigrants and poor women were ignored or discounted. Writing from the perspective of a black woman in 1970, La Rue also raised concern that white women who did not protest against



white men monopolizing jobs that excluded black people up until the 1950s, would not be sympathetic to the cause of black women's liberation. She argued that white women would take advantage of the system that would favor white people, whether they were male or female, over black people and thus women's liberation "not only attached itself to the black movement but did so with only marginal concern for black women and black liberation, and functional concern for the rights of white women". She differentiated black people's unjust oppression from white women's suppression. Carol Ehrlich agrees, writing on the women's liberation of the 1970s a decade later in 1980 that, "women's liberation has gained support from among a number and a range of women that it simply didn't have in 1970" (Ehrlich, 1980). She contended, because the liberation movement consisted of young, college-educated, heterosexual, middle-class white women until the 1970s, it was not until later that women that fell out of that very specific category would enter the restricted territory. She was correct in that consciousness-raising practices led to the formation of *North American Indian Women's Association*; and to the founding of *Gray Panthers*, an organization aimed to protect elderly women in 1970. While Ehrlich's account as a white woman is much more optimistic than her black counterparts, the reality was harsher. Feminist writer bell hooks wrote in the opening pages of "Ain't I a Woman" that (hooks, 1982):

"Contemporary black women could not join together to fight for women's rights because we did not see womanhood as an important aspect of our identity. [...] Consequently, when the women's movement raised the issue of sexist oppression, we argued that sexism was insignificant in light of the harsher, more brutal reality of racism. We were afraid to acknowledge that sexism could be just as oppressive as racism" (p.1).

The name of hooks' book is borrowed from anti-slavery advocate Sojourner Truth's groundbreaking speech of the same title in 1851. The aptly titled speech called out different attitudes white men had towards white women and black women born into slavery. Gloria Steinem enforced this separation of "women" from "black people", as well, subsequently ignoring black women. She distinguished the racial equality movement from feminism in her 1969 New York Magazine article, which was incidentally the first time the term "women's liberation movement" appeared in writing (Steinem, 1969).

Race and gender issues in employment led to Friedan stepping down as president of NOW in 1969. Friedan had called NOW “an underground feminist movement” but it was composed mainly of educated middle-aged, middle-class, Midwestern white heterosexual women pressuring the government from outside to abolish sex discrimination in employment. The reason Friedan deemed NOW “underground” was because members who had grown up during the McCarthy era had trouble trusting one another and had to hold meetings in secret. Their concerns were not unreasonable, either. In 1969, FBI began a mass investigation on feminists by infiltrating women’s liberation groups. A year later, they would report that women’s crime rates were increasing rapidly and overshadowing crime rates of men. Women’s crimes were, of course, holding protests and sit-ins (Salper, 2008). The same year NOW was formed, an actual underground organization, *New York Radical Women* (NYRW), were formed. The next year, two publications would sweep the nation: *Voice of the Women’s Liberation Movement*, the first newsletter of WLM published by Jo Freeman and *Notes from the First Year* published by NYRW. NYRW’s magazine was aptly titled as it sparked the publication of nearly five hundred feminist magazines and underground newspapers for the next five years (Rosen, 2006). NYRW was also the first group to consciously form CR groups (Evans, 2004).

Mainstream media controlled by white men was the main weapon American culture had against liberation movements. By distorting women’s image on television and in magazines, the *feminine mystique* could be upheld. There were simply not enough women in positions of power in media (Tuchman, 1979). To counter the vilification of feminists in media, radical feminists started a war on mainstream media in 1970. Around one hundred women gathered to stage peaceful sit-ins at the headquarters of magazines like *Newsweek* and *Ladies’ Home Journal*. Other magazines such as *Time*, *Life*, *Fortune* and *Sports Illustrated* were sued for discrimination. *The Feminist Press* was founded to control of the feminist narrative by publishing books concerned with women’s issues that would otherwise not get published. That same year, NOW published a satirical parody of *New York Times* (Rosen, 2006). The first feminist publications by Jo Freeman and NYRW often rejected the idea that WLM was exclusionary. In an issue of *Voice of the Women’s Liberation*, Shulie Firestone, who was also the co-founder of NYRW, would write: “There are only two divisions: Women for women all the way, and women who are afraid to be for women all the way” (Firestone, 1969). Firestone’s

comment, while meant to be uniting, also ironically ignored different voices within the movement.

In 1970, Truth's speech "Ain't I a Woman?" would lend its title to a white women's collective concerned mostly with women's health as well. *AIAW?* was one of the first underground women-owned newspaper publications in early 1970s. While most women's liberation organizations were based in major urban centers such as New York, Boston, or Chicago, *AIAW?* was founded in the somewhat more conservative state of Iowa. In a time most feminist publications were short lived, *AIAW?* survived for four years. When medical advice for self-administered abortions or breast self-exams were found too graphic, or rather "pornographic", by the press *AIAW?* was publishing through, the women of the collective founded the *Iowa City Women's Press* (Beins & Enszer, 2013). Over time *AIAW?* and subsequently *ICWP* increasingly came to consist of white lesbian women, which was an equally important step towards the gay liberation movement. While *AIAW?* is a lesser-known example of women's publications and not representative of all women's liberation efforts, it is a case that illustrates the unity of racial equality, women's liberation, and the gay liberation. After all, the gay liberation movement was launched in 1969 following women's liberation efforts, when gay men resisted police at the Stonewall Bar in New York. It is important to note that, however seminal *AIAW?*'s achievements were for women's liberation, a collective composed of mainly white women appropriating black women's concern of being excluded from the feminist movement confirmed black women's concerns that white women were taking over. White women were not only oblivious to other women's issues but their quest for liberation featured colonial undertones as well. Jane Mansbridge, member of the *Bread and Roses* collective of Boston, recalled in 1969, quoted from Flora Davis (1999): "We had the feeling that we were, like Columbus, sailing at the edge of the world".

In 1971, NYRW published the sequential volume of their magazine, *Notes from the Second Year* due to popular demand. That same year, Gloria Steinem founded *Ms. Magazine* with Dorothy Pittman Hughes. *Ms. Magazine*'s first issue sold around 300,000 copies (Evans, 2004). Other lesser-known publications would soon sweep the nation as well. Composed mainly of suburban communities, the population density in the Midwest was very low, therefore feminist

publications such as *AIaW?* were one of the sole ways that women could communicate through. With the exception of *Ms. Magazine*, most feminist publishers operated on very small budgets; and most magazines or newsletters were published and circulated underground. Radical feminists had a knack for visualizing their anger in their publications. The vibrant and rebellious visual language in radical feminist magazines can be likened to the “little magazines” of the period. Little magazines were avant-garde publications that originated at the turn of the twentieth century to challenge customary publishing (Marek, 2015). Melinda Knight wrote that first examples emerged in a “period of severe recession” during which “cultural radicals” attempted to “block out all those problems and create a more interesting environment for themselves” (Knight, 1996). Such magazines reemerged during the Long Sixties, often as architectural magazines, as the idea behind them appealed to the very beliefs of countercultural figures. In regards to little architecture magazines, Denise Scott Brown noted “they may attempt to follow in layout and graphics the same style that they preach in their content” (Brown, 1968). Beatriz Colomina likened little magazines to “portable utopias”, in which countercultural dreams could be realized (Colomina, 2018). Some of these portable utopias featured collages composed of advertisements cutout from glossy mainstream magazines pages (Steiner, 2000). Literally disassembling consumerism and assembling new worlds was a practice that inspired counterculture. Little magazines were “protagonists of a little revolution” in their own right (Amistadi & Prandi, 2018).

The visual language of radical magazines that was meant to shock and intimidate those who opposed feminism was also mirrored in the written material. Foul language offended not only anti-feminists but moderate feminists, too. Friedan, in particular, was disturbed by “the abusive language and style of some of the women, their sexual shock tactics and their man-hating, down-with-motherhood stance” (Friedan, 1998). As a materialist feminist, she argued economic imbalance was what needed to change and deemed sex-positivity in feminism was fun but not transformative (Friedan, 1998; Rosen, 2006). Jo Freeman’s “The BITCH Manifesto” that appeared in NYRW’s *Notes from the Second Year* had particularly offended older feminists like Friedan. NYRW would also form the humorously titled collective of WITCH (Women’s International Terrorist Conspiracy from Hell). Hierarchal orders were avoided in the innerworkings of the publications, and in the entire movement. Women’s liberation was planned

to be a collective effort and using it to celebrate one's own achievements was often frowned upon (Zeitz, 2008). Already a controversial figure by the time *Ms. Magazine* was founded, Gloria Steinem's name appearing as the pioneer of women's liberation irked other radical feminists. In 1975, radical feminist collective Redstockings published an exposé of Gloria Steinem, in which they claimed she worked for the CIA ("redstockings' statement," 1975). Although the claim was never confirmed, it was evident that McCarthyism had affected even young radical feminists who were born after the practice ended.

While it was a revolutionary time in women's liberation, second wave had its shortcomings. For one, exclusion of women of color and queer women had weakened the movement (Lorde, 2007a, 2007b). Fighting to be equal to white men, especially in employment, was another issue feminist theorists would have with this period (Krolokke & Sorensen, 2006). The movement had more streaks than the material feminism and radical feminism mentioned above.

One subcategory that this period of women's liberation and environmental movement bore was eco-feminism, which is based on the idea that environmental degradation and exploitation is rooted in women's suppression (Mellor, 1997; Warren & Cheney, 1991). Jytte Nhanenge describes eco-feminism as a concept "concerned with the connection between the unjustified domination of women, children, people of color, traditional people, poor people and the unjustified domination of nature" and summarizes it as a subordination of the Other (Nhanenge, 2011). As natural exploitation encompasses a myriad of issues from corporate exploitation of workers to extractivism, Ariel Salleh argues that "no other political perspective – liberalism, socialism, feminism, environmentalism – can integrate what ecofeminism does" (Shiva & Mies, 2014). While it would be inaccurate to ascribe the rise of the entire environmental movement to feminism alone, "it was American women activists", Rosen argues, "who first inspired young women to see the power of female protest", who then "began to make peace [and environment] a pressing issue" (Rosen, 2006).

## Environmental Movement

The rise of environmentalism in the Long Sixties differs from other liberation movements in a number of aspects. Unlike black people or women, environmentalists were not a group that had been suppressed or oppressed. Environmental awareness was only beginning to rise in the 1960s and was not on the governmental agenda of social engineering. Contrastingly, Andrew Kirk argues that the environmental movement of the counterculture attempted to create its own “alternative society” (A. G. Kirk, 2001). Environmentalism was a “self-reinforcing process” and not a “process that occurred in a vacuum” (Uekötter, 2014). Uekötter also argues that the environmental movement was more skeptical of enigmatic figures than the likes of women’s liberation and racial equality movement. While there were important figures that will be introduced in this chapter such as Rachel Carson, Gaylord Nelson, Stewart Brand, and the Club of Rome, they were not as transformational as the likes of Martin Luther King Jr. or Betty Friedan.

It would still be inaccurate to separate the rise of environmentalism from its connection to the feminist, anti-war, anti-nuclear movements. Anthony Giddens goes as far as to conclude that there was no environmental movements but “a diverse range of positions, perspectives, and recipes for action” (Giddens, 2009). He traces the rise of the environmentalist movement to the Industrial Revolution in the 18<sup>th</sup> century<sup>4</sup> and to the Sierra Club founded in 1892<sup>5</sup> but agrees that the social protests of the 1960s and ‘70s increased awareness with regards to environmental decay. Giddens also argues, in capitalistic fashion, the environmental movement of this period advocated that if economic growth lowered “the quality of life, which damaged the biosphere”, it would essentially be “uneconomic growth”. In other words, environmentalists of the time

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<sup>4</sup> In 18<sup>th</sup> century Britain, there was a strong opposition to curb air and water pollution and health concerns created by accelerated industrialization. This movement was fueled mostly by Romanticism and led to the formation of conservation groups to protect wildlife that advocated for regulation in industrial production. The movement soon spread to continental Europe.

<sup>5</sup> Sierra Club was founded in the United States in 1892 by John Muir. Sierra Club focused on preservation and conservation of wildlife and advocated for the establishment of national parks. Sierra Club was active throughout the 1970s as well, albeit continued to focus their efforts mainly on national parks and natural lands. The Club is still active at the time of writing, often organizing outdoor recreation activities to strengthen commitment to natural preservation.

suggested economic growth achieved at the expense of the environment and planetary health would be unsustainable economic growth in the long run. Supporting environmentalism through the lens of economic growth was a paradox. Economic abundance through industrialization fuels mass consumerism, which inescapably contributes to environmental decay. Mass consumerism was supported by the post-scarcity created by the postwar economic boom. The post-scarcity leisure society undeniably enjoyed the wealth and abundance granted by “the Good War” in the 1950s. Yet by the 1970s, economic growth slowed down. Plateaued economic growth widened the gap between upper and lower classes (Uekkötter, 2014).

Another turning point for the movement was when marine biologist Rachel Carson published *The Silent Spring* in 1962 (Musil, 2014; Santese, 2020). The book criticized the use of pesticides and the chemical industry overall. *The Silent Spring* starts with the dystopian description of a non-existent town that was once lively and pastoral. In Carson’s words, “a strange blight crept over the area and everything began to change. Some evil spell had settled on the community” and wiped out the birds (Carson, 2002). The “strange blight” and “evil spell” Carson was referring to was human impact on the environment.

Rachel Carson’s anthropogenic account came decades before the term of Anthropocene was popularized by Crutzen in 2000. The term is defined and dated differently by scholars, but to borrow Crutzen’s own definition, Anthropocene refers to the geological epoch that is characterized by “human dominance of biological, chemical and geological processes on Earth” (Crutzen & Schwagerl, 2011). Crutzen dated the start of the Anthropocene to late-18<sup>th</sup> century when the steam engine was founded (Crutzen, 2002; Crutzen & Stoermer, 2000). Steffen and Crutzen named the second stage of the Anthropocene as “The Great Acceleration” following World War II (Steffen et al., 2007). They argue, with the post-war baby boom; immense economic growth; rapid escalation of automobilization and airplane mobility; and industrialization gaining momentum were all contributing factors of human impact on the environment. While American public deemed World War II “the Good War” for its economic and technological prospects (Terkel, 1984), they were only becoming aware of its environmental consequences in the 1960s.

The rise of the movement can be attributed to a generational divide as well. To most men and women who experienced World War II, the atomic bomb symbolized the end of the war, while to the children of the boom years, it was a “threat of planetary annihilation” (Rosen, 2006). While there was a general agreement that the environmental and anti-nuclear movement rose to prominence in the ‘70s, Rosen also argues that the environmental movement was inspired by women activists. For instance, the earliest protest against nuclear weapons and testing was carried out by thousands of women and mothers in 1961, who argued that nuclear testing was “poisoning their children’s milk” (Rosen, 2006). Feminism and peace are inseparable concepts as both concepts critique “coercive power over privilege systems of domination” (Warren & Cady, 1994). The connection extends also to the environmental movement. The same way feminism criticizes women’s suppression and oppression; the environmental movement criticizes humans’ domination over nature.

Another convergence of anti-war and environmental movements appeared in 1969 when Greenpeace was founded by Bohlen and Stowe, who migrated to Vancouver to avoid being drafted for the Vietnam War (Santese, 2020). The same year, U.S. would face the urgency of environmental issues when the 1969 Santa Barbara Oil Spill occurred. The images of birds, beaches and the sea covered in oil on the news accelerated the movement and is cited as the beginning of the environmental movement by some accounts (Flippen, 2012; Spezio, 2018a). The spill marking the beginning of the movement can be traced to three landmark announcements and the events that followed them.

The first announcement was newly elected President Nixon’s declaration that the 1970s would be the “Environment Decade” upon visiting the site of the spill. A number of protection laws were instated in the next decade (Spezio, 2018b). Despite his strict anti-counterculture policies, Nixon had discovered that building his platform on environmental issues could help his reputation. On the first day of 1970, he signed the “National Environmental Policy Act” (NEPA); and at the end of 1970, he created the “Environmental Protection Agency” (EPA). From 1970 to 1972, Clean Air Act and Clean Water Act would be signed into law. These acts were meant to regulate industrial production in terms of air, surface water and groundwater pollution. Political gestures, as argued in the racial equality movement as well, were merely



gestures to satisfy the public and were not as transformative as they were advertised. By incrementally passing generic laws over the decade, the Nixon government could not realistically reach the speed of environmental decay caused by industrialization. Passing generic laws without enforcement led to superficial improvements. Regulation could not sufficiently reverse the environmental consequences of industrialization.

The second announcement was the establishment of the Get Oil Out (GOO) organization a few days later the spill. GOO prompted American public to drive less, boycott offshore drilling companies and gas stations, and burn their oil-company issued credit cards (GOO!, 2018). This anti-automobilization campaign was similar to *The Affluent Society* published by John Kenneth Galbraith a decade earlier, in 1958. *The Affluent Society* essentially criticized the modes of production but highlighted that mass consumerism and automobilization were polluting cities (Galbraith, 1998). GOO started a petition that aimed to ban offshore drilling and managed to collect over 100,000 signatures (Clarke & Hemphill, 2002). Whether the petition achieved a tangible victory is up to debate. While the organization undoubtedly raised awareness of the issue, offshore drilling continues to exist today. The oil spill in Santa Barbara was not an isolated incident, many more oil spills of greater magnitudes occurred before and since 1969. While physically of lower magnitude than its processors or antecedents, the Santa Barbara oil spill had achieved greater media and public attention.

The third and perhaps the most important announcement came from Senator Gaylord Nelson when he declared Earth Day a month after visiting Santa Barbara. In his speech of September 20<sup>th</sup> in 1969, he noted that he had confidence the youth would show the same concern for environment they did for Vietnam War and the civil rights issues. As Nelson depended on the youth to carry the torch for the environmental movement, he carefully selected date of April 22<sup>nd</sup> as it would not interfere with university students' final exams (Stoss, 1995). Some celebrations lasted a week, some were held as early as March (Rome, 2010). Although aimed at young people, Nelson wanted to avoid restricting the events to university campuses due to their association with anti-Vietnam War protests (Nichols, 1990). Overall, two thousand universities and ten thousand schools participated in the event (Schoon, 2016). The events gained national

attention and raised environmental consciousness across America. Although the event started in the United States, it gained popularity worldwide and is still celebrated to this day.

While Gaylord Nelson did not want Earth Day to be associated with anti-Vietnam War demonstrations, the ecological consequences of the Vietnam War inevitably concerned the environmentalist movement. During the war, the term “ecocide” was coined by a group of scientists which at the time referred to the “herbicidal warfare” campaign adopted by the U.S. Army in Vietnam (Zierler, 2011). More generally, the term means “the destruction of large areas of the natural environment as a consequence of human activity” (“ecocide,” n.d.). The herbicidal warfare referred most commonly to the use of Agent Orange, a mixture of two common chemicals that when mixed, created an ultimately deadly combination. Agent Orange was used in particular to eradicate forests of the Ho Chi Minh Trail in which Vietnamese troops were hiding (McElwee, 2020); and to obliterate croplands to ensure food deprivation and famine (EJAtlas, 2017). Beyond the atrocities of denying cover and food to their opponents, Agent Orange caused a myriad of health issues that are still affecting the people of the region. Even decades after the war ended, approximately one million people are still experiencing health issues such as cancer, birth defects, neurological and internal conditions among others (Anand, 2015). The heavy bombing led to the extinction of one of the eleven mammals that lived in the region and brought others to the verge of extinction (Brosch, 2002). In reality, the vastness and the depth of the consequences born out of this ecological warfare cannot be calculated fully. Another convergence of environmentalism and anti-war movement can therefore be traced to this ecological genocide rooted in social annihilation.

Stewart Brand, the founder of *Whole Earth Catalog*, which will be analyzed in the chapter of Technological Utopias: The Whole Earth Catalog, claimed credit for the establishment of Earth Day, albeit indirectly. According to him, it was “no accident of history that the first Earth Day, in April 1970, came so soon after color photographs of the whole earth from space were made” (Brand, 2000). Years before Earth Day was established, Brand held the belief that people could be unified to solve global issues if they saw an image of the whole earth. To pressure NASA to release the image, he designed pins that bore the question: “Why haven’t we seen a photograph of the whole earth yet?” in 1966 (Farman, 2020; Turner, 2006). His campaign led NASA to

publish the historical photograph of *Earthrise* in 1968. Brand's belief was accurate, the photograph soon became an environmental and cultural sensation, gracing the covers of *Life* magazine and the second edition of the *Whole Earth Catalog*. It is also often cited as the event that launched the environmental movement (Kilgore, 2003; Lazier, 2011; Lekan, 2014; Logan et al., 2020; Maher, 2004; McCray, 2013; Schoon, 2016). It can be argued, therefore, that Cold War that accelerated space exploration programs was partly accountable for the rise of the environmental movement in the '60s.

To state the concept of Whole Earth did not inspire Earth Day at all would be inaccurate. Brand's contribution to environmentalism was rooted in inducing consciousness that Earth was fragile, that its resources were finite and that its inhabitants ought to take better care of it. The idea of Whole Earth was to unify people; however, its contents were somewhat conflicting. While WEC was an important component of the environmentalist movement, Brand's opening words "we are as gods" in the first pages of the catalog were also "a motto that foreshadowed the rise of the Anthropocene" (Trim, 2016). Bonneuil and Fressoz argue that while humankind thought itself to be the "masters and possessors of nature", the Anthropocene is a sign of its impotence (Bonneuil & Fressoz, 2017). "We are as gods" was therefore a bold and self-important statement that hinted at Brand's inclination to put mankind above nature. In reality, the Whole Earth idea is colonial in its essence. Planetary health being deemed important as long as humans survive is not the holistic outlook Whole Earth preached; quite the contrary, it signified collective individualism.

Stewart Brand's ambitious yet anthropocentric understanding of nature is evident to this day. In the recent years, Brand has co-founded Revive & Restore organization which has been working towards "de-extinction" of animals like the long-extinct woolly mammoth (*Woolly Mammoth Revival*, n.d.). While this regeneration effort is compelling, if not admirable, it still alludes to the egotistical belief that "we are as gods". Brand also controversially advocates that nuclear energy will reduce greenhouse gasses; and that genetically modified organisms and crops will increase the efficiency of otherwise unsustainable agricultural practices (Gillespie, 2018). In the

recent years, he has been calling himself an “ex-environmentalist” but a conservationist<sup>6</sup> (Brand, 2015).

Another conflicting aspect of Whole Earth Catalog was that, while it was a “catalog of goods that owed nothing to the suppliers and everything to the users” (Brand, 1971c), it was modeled after a sales catalog and promoted consumerism to some degree. The project, therefore, was an early example of “green consumerism” (Wight, 2017), which can be defined as a “list of behaviors that are undertaken with the intention of promoting positive environmental effects” (Sachdeva et al., 2015). Green consumerism is a troubling oxymoron: On one hand, it is a means to promote the use of sustainable products over environmentally harmful products, while on the other hand, it is a process rooted in consumerism and capitalism (Kepner & Cole, 2013). It can be argued that a truly environmentalist approach would be to consume less. Dean Pettit and Jerry Sheppard argue that consumers that tend to participate in green consumerism do not do so out of concern for environmental issues but “because it makes them feel better or makes them feel like they are contributing and thus doing something for the environment” (Pettit & Sheppard, 1992). They also argue that individual efforts of green consumerism alone are not enough to reverse the effects of unsustainable consumerism, that systemic change and regulations on production are required instead. Of course, this informed awareness had not yet been established when Brand published the catalog in 1968. To Brand, changing the system would only be possible through “manipulating energy and information” (Kelly, 1988) and through self-sufficiency (A. Kirk, 2001).

Brand’s campaign that led to the publication of *Earthrise* did more than just influence the environmental movement but the anti-war movement as well. Unlike the *Mushroom Cloud Over Nagasaki* photograph taken by Lieutenant Charles Levy in 1945, which was a cause of celebration for the American public, *Earthrise* was an image of guilt and liability. Astronaut, author of *Earthrise* and self-proclaimed “cold warrior” William Anders would summarize the effect seeing the whole earth had on him as “This is the only home we have and yet we are busy

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<sup>6</sup> It should be disclosed that Brand claims this position on GMOs and being an “ex-environmentalist” in an interview with Will Hearst, chairman of the Hearst Communications, one of the largest and oldest media conglomerates in America.

shooting at each other, threatening nuclear war, and wearing suicide vests” (Sample, 2018). Both *Earthrise* and *Mushroom Cloud Over Nagasaki* appear in Time’s “The Most Influential Images of All Time” project.

The human impact in environmental deterioration would be analyzed further in 1970 by the Club of Rome. Composed of scientists, architects, engineers and economists, the group gathered in Rome “as an invisible college” to discuss “economic, social, political and natural” systems (Dukes, 2011). The group believed the planet was burdened by overpopulation and depletion of resources caused by Western civilizations’ overconsumption. To argue this, they commissioned a team of researchers from MIT to produce a forecast report that outlined when the human population and resources per capita would reach their peak. Using complex software for their time, MIT and the Club of Rome published their findings in *The Limits to Growth* in 1972, co-edited by Dennis and Donella Meadows. The forecast predicted the population peak would reach its peak in 2020, followed by unavoidable decline in resources, and therefore in population (Meadows et al., 1972). The report stated if the current exponential growth trends were not controlled, depleting resources would result in global famine and mass deaths. The group concluded that alternative, sustainable, ecological industrial and food production had to be adopted in order for the humankind to survive (Dukes, 2011).

Consequences of uncontrolled exponential population growth was not a newly unearthed fear. Thomas Malthus had advocated for a “universal law governing the relation between population and resource scarcity” in 1798 (Sandbach, 1978). Four years before the Club of Rome published *The Limits to Growth*, Paul Ehrlich published *The Population Bomb*, the cover of which noted “While you are reading these words, three children are dying of starvation – and twenty-four more babies are being born” (Ehrlich, 1978). Club of Rome’s analytically obtained results, however, were much more concrete than their predecessors. The forecast was also more alarming than the holistic Whole Earth idea or cheerful Earth Day celebrations. The solemnity of the report elicited adverse reactions from the media, which deemed it had “a socialist conviction” (Miscellany News) (Miegel, 1973) and was “empty and misleading” (New York Times) (Passell et al., 1972). The article in New York Times was published alongside positive and fervent reviews of the much more cheerful environmental books of *Whole Earth Cook Book*

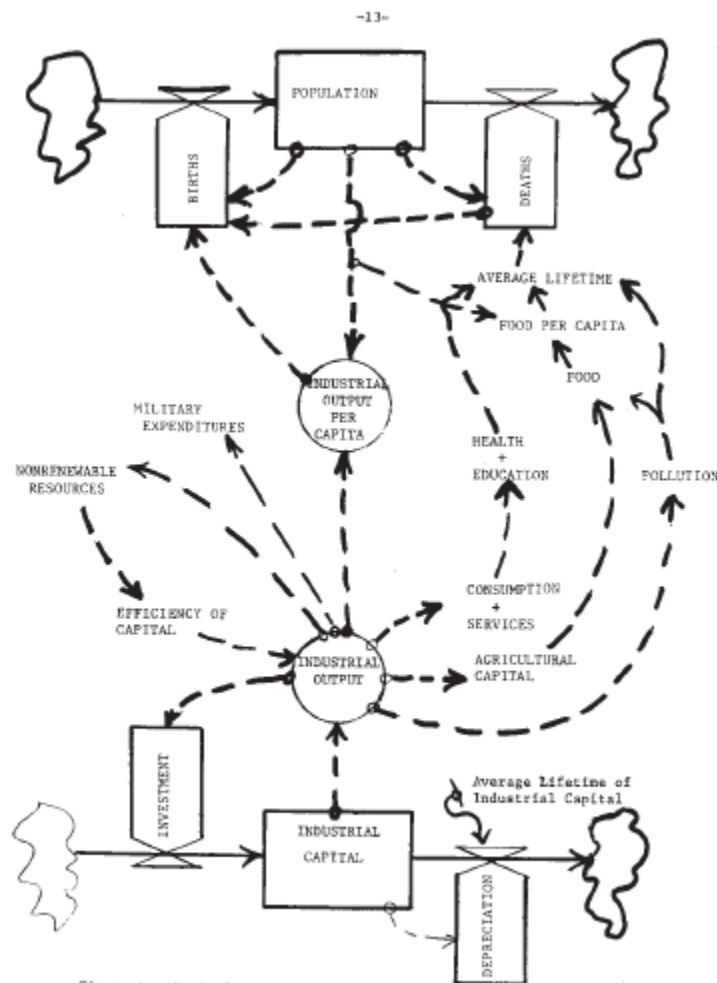
(Cadwallader & Ohr, 1972), *Peterson Field Guide to Birds* (Peterson, 1972) and *The House of Life: Rachel Carson at Work* (Brooks, 1972).

Distrust in new computer technology was another reason that obscured the gravity of the report's findings. The Miscellany News article quoted from Professor Norman Birnbaum of Amherst College that the *Limits to Growth* omitted "global distribution of wealth and the balance of power in the political world". This criticism was an anti-thesis of the Whole Earth idea prevalent at the time. Professor Birnbaum argued that social factors could not be analyzed through quantifiable analysis and computation (Miegel, 1973). Passell of the New York Times (Passell et al., 1972), too, condemned the use of technology in the analysis, calling the report a "rediscovery of the oldest maxim of computer science: Garbage In, Garbage Out". In actuality, the use of technology in the report strengthened its accuracy.

The report was not as cynical as the media portrayed it to be. One of the conclusions of *The Limits to Growth* was that if alternative modes of production were adopted immediately, humankind had the chance for survival. This conclusion may have relaxed its severity, however. The peak of devastation the report found was half a century into the future and did not elicit urgency among the American public (Sandbach, 1978). Sandbach likens the criticism of *Limits to Growth* to the criticism of Thomas Malthus in the 19<sup>th</sup> century, and quotes from Dr. H. McCormac:

"when the earth is crammed with human beings, the ocean with junks, and men grope in diving-bells over the beds of the sea for submarine food, or chase the birds in their native elements, some new Malthus of the then Church of England, may usefully employ his time and talents in devising means to check the prolific tendency of mankind, but not till then" (p. 497).

When the above text was written in 1830, denying the urgency of the problem and burdening future generations to solve the issues created in the past may have been sustainable in the short term. The Club of Rome, by contrast, presciently argued that there was no longer room for postponement.



**Figure 21.** Flowchart showing connections between population growth and industrialization. From MIT/Club of Rome, “Project on the Predicament of Mankind” prepared by Dennis L. Meadows in 1972 (McCray 2017).

Overall, environmentalists were not an isolated subcategory of the counterculture but organizations that led an entire nation of concerned people. According to former vice president of the World Wildlife Fund (WWF) Douglas Wheeler, “The changes in public consciousness were too pervasive and gradual to be captured by a single event in the way that Pearl Harbor, for example, stands for the advent of World War II” (Wheeler & Lea, 1990). The movement was not sparked by a single event, much like other civil rights movements. Again, just like the racial equality and women’s liberation movements were criticizing centuries of oppression and its consequences, the environmental movement was denouncing centuries of exploitation on

behalf of nature. While numerous white allies fought racism alongside black people, the racial equality movement was first and foremost led by black people. Similarly, women activists rose their voices and revolted to liberate themselves from patriarchy. Earth, however, needed its issues to be seen, heard, and voiced by humans, who had been exploiting and exhausting its resources for centuries. The concepts of Spaceship Earth and Whole Earth, while products of counterculture, were adopted by the whole nation.

This division in interested parties of the movements may be due to systemic oppression of black people and women by the American government. Black people and women getting higher education or reaching high positions in employment interfered with American policymakers' "ideal society". Yet environmental decay was somewhat disadvantageous for the American Dream as well. As Giddens argued (2009), economic growth that lowered "the quality of life" would be, to some degree, "uneconomic growth". Similar to patriarchy or racism, however, environmental deterioration was detrimental to the society yet benefitted the American government and large corporations.

In fact, large corporations such as oil companies, weaponry production companies, heavy industry, automobile industry, industrial agriculture and the pharmaceutical companies all benefit from environmental deterioration. Unregulated industrialization, exploitation of nature and cheap labor are all contributing factors for these corporations to grow exponentially at the expense of environmental collapse. Especially within the recent decade, to veil the actual environmental consequences, a performative and deceptive assemblage of "greenwashing" practices have been adopted, contributing to the weakening of the movement. The "green" approach appropriated by these corporations was a loophole to satisfy the American public. While racial equality and women's liberations have evolved and opened the doors for a variety of achievements after the 1960s, the environmental movement failed to achieve the same. In the last five decades, environmental issues grew exponentially beyond the point of return. According to NASA, even if greenhouse gases emissions were completely halted right now, global temperatures could still continue to rise for centuries to come (Bailey, n.d.).



As environmentalist and anti-war movements participated in peaceful teach-ins and celebrations, rather than provocative demonstrations, they were much more digestible for the American public as well. While radical or violent demonstrations often led to media marginalizing and vilifying political actions, the environmental movement successfully avoided that trap (Wight, 2017). Americans reacted more to optimism of the environmental movement than to the pessimism of liberation movements. Individual action, as argued above, made the public feel better that they were achieving something (Pettit & Sheppard, 1992). Wheeler and Lea point out that “Millions of individuals changed their everyday patterns of external behavior to reflect changes in internal values and consciousness” for the better (Wheeler & Lea, 1990). These performative behavioral changes were of course not sufficient in halting environmental deterioration. This digestible movement was not necessarily political or social like other civil rights movements were. For instance, Rachel Carson’s gentle and nurturing language when criticizing the human impact on environment was celebrated yet eco-feminists were regarded as defeatists. More controversial groups like the Club of Rome faced backlash from mainstream media as well, mainly due to their pessimism. Earth Day, by contrast, aimed to educate young people of environmental issues with cheerful celebrations. Again, Stewart Brand’s involvement in counterculture made him an overlooked character in the environmental movement.

The movement being digestible for the public was both an advantage and a curse. Thanks to the rise of the environmental movement in the 1960s, environmental awareness became universal; and urgency of the ecological crises became more evident. The movement unified people under a single cause, like Brand predicted. Awareness was undoubtedly invaluable. On the other hand, the movement encouraged people to be satisfied with insufficient individual or collective action. Individual actions such as recycling, which had been popular during World War II due to scarce resources, made them feel like they were achieving something good for the environment. It also relieved consumers of guilt. Recycling or “green consumerism” create a sense that goods are obliterated completely, as if they never existed in the first place. In reality, both production and recycling use enormous energy. Involvement in any kind of consumerism, whether it is “green” or not, was also only contributing to the issue at hand. Like regulation, awareness alone was insufficient in reversing environmental deterioration. Encouraged by people’s reluctance to participate in actual, constructive reform, policymakers like Nixon based their platforms on

environmental issues. The bills and laws that were passed were nevertheless inadequate in solving urgent issues. Unlike what came after other social movements, environmental victories in government policies were only incremental and not progressive enough.

When satisfied with their involvement in the environmental movement, American public soon lost interest in the issue. Anthony Downs (1972) argued that the American public did not have the attention span to stay focused on “any domestic issue for very long”. He noted that problems leapt “into prominence, [remained] for a short time and then [faded] from public attention largely unresolved”. He also correctly predicted that the issue of environmental deterioration would stay on the public agenda much longer than other movements due to its broadness and urgency (Kuzmiak, 1991). To Dunlap (1985), America’s commitment to the environmental movement was “miraculous”. The commitment in question was only surface-deep.

The surface-deep commitment of the environmental movement has now created a global paradox. The movement’s reluctance to demand actual action or ecological regeneration has been a gateway for greenwashing becoming a corporate fad in the 21<sup>st</sup> century. Many corporations from fashion companies to fast food chains have now co-opted greenwashing to appear more relevant and considerate. “Environmentally friendly production” or “eco-friendly” have become a misleading marketing scheme. Language and graphics carefully designed to deceptively evoke a sense of environmental consciousness adorn the advertisements and products of large corporations over the last decade. Commitment to sustainability has become common parlance, yet sustainability alone is not sufficient anymore. In reality, greenwashing only improves a company’s image yet has a limited effect on its operations. This paradoxical and deceitful practice also relieves the government and large corporations of responsibility; and instead, puts the burden of environmental conservation on the shoulders of individuals. Even the Zero Waste movement of the last decade, while helpful to some degree, is not sufficient by itself. Individual actions such as abandoning plastic straws or the Zero Waste movement unfortunately achieve very little when compared to exploitative industrial production.

The reason the movement “miraculously” lasted longer than others was partly due to its universality. Mainly, it was because environmental concern, at its core, is the fear of annihilation of humankind. For instance, Earth Day’s success partly lay in young people’s concerns for the

future they were to inherit. In actuality, Earth existed before humans did and will continue to do so in some form or another, even if humans become extinct. The ideologies of Spaceship Earth and Whole Earth that stemmed from *Earthrise* seemed like naïve and innocent concepts to unify people. Yet they were rooted in the anthropocentric practice of humans placing themselves at the center of the universe, with the “pleasure of imagining oneself piloting the whole system” (Bonneuil & Fressoz, 2017). In 1974, Marshall McLuhan proclaimed USSR launching Sputnik into space “created a new environment for the planet”. As soon as humans’ reach exceeded planetary bounds, into outer space, “nature ended and Ecology was born. ‘Ecological thinking’ became inevitable as soon as the planet moved up into the status of work of art” (McLuhan, 1974). R. Buckminster Fuller’s otherwise prudent statement of “a problem adequately stated is a problem solved” (Fuller, 1965) therefore did not satisfactorily apply to the case of the environmental movement. Environmental problems had been evident for centuries. In the 1970s, McLuhan may have described the problems; the environmentalists may have highlighted them; and the Club of Rome had analyzed them, yet the actual issues were much deeper than they could be identified at the time.

What the environmentalist movement of the 1960s overlooked was that the issue is a vicious cycle. Celebration of the planet or environmental awareness are not enough to erase capitalist greed. Overall, the environmentalist movement hoped to halt the decline of natural resources in order to save humankind and not necessarily the environment. This belief is still based on the idea that humans are the “masters of the planet”, that the human population needs to be saved. Essentially, the issue of the environment was and is systemic; rooted in capitalism and the greed it elicits; and ingrained in the entire history of humankind. Even today in the 21<sup>st</sup> century, we often lack the tools to understand how deep these issues are; to what extent they affect our daily lives and natural issues. Chemical warfare used in Vietnam War still haunting the region decades later is only one of the direct links between human impact and environmental decay. While the past of the environmental movement was colorful, the future looks dangerously bleak.

## **The Aftermath of Liberation Movements**

The Long Sixties were a turbulent decade of protests, unrest and demand for equality and justice. Each streak of the movement, including equally important but less relevant ones that were omitted from this study such as gay liberation, student activism and ethnic movements, among others, influenced each other. Each sparked the creation of another, both because each was incredibly influential and because they failed to address the concerns of all interested parties. Failure to be completely inclusive caused splintering and conflicting ideas within the movements, which served as their downfall.

All had one common enemy, however: the policies put in place by white, heterosexual, middle-to-upper class men. Mainstream media, as a catalyst for those policies, became a common enemy as well. Achievements of the racial equality and women's liberation, especially, were so transformative that they have afforded the next generations the luxury to take such achievements for granted (Rosen, 2006). By contrast, the environmental movement had failed to achieve the same transformative momentum.

### **3.2. SOCIO-SPATIAL UTOPIAS: COMMUNES**

Just as it is important to highlight that the political and social climate in post-war America served the basis for the explosion countercultural movements in the Long Sixties, it is equally important to outline the common beliefs of the counterculture to understand the explosion of communes in the 1960s. Communes built during this decade were based on the idea that every member would have equal rights and responsibilities, disregarding gender, race, or social class. As a counter practice to suburbs, some countercultural youth would reject the private and segregated suburban living and settle instead in communes. It is important to note that communes were not as widespread as suburban communities had become in the 1950s. Most people still lived in either suburbs or cities. Instead, communes became an ideal alternative for the youth of counterculture that wanted to practice equality and liberation from society. What is often called the first "hippie commune" is Drop City, which will be introduced and analyzed in the 4<sup>th</sup> chapter. This subchapter on communes as Socio-Spatial Utopias will instead briefly introduce

early examples of egalitarian communities of the 19<sup>th</sup> century and focus on the larger phenomenon of commune building that gained traction during the Long Sixties. More specific research on communes built after the 1960s was written about most extensively by Timothy Miller, former president of the International Communal Studies Association (Miller, 1992, 1999, 2002, 2019). Dolores Hayden has vastly researched and documented American utopian communal experiments, through a focus on gender equality (Hayden, 1977, 1978, 1980, 1981). Similarly, Dick Urban Vestbro has conducted a wide research on communes, with a specialized focus on gender equality in collective housing in Scandinavia (Vestbro, 1997, 2000; Vestbro & Horelli, 2012).

Farber argues that much like hippies, counterculture was interested more in creating an egalitarian and communal society rather than eradicating capitalism altogether, but the system adopted by countercultural communarians was inherently a more altruistic one in which there was little to no hierarchy (Farber, 2016). Intentional communities are often formed on the basis of a “set of ideological premises, overt or unstated, to which most members subscribe” (Kurtz, 1973). For countercultural youth, that set of ideological premises were based on the notion that American mainstream social structure and the American Dream were hostile; that a more egalitarian society without hierarchy was possible; and that the concepts of the liberation movements could be applied in a real-life setting.

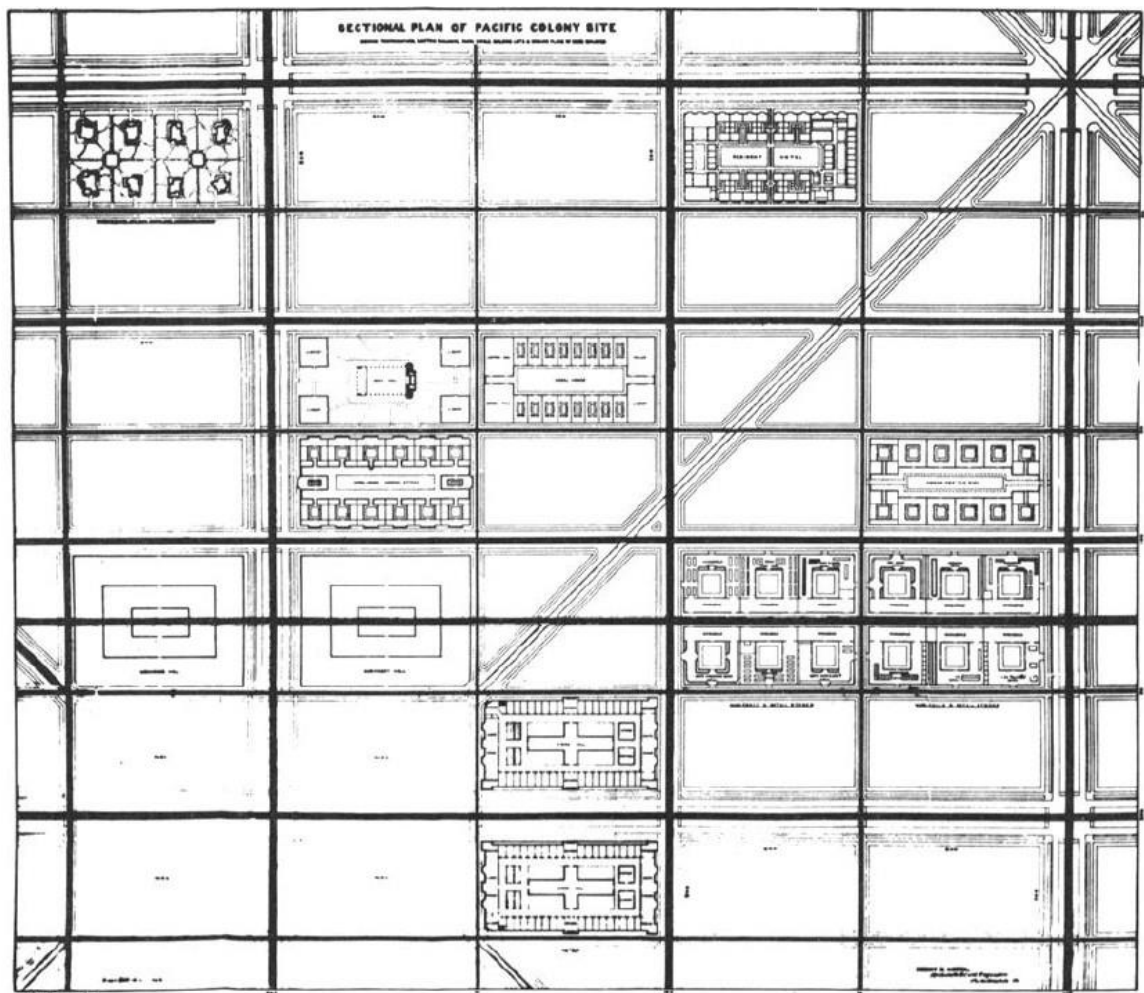
Although Drop City was called “the first rural” commune in media in the 1960s, commune-building was not a new practice nor was it exclusive to counterculture of the ‘60s. “Peaceable kingdoms” as Sorkin called communes, “were deliberate microcosms of a larger order, manifestations of a theory about perfection” (Sorkin, 2001a). The “peaceable kingdoms” Sorkin writes of refers to the 19<sup>th</sup> century American utopian communities, which ‘60s communes borrowed much of their composition from. Laurence Versey noted that the counterculture of the 1960s was inherited from the 19<sup>th</sup> century traditions of the Antebellum Reformism, Anarchism and Depression-era Socialism (Versey, 1973). He also accounted for the rise of communes during the 1960s to the decade’s resemblance to the 19<sup>th</sup> century counterculture.

Early utopian experiments prior to the 19<sup>th</sup> century were mostly focused on religion. In the first half of the 19<sup>th</sup> century, a number of secular intentional communities were formed that focused

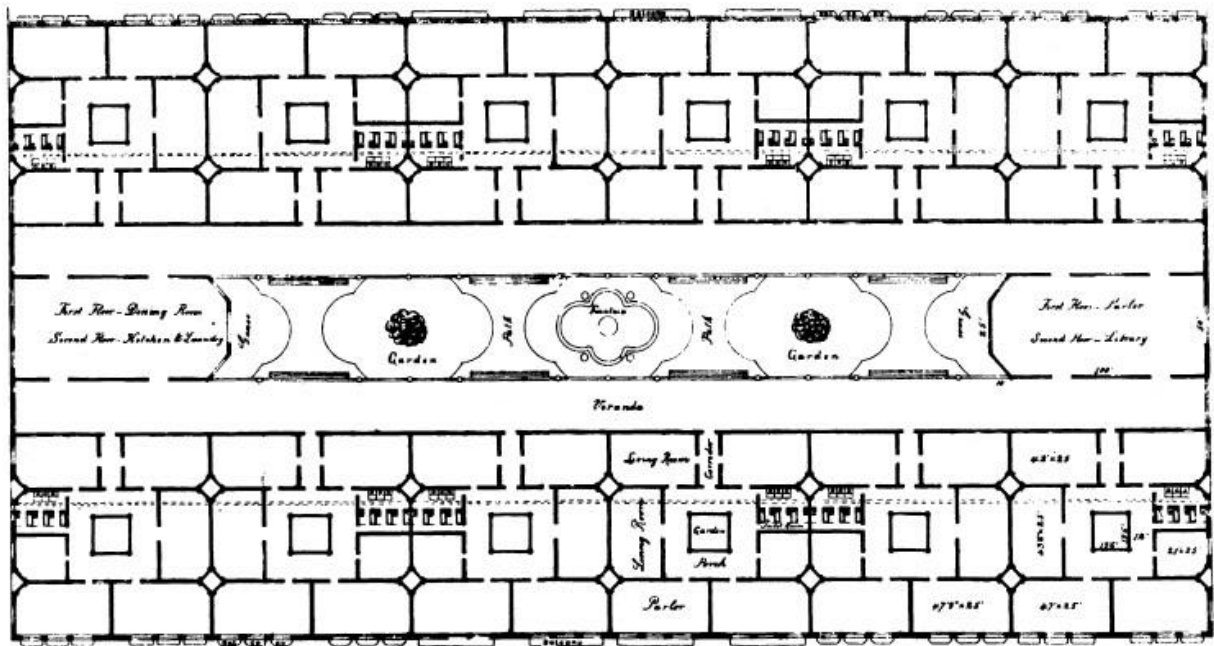
more on social reform with the aim to ease the inhumane living conditions that arose during the Industrial Revolution. Most prominent of these communities were centered in Europe. The earliest known example was in France where Charles Fourier conceived the *Phalanstère*, which was essentially a large palace modeled after the Palace of Versailles, in which approximately two thousand people would live and work together. Fourier never actualized his concept, neither did he plan to. When asked what a Utopia was, he had answered “it is the dream of good without the means to achieve it, without method” (Lallement, 2011). Although Fourier himself never attempted to build his concept, it was actualized in 1858 in *Familistère* by André Godin in Guise, France. A similar example called *New Lanark* was conceived in the United Kingdom by Robert Owen, that featured a ‘cooperative nursery’ to “form [children’s] dispositions to mutual kindness” early on (Hayden, 1981); and later in 1903 in Denmark by Otto Fick, with the idea to ‘collectivize the maid’ (Vestbro & Horelli, 2012). According to Sorkin, Fourierites and Owenites “believed their communities and their land were gifts to be perfected” (Sorkin, 2001a), thus all of these projects, while placed in rural areas, borrowed living arrangements from urban settings. Featuring communal kitchens and large dining halls, schools, libraries, and workshops; the projects were based on the idea that housework would be shared among men and women (Hayden, 1981; Vestbro, 2000; Vestbro & Horelli, 2012). Therefore, the main focus of such communities was communal and mutually beneficial production.

In the United States, the idea of communal living would be adopted in the second half of the 19<sup>th</sup> century by material feminists, rather than socialists. In 1868, Melusina Fay Peirce wrote a strongly worded article in *Atlantic Monthly*, in which she criticized women’s exclusion from industrialized capitalism and noted that women were forced to sacrifice their own talents in pursuit of unpaid reproductive labor (Hayden, 1981). To counter this regime, she proposed a community, which she called the *Cambridge Cooperative Housing Society*, where women would carry out housework responsibilities collectively in individual buildings designated for specific functions, such as cooking and laundry. Her proposal also called for wages for housework (Hayden, 1978). Kitchenless houses and centralized kitchens would serve as the basis of Marie Stevens Howland’s feminist utopia of *Pacific Colony*, designed in 1874. After having lived in Godin’s *Familistère* in France, Howland would bring the utopian idea to the United States, yet unlike the *Familistère*, which was a self-contained settlement, Howland hoped

to reform entire cities with kitchenless houses. Similar to a suburban settlement, *Pacific Colony* was set up on a grid plan (Figure 22). The colony was composed of both private dwellings and communal activities, just like its predecessors, however also featured pastoral flower gardens (Figure 23). Howland's utopia was also one that would practice free love, meaning marriages were not monogamous. As an early advocate for free love, Howland was "labeled as a loose woman" (Hayden, 1978). Her reputation did not help her case, and the *Pacific Colony* was never built.



**Figure 22.** Partial site plan of Pacific Colony by Marie Howland, Albert Kimsey Owen, and John Deery in Topolobampo, Mexico, 1885 (Hayden 1978).



**Figure 23.** Plan of a single block of twelve rowhouses complete with collective services and gardens, in Pacific Colony by Marie Howland, Albert Kimsey Owen, and John Deery (Hayden 1978).

An actualized commune that practiced free love, *Oneida Community* in New York, had just dissolved the same year Howland designed her utopia. Although a religious commune, *Oneida Community* banned traditional marriages and advocated only for complex marriages. Oneida's advocacy for sexual freedom also extended to employment and childbearing. While housework was taken up mostly by women, they could also choose to opt out of housework completely and choose to get involved in business deals or sales instead. Unwanted pregnancies were avoided as the community practiced male continence, and even if women chose to bear children, they still had the freedom to work thanks to the extensive child care services provided in the commune (Foster, 1991). The radical practices of *Oneida Community* were not widespread, and later communes rarely allowed women the same freedoms.

Commune building was not a practice that had risen in the 19<sup>th</sup> century to be abandoned later. By the time '60s counterculture had adopted communes to live in, many lesser-known communes were already built and operational. The idea of communes had appealed to counterculture as a counter to segregated private suburban or urban settings. Some newcomer communitarians settled in those earlier established communes, often taking over the existing



structure, instead of building their own communes (Miller, 1999). Others, like Drop City, chose to build their own communes from scratch.

Another reason communes came into prominence in the 1960s was the communal and celebratory spirit of hippie gatherings, which account for the colorful visual language associated with the decade. One of the most memorable gatherings was the “San Francisco Human Be-in” in early 1967. The event was attended by tens of thousands of people. Featuring a line-up of speeches by countercultural figures and performances by psychedelic rock bands, the event was a countercultural utopia. “Human Be-In” was when controversial psychologist, countercultural writer and psychedelic drug advocate Timothy Leary famously called out to the audience to “turn on, tune in, drop out” as well. The memorable quote, which he would later attribute to have come out of a fruitful conversation with communication theorist Marshall McLuhan, instantly became a trademark expression for the hippie culture. Ironically, the phrase would be parodied in media and advertising for many years to come. The original expression referred to “turning on” one’s own senses and consciousness; “tuning in” to the world around and “dropping out” of society and instead rely on one’s own self and mobility (Leary, 1990). “Dropping out” was not the inspiration behind Drop City, which will be explored in depth in later chapters, however the general idea of “dropping out” appealed to commune-builders.

Following the media attention of “Human Be-In”, San Francisco then hosted the Summer of Love in the Haight-Ashbury neighborhood half a year later (Braunstein & Doyle, 2002b). The neighborhood was already home to various countercultural figures, such as Beatnik poet Allen Ginsberg and musician Janis Joplin. Members of the psychedelic rock band Grateful Dead were living communally in an apartment in the neighborhood. Expecting a much larger gathering once the academic year ended, residents founded the “Council of the Summer of Love” in order to regulate housing and provide sanitation. The communal living and collective services made the event a short-lived commune. Attendees gathered under an egalitarian position like the residents of Charles Fourier’s *phalanstères*; and advocated for free love like in Carl Jonas Love Almqvist’s *Universal Hotel*. Unlike early modern utopias, however, the Summer of Love involved heavy psychedelic drug usage and acid rock music.

Both events strengthened the holistic “Whole Earth” or “We are All One” sense among hippies and more generally in counterculture. The attendees, however, were mostly white, middle-class, university students and children of affluent families. The similarities in their backgrounds helped them overlook their differences. Coincidentally, the event was attended by founder of *Whole Earth Catalog* Stewart Brand; members of Drop City (Curl, 2007); and was where Ant Farm was formed (Lewallen & Seid, 2004).



**Figure 24.** Crowd carrying a large model of the Earth in the Golden Gate Park, at the start of Summer of Love, 21 June 1967 (Associated Press 1967).

Commune-building had also appealed to the youth of counterculture because they believed gainful employment would become obsolete in postwar, economically prosperous America (Farber, 2016). With no reason to work for a living, communarians believed they could enjoy endless leisure time (Braunstein & Doyle, 2002b). Communal housework was also an idea rooted in expanding leisure time for women. If individual housework responsibilities were shared, the time allocated for such responsibilities would be shortened, as well. With spare time, women could develop themselves. In 1960s’ communes, both men and women were to develop themselves spiritually.

Hayden argues that the private suburban house in which the housewife was responsible for ensuring serenity and comfort “was the stage set for the effective sexual division of labor” (Hayden, 1980). Communal living was therefore the only way to abolish sex discrimination in the residential setting, and in employment. In that vein, while suburban settlements were “men’s utopias”, communes had the potential to be “feminist utopias”. As abolishing class division was not a main concern, all of the earlier communal experiences featured private living spaces, and only housework or labor functions were communal. According to Hayden, building communes in which a select number of women were able to share responsibilities was not enough, and that the practice had to be widened to entire cities. Patriarchy had to be changed systemically. Housework responsibilities being shared amongst women, while alleviating individual burden, was not enough in liberating women from the domestic setting either. Responsibilities had to be shared by both men and women.



**Figure 25.** ‘Straight’ families watching hippies on Haight Street, June 1967, photograph by Jim Marshall (Marshall 1967).

While the general idea in most '60s communes was similar, as in responsibilities would have to be shared among all members, the reality was different. Just as women active in civil rights groups would be ascribed as the “housewives” of the movement, stuck with menial bureaucratic responsibilities, so were the women of communes. As Drop City member Carol diJulio recalled in 2012, sexual division of labor within the commune was upheld just as it was in mainstream American culture (Grossman, 2012). While women were stuck with cleaning, cooking, laundry, childcare responsibilities; the men of the commune had given themselves construction jobs. Spiritual development and collectively “dropping out” were more important for most countercultural communarians. Most communes of the decade were founded by white men, who enjoyed advantages that patriarchy had given them. Erin Elder, while researching Drop City had encountered a commune builder who said, “the counterculture occupies a historical niche somewhere between a pernicious social virus and an amusing Halloween costume” (Elder, 2012).

Instead of reforming society from within, like Hayden was suggesting, commune residents chose to opt out of society altogether. Miller (1999) notes that most communarians, especially rural ones, “came to disavow overt activism” but the impact of the liberation movements was so transformative and embedded in counterculture, that whether involved in actual activism or not, the underlying beliefs of the movements had seeped into the communes. Egalitarianism and pacifism were at the center of communal ideology, as well the critique of mainstream society. Unlike some of the earlier modern utopias, hierarchy and private ownership were abandoned concepts in the communes of the 1960s. While private territories were allowed in some communes, most shared their living spaces as well.

Early utopian communes challenged the social norms but adopted the architectural styles of the cultures they opposed. Early European communes modeled their living spaces after palaces and American communes were configured to resemble suburban settlements. What separates the '60s communes from their predecessors, therefore is that they challenged not only social norms but conventional architectural forms, as well. The architectural language adopted by the 60s communes and collectives were almost exclusively inspired by R. Buckminster Fuller's geodesic domes, as they were unusual, boundless, and self-sufficient: the perfect physical

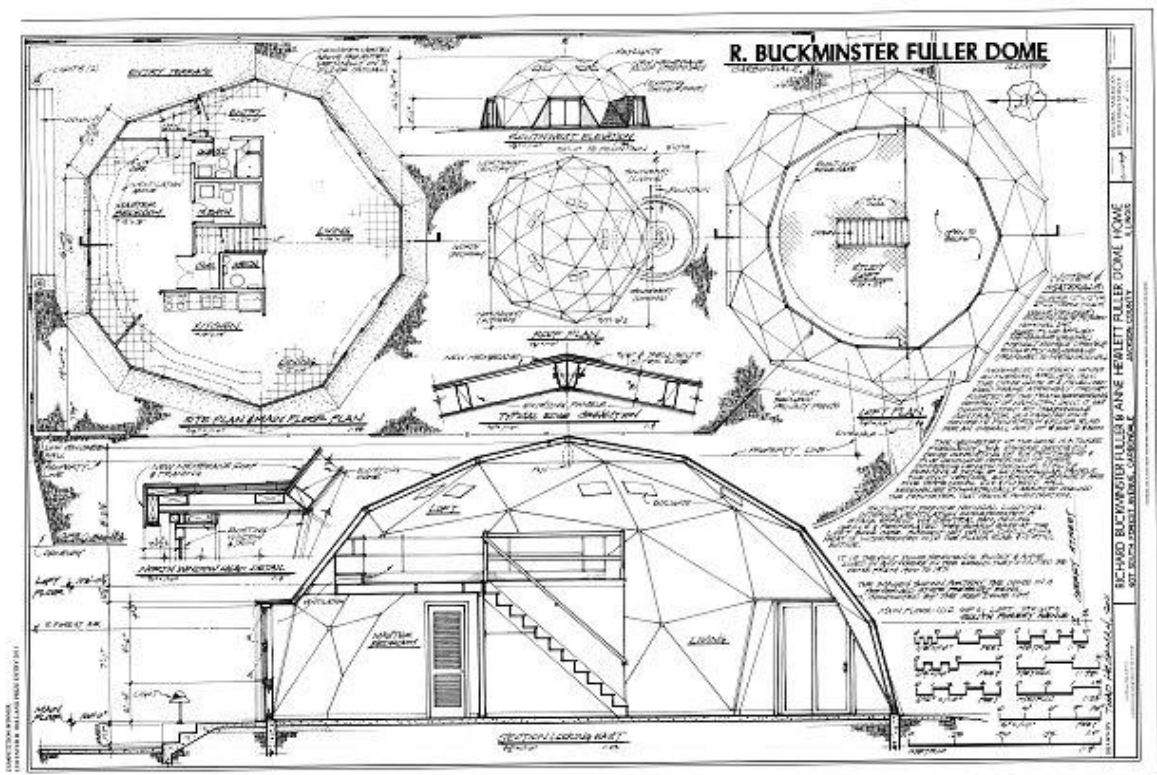
metaphor for a group of young people burdened by society's expectations. While some communes opted for teepees or similar easily assembled structures, the geodesic dome dominated the communal scene. One structure to function both as a roof and structural walls seemed to suit the idea behind dropping out. Domes were easy to build as well, which was another advantage for commune members who lacked construction skills and knowledge. As they were easy to build, the act of building became a communal and participatory practice. Communitarians built their living spaces together and were free to build whatever they desired. As the Drop City member Peter Rabbit writes in his memoirs, "it was obvious to the Droppers that the Drop City should be geodesic domes, and Bucky encouraged them" (Rabbit, 1971).

The fascination with domes as residential spaces and with Fuller lasted for a short period, until 1972, when a fellow counterculture icon, dome-builder and publisher of *Domebook*, Lloyd Kahn, discovered that Fuller was not the inventor of the structure but merely the first one to patent and advertise it (Scott, 2006). In fact, the first geodesic dome was built all the way back in 1922 in Germany by Walter Bauersfeld as a planetarium (Scott, 2007). Although disappointed by this discovery, most communes had already become aware of the shortcomings of the structure: The spatial freedom provided by the shape also restricted the residents when it came to furnishing the interiors. Scott also highlighted that while this fact was already obvious to architects, dome-builders were not knowledgeable or skilled in construction. This lack of know-how also meant that the domes were not rainproof and leaked whenever it rained (Scott, 2007). There is, however, little proof of Fuller ever intending to advocate geodesic domes to be actually realized or to be utilized for residential purposes. Fuller himself lived in a geodesic dome for some time, but he was admittedly more knowledgeable in dome-building. Fuller had also proposed a geodesic dome stretching over the entire borough of Manhattan, in his self-explanatory project "Dome over Manhattan", as a means to shield the city from the sky and to filter light, dust, rain, snow, pollution, and sound (Kurgan, 1997).

R. Buckminster Fuller, born in 1895, was an inventor, designer, and an author but first and foremost a futurist and a theorist. He was a beloved yet controversial figure, having developed and patented many structural and social concepts, such as Spaceship Earth, a term that in a way helped shape the environmentalist outlook of the 1960s. The term, much like the geodesic dome,



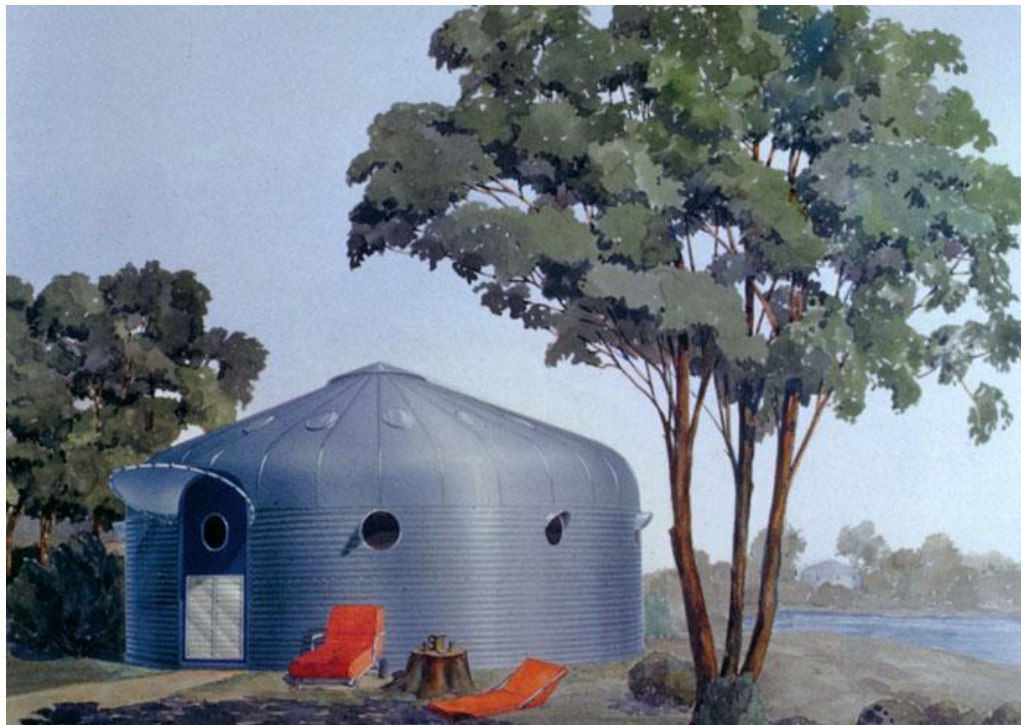
was not coined by Fuller himself but popularized by him when he published “Operating Manual for Spaceship Earth” (1968). Fuller alluded to the geodesic dome to be a revolution by design, solely a suggestion to offer spontaneity and challenge the rigidity and cubic-like qualities of architecture. Therefore, when the dome was adopted in a repetitive fashion by communes, it had become a paradox in itself.



**Figure 26.** Plans and sections of R. Buckminster Fuller and Anne Hewlett Fuller Dome Home, Carbondale, IL, 1933 (Arzola 1960).

The concept of “doing-more-with-less” and revolution by the way of design in Fuller-esque thinking seemed to align with the ideologies of anti-war protests and environmental movements (Scott, 2006). It was therefore ironic that domes had been adopted by the military decades before they became the countercultural architectural language. Fuller was trained at the U.S. Naval Academy and often resorted to military vocabulary in his writings and designs. In 1928, he had designed the Dymaxion House, which was reintroduced as Dymaxion Deployment Unit (DDU) in 1940 during WWII. This conflicting use of domesticity and militaristic language in the name was evident in the design. Fuller reintroduced the house as an easily and quickly built shelter

that would be placed sparsely in rural areas “to reduce national vulnerability to air attack” (Colomina, 2006). When DDU was exhibited at MoMA in 1941, the press release noted that the structure “might be used for defense housing, evacuation dwellings, army barracks, or in peace time use as a beach or guest house” (MoMA, 1941). The press release also stated that the rounded surfaces of the house, which were similar to surfaces of the geodesic dome, could deflect “bomb fragments or flying debris”. Had the Dymaxion House been designed for the first time during the war, this confusion between militaristic outlook and domesticity would be understandable. In a period burdened with a shortage in housing stock, Fuller’s proposal stood as an alternative to suburban settlements. As a self-sufficient bomb shelter that doubled as a stand-alone house, the Dymaxion House could very well be adopted by the communes instead of the geodesic dome. DDU was more difficult to construct; nowhere as lightweight as the geodesic dome; and lacked the holistic feeling of the dome. Domes becoming the vernacular language for pacifist communes is, in a way, a reclamation of the form. Anthony Vidler noted that sociologist-turned-artist John McHale wrote Fuller was not only “the man with the dome-house bug” but instead a “phenomenon which lies outside the customary canons of architecture,” (McHale, 1956; Vidler, 2008).

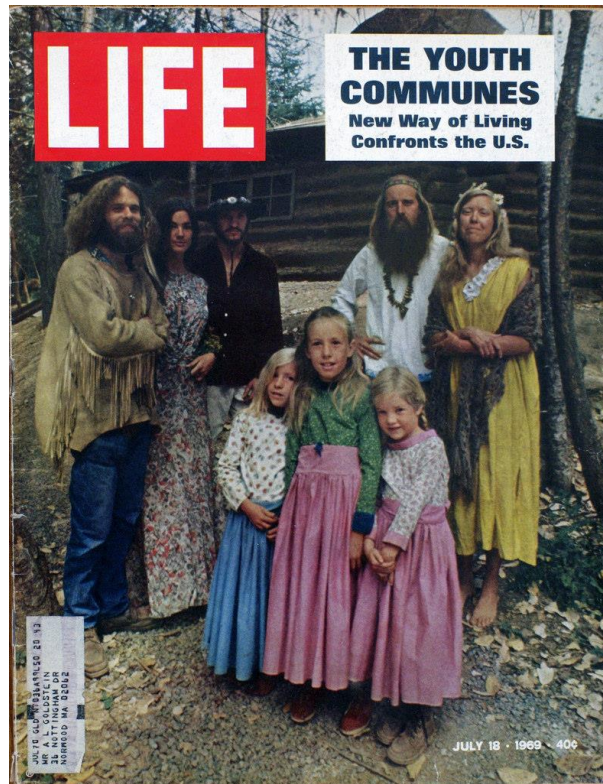


**Figure 27.** Dymaxion Deployment Unit (DDU), 1940 (Kaal, n.d.).

Another reason communes gained popularity in the 1960s was the vast media coverage of communal life. In the beginning of the “communal stream” which started around 1968, communes would mostly be featured in underground publications, such as *Modern Utopian* magazine, founded by Richard Fairfield in 1966. Shortly after, the colorful lives of countercultural youth would grace the covers of magazines like *Time* and *Life*. Media, which had been the lawmakers’ main weapon to ensure a one-dimensional society, was fascinated with communes (Miller, 1999). Scott reports from dome-builder Lloyd Kahn that during the Haight-Ashbury days in 1968 “the media discovered that domes photograph well. They look exciting, colorful, new” (Scott, 2007). In addition to photographing well, the idea of the communes was extreme and therefore fascinating to the individualistic, consumerist Americans.

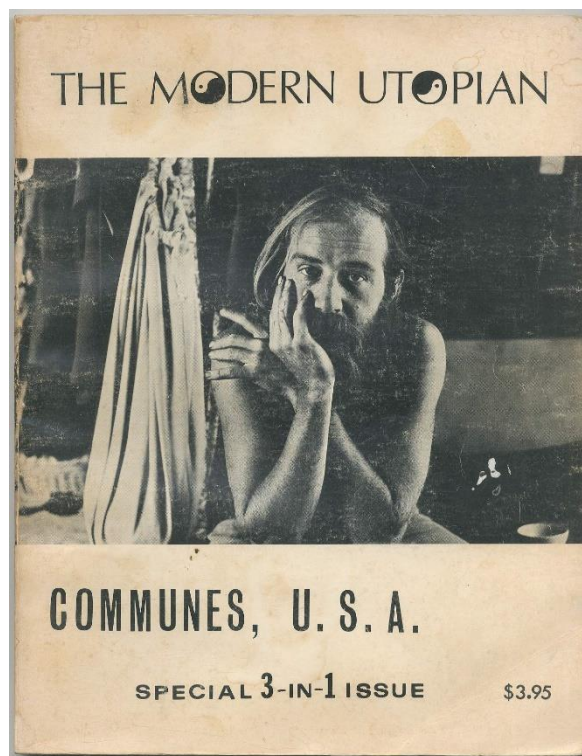
While exploiting the colorful nature of communes, media was often merciless in the language used to describe them. Most magazine articles on communes were concerned with the presence of nudity or drug use, often deceptively. Ridiculing communes by using hostile language was a propaganda technique similar to what was adopted during the McCarthy years. Mainstream media coverage also avoided distinguishing between different communes, that is, every commune was seen as filthy and bizarre, with members being depicted as drug-addled nudist hippies (Miller, 1999). Popularity for communes was not ideal, either. As most had an open-door policy, members could not turn away visitors or prospective members. In a July 1969 issue of the *Life* magazine (Figure 28), between the pages of automobile advertisements, an article titled “The Commune Comes to America” featured full-sized photographs of the *Family of the Mystic Arts* commune, showing the members bathing in a creek or building teepees (Stickney & Olson, 1969). The article notes that a “threat is unwanted visitors – the sightseers from ‘straight’ society and the weekend hippies who descend upon them to freeload” and that the commune members specifically asked the reporter not to disclose the name or the location. Nevertheless, hundreds of hippies from all around the country flocked to the commune, most likely identifying the location from the photographs, leading to the commune’s decline (Miller, 1999). Drop City’s dissolution, too, was due to the popularity it gained through media.



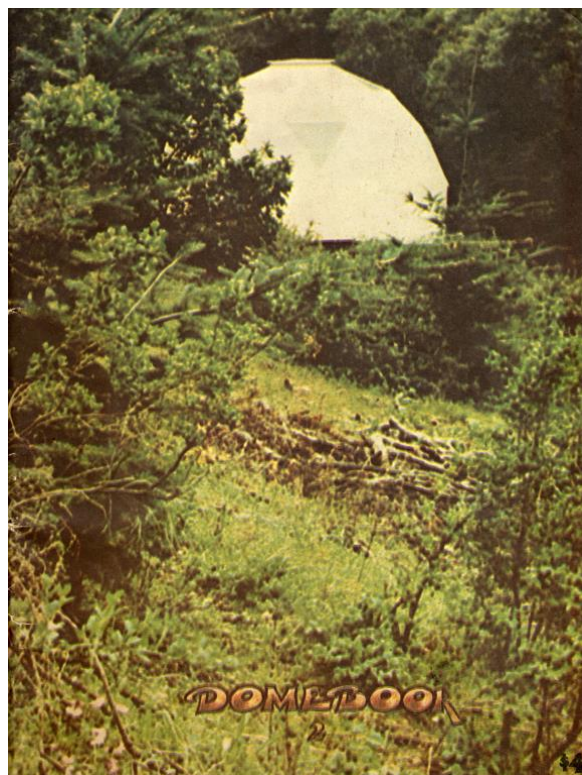


**Figure 28.** Cover of Life Magazine, 18 July 1969 issue (Stickney & Olson 1969).

By contrast, Fairfield's coverage in *Modern Utopian* was not aimed at shocking 'the straight society' but instead acted as a newsletter to a network of communes (Figure 29). The magazine featured commune-related or dome-related news, interviews with countercultural figures or community members. It was a space for the communities to broadcast to other communes of internal happenings, news, or information. A year after *Modern Utopian* began circulation, Steve Baer would publish *Dome Cookbook* and Lloyd Kahn the *Domebook* (Figure 30), however neither was aimed at communes specifically but instead for dome enthusiasts. Many communes published their own newsletters, too, although none were circulated as widely as *Modern Utopian*. This early example of social media would be replicated two years later by Stewart Brand when he founded the *Whole Earth Catalog*, co-edited by Steve Baer of *Dome Cookbook* and Lloyd Kahn of *Domebook* (Sadler, 2008). The *Whole Earth Catalog* featured news and advertisements not only for communes but for the entire counterculture and alternative lifestyles. If the *Modern Utopian* was a social media outlet for the counterculture, the *Whole Earth Catalog* was the internet.



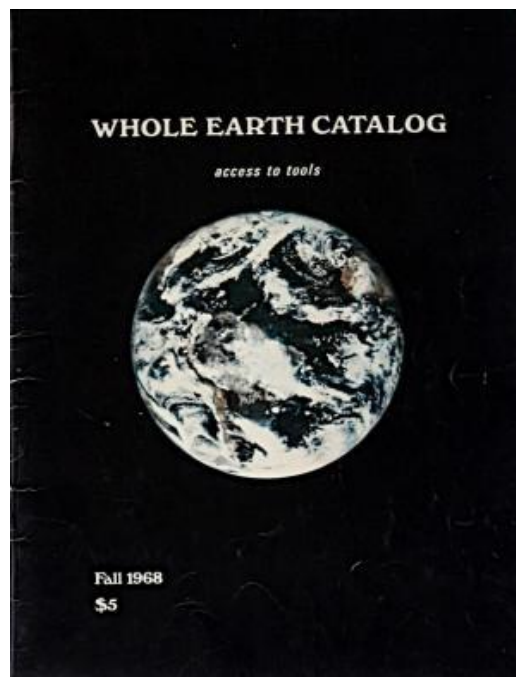
**Figure 29.** Cover of The Modern Utopian, vol. 5, issue 1, 2, 3. 1971 (Fairfield 1971).



**Figure 30.** Cover of Domebook 2. 1971 (Kahn 1971).

### 3.3. TECHNOLOGICAL UTOPIA: THE WHOLE EARTH CATALOG

Perhaps the most visionary project of the time, *Whole Earth Catalog* (Figure 31) was founded in San Francisco in 1968 as the brainchild of one of the most influential figures of the period, Stewart Brand. The catalog was modeled after an L.L. Bean Catalog and featured a collection of product reviews of anything that could be deemed useful to those prescribing to countercultural ideals, ranging from books to agricultural utensils to computer equipment or camping gear (Figure 32). It also featured articles on ecology, individualism, and do-it-yourself culture. When Roszak described counterculture for the first time in his book “The Making of Counter Culture” in 1968, the same year *Whole Earth Catalog* was founded, he argued that the movement was “inherently anti-technology and anti-science” (Roszak, 1968). Contrastingly, Kirk noted that Brand wanted to “create a service that would blend the liberal social values and technological enthusiasm of the counterculture with the emerging ecological worldview” (Kirk, 2007). In fact, subtitled “Access to Tools”, the magazine has set a precedent for the world wide web and acted like a guide for the youth much like the basic Google search of our day. In 1985, Brand and his team took even the publication online and created what they called the WELL – the *Whole Earth 'Lectronic Link* (Turner, 2006).



**Figure 31.** Cover of the first Whole Earth Catalog, Fall 1968 issue (Brand 1968).



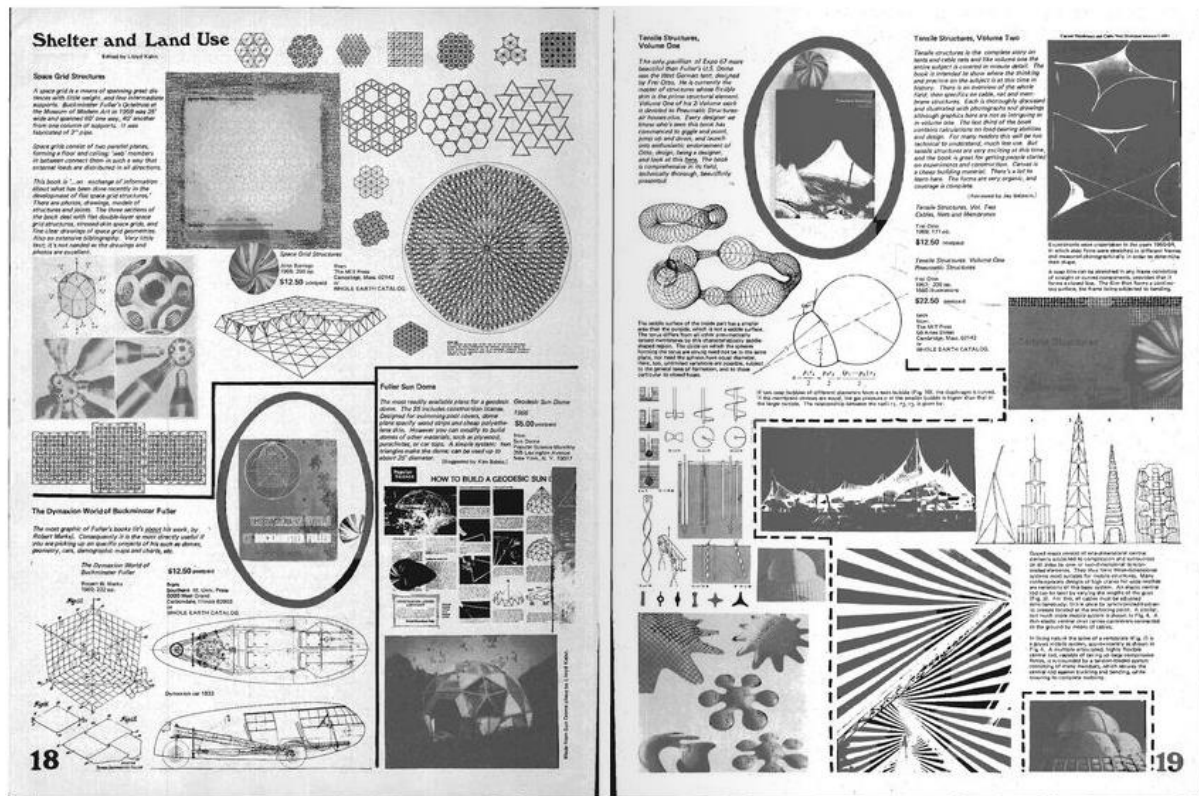


Figure 32. Shelter section of the first Whole Earth Catalog, 1968 (Brand 1968).

The *Whole Earth Catalog* was an exact model of a techno-utopia, which can be defined as the belief that technological advancements would create an ideal society. Langdon Winner described techno-utopian ideology as the belief that “new technology will bring universal wealth, enhanced freedom, revitalized politics, satisfying community, and personal fulfillment” (Winner, 1997).

R. Buckminster Fuller inadvertently participated in the belief that technology would liberate people and bring universal health, as well. He would state in a panel in 1970 that “one in ten thousand of us can make a technological breakthrough capable of supporting all the rest” (Barlow, 1970). Fuller was an inspiration not only for the communes of the Long Sixties but also to Stewart Brand. When the idea for the catalog first came to Stewart Brand, he scribbled his plan on the margins of his copy of “Spaceship Earth” by economist and environmentalist Barbara Ward, a book urging the world population to unite to care for one another and the planet

(Kirk, 2007). Although not coined by R. Buckminster Fuller, the term was popularized in his book “Operation Manual for Spaceship Earth” (1968). The first page of the first issue of the *Whole Earth Catalog* reads, alongside advertisements of his books: “The insights of Buckminster Fuller are what initiated this catalog. [...] Fuller’s lectures have a raga quality of rich nonlinear endless improvisation full of convergent surprises” (Brand, 1968). Brand was inspired by Fuller when it came to rioting against the norm as well. In the opening pages of “Spaceship Earth”, Fuller denounced conventionality by writing:

“Because our spontaneous initiative has been frustrated, too often inadvertently, in earliest childhood we do not tend, customarily, to dare to think competently regarding our potentials. We find it socially easier to go on with our narrow, shortsighted specialization’s and leave it to others – primarily to politicians – to find some way of resolving our common dilemmas. Countering that spontaneous grownup trend to narrowness, I will do my, hopefully ‘childish’ best to confront as many of our problems as possible” (p. 1).

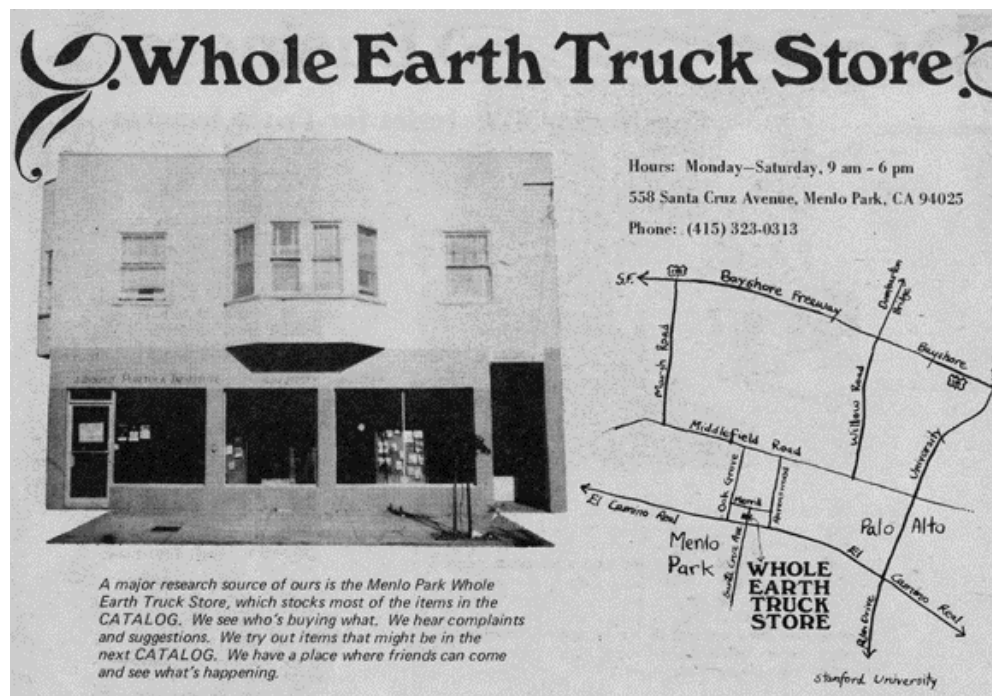
Brand would open the *Whole Earth Catalog* in a similar vein (Brand, 1968):

“We are as gods and might as well get good at it. So far, remotely done power and glory – as via government, big business, formal education, church – has succeeded to the point where gross obscure actual gains. In response to this dilemma and to these gains a realm of intimate, personal power is developing” (p. 1).

The dilemma of governmental oppression that troubled both Fuller and Brand would only be overcome by suggesting alternatives to what the society had grown accustomed to, which was the very basis of ‘60s counterculture as well.

The original concept was not a manual, but a traveling information point for counterculture. Brand had spent the earlier years visiting intentional communities and wanted to create an information system for the network of communes. He and his wife first purchased a truck, which they called “Access Mobile” and visited hippie communes to sell samples of items they deemed were beneficial. Brand then settled on a “catalog, continuously updated, in part by the users” (Baldwin & Brand, 1986). The catalog was meant to be a “survival guide” for “hippie environmentalist spacemen” (Winner, 1980). Brand explained the mission of the catalog a few years later, “If [the commune dwellers] were going back to the basics, they needed to know what the basics were” (Turner, 2006). A magazine that would feature useful information for

communes had been established two years before when Richard Fairfield founded the magazine *Modern Utopian*, but participatory editing practice of Brand's catalog was a new concept. Just as countercultural figures built communes together as a spatial realm of their ideals, Brand hoped they would write together to build the *Whole Earth Catalog*. The participatory mission was in part due to Brand's insufficient knowledge of the basics that commune dwellers needed. Instead he created a "node of a network of people purveying it to each other" (Fulton, 1994; Turner, 2006). In order to gather information on what communes needed and their feedback on the products, Brand also founded the Whole Earth Truck Store, which stocked the goods that were advertised in the catalog (Brand, 1968).



**Figure 33.** Advertisement for the Whole Earth Truck Store in Whole Earth Catalog (Brand 1968).

According to Sadler, the aesthetic choices made of the catalog, "a collage of content, set between iconic images of the Earth" – signified to the readers that they could "construct the world by knowledge, experience" as well (Sadler, 2008). Thus, participating in the Whole Earth movement did not require submitting advertisements or articles to the catalog: Each reader could engage in the "portable utopia" by merely reading the catalog. In countercultural fashion, the catalog was self-published on low-quality paper, stapled together by hand. They were unusually

large in size and therefore demanded attention (Kirk, 2007). Alternative technologies and alternative energy systems such as solar power panels and windmills were the most frequent advertisements featured in the catalog. Besides advertisements for countercultural products, the catalog included articles on architects that incorporated technological innovations in their designs, such as R. Buckminster Fuller, Paolo Soleri, Moshe Safdie (A. Kirk, 2001).



**Figure 34.** Collage depicting the “Whole Earth” holism of Whole Earth Catalog in the Last Supplement to the Whole Earth Catalog (Brand 1973).



As a prominent figure of counterculture, it was ironic that Brand was not anti-war but controversially pro-war. He had willingly enlisted in the U.S. Army after having graduated from Stanford University in 1962. His enthusiasm for war and the military did not fade over time, either. In an interview with Andrew Kirk in 2007, he recalled, “I did not care about Vietnam. I was in the military and trained troops to go over there. I wanted to check it out, but it was too early” (Kirk, 2007). This controversial thought, Kirk argues, was rooted in Brand’s belief that communism was “a threat to freedom in general and his personal freedom in particular.” Enthusiasm for war was evident in the advertisements for military surplus gear in the catalog as well (Turner, 2013). Again, contrastingly, the idea behind *Whole Earth* was that organized politics and governmental interventions should have been eradicated and that individual action should be favored. In an earlier interview with Katherine Fulton, Brand recalled, “I didn’t want to go fight. I wanted to go see it. And since I couldn’t go to see it, I didn’t believe anything I heard about it” (Fulton, 1994), hinting that he was not actively advocating for the Vietnam War but was apathetic towards it due to his distrust of politicians and media. Fulton also described Brand as a “product of the ‘50s”. Born at the start of the Second World War, Brand had grown up during a time the war was referred to as “the Good War”. The narrative of WWII had complicated the outlook on the Vietnam War for many people. In a series of interviews on the WWII, Studs Terkel reported from an ex-admiral (LaRocque; Terkel, 1984):

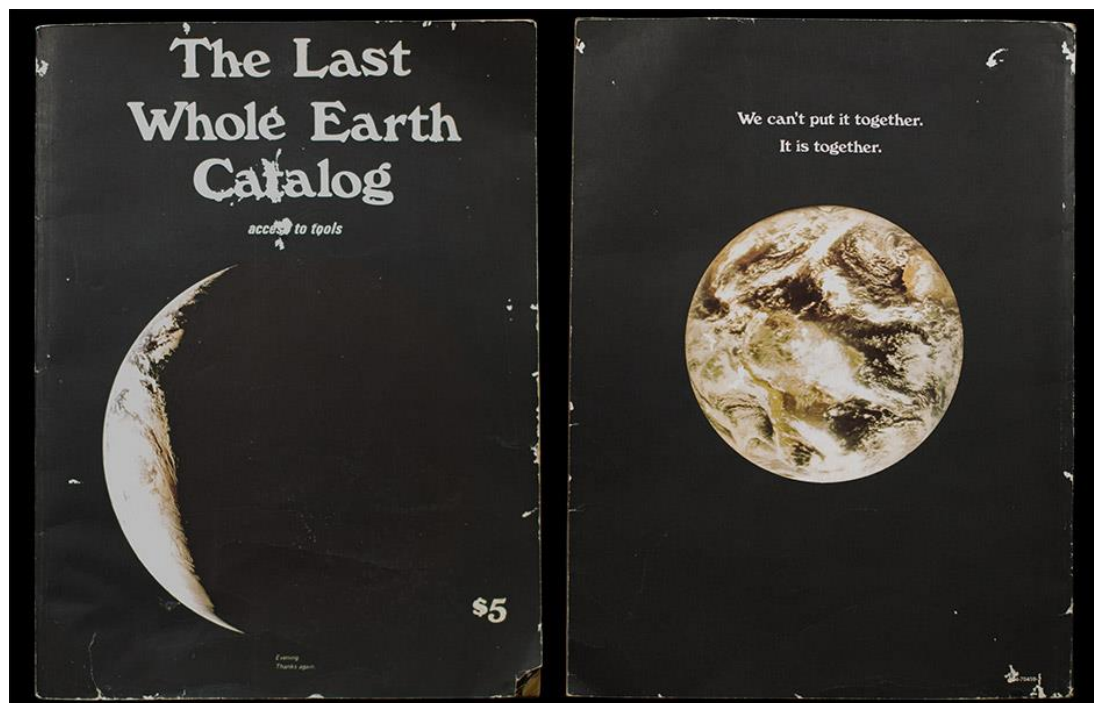
“World War Two has warped out view how we look at things today. We see things in terms of that war, which in a sense was a good war. But the twisted memory of it encourages the men of my generation to be willing, almost eager to use military force anywhere in the world” (p. 189).

On the fiftieth anniversary of the catalog’s publication, Stewart Brand stood before a crowd of countercultural retirees and claimed that he hoped “the sense that somehow the ‘*Whole Earth*’ is Stewart Brand” would now be abandoned (Wiener, 2018). While he was a frontrunner of the *Whole Earth*, the idea was meant to unify people instead of rising him to fame. The catalog was also co-founded by his then-wife Lois Brand and co-edited by authors of dome cookbooks Lloyd Kahn and Steve Baer, although they are hardly ever credited. He also complained that there were magazine and newspaper articles blaming him “for everything, from sexism in the back-to-the-land communes to the monopolies of Google, Amazon, and Apple”. While there is no evidence documenting Brand’s sexism within the movement, there is also no overt evidence that



he believed in gender equality. There were rarely any women shown in the pages of the catalog and even when there were women, they were seen “sitting in on meetings watching men speak, or as part of a male-female couple living on a commune, or giving birth” (Turner, 2013).

Blaming the sexism in communes on Brand or WEC would not be completely accurate, however. Brand was inspired to create the Whole Earth Access Mobile after having visited Drop City with his wife in the commune’s early years. Lois Brand recalled that the gender roles she saw in Drop City were not much different than the suburbs she grew up in (Turner, 2006). Blaming the lack of gender equality in all communes on Drop City would just be as unwise, as the problem ran deeper. The apathetical outlook on gender relations was partly because communes were composed of white, middle-to-upper class men; and women who married into those communes. Turner also attributes the blatant sexism to the communalists’ desire to be united as one in holistic fashion, and subsequently ignoring “individuals and groups with very different life experiences” (Turner, 2013). Thus while the concept of Whole Earth succeeded in its mission to unify people, much like the suburbs or the space suburbs of O’Neill’s Colonies, it also erased individuals’ identities and struggles.



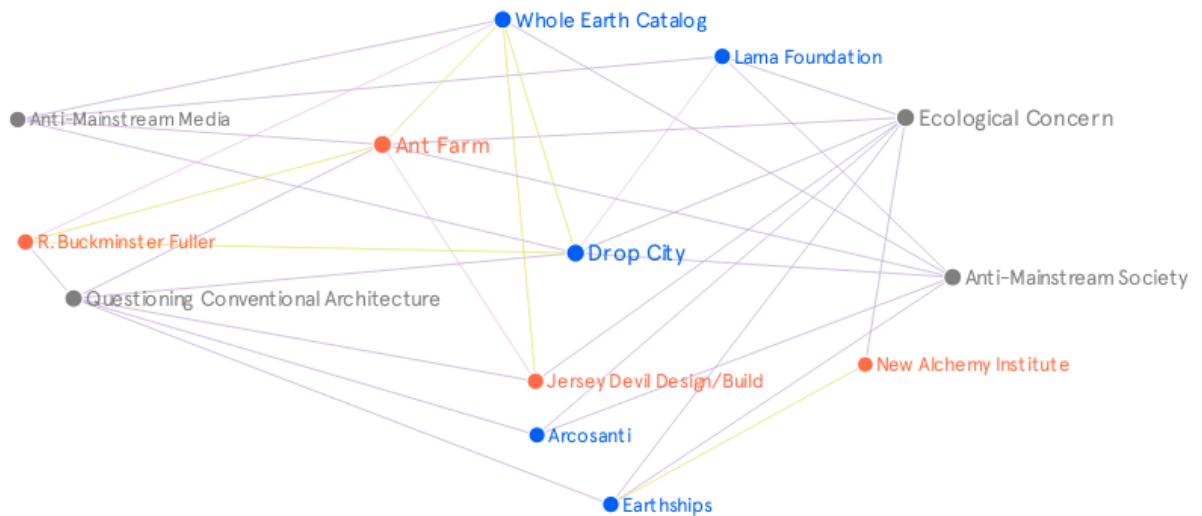
**Figure 35.** Front and back covers of *The Last Whole Earth Catalog* in 1971. The back cover shows the picture of Whole Earth, with the text “We can’t put it together. It is together.” (Brand 1971c).

#### 4. CASE STUDIES

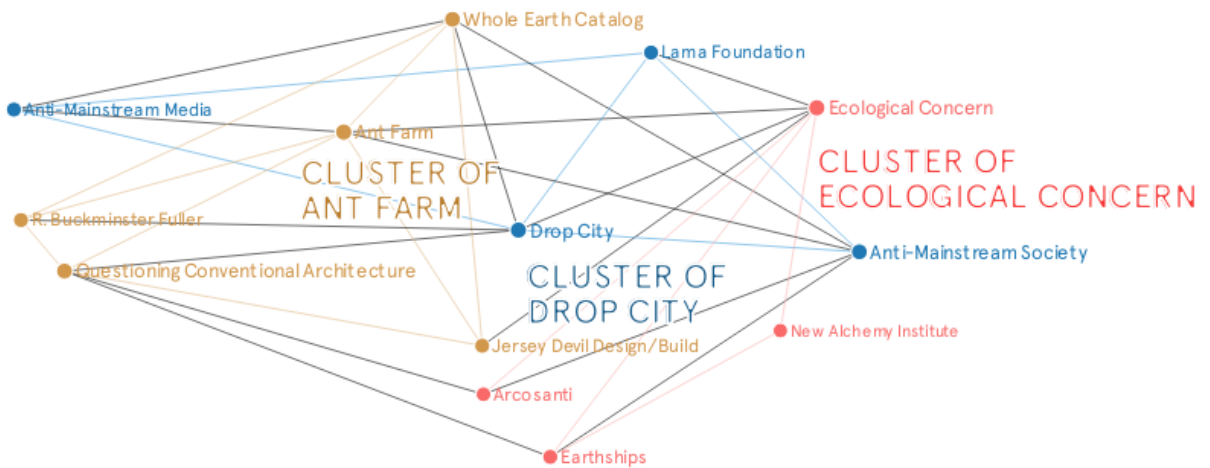
The elements of the American culture and the counterculture that were explored in the previous subchapters can be further examined through collectives that were active during the Long Sixties. The cases were selected first and foremost due to their use of somewhat similar yet and unpredictable, otherworldly forms, their renunciation of the recent past and adoption of unprecedented choice of materials. Their common aspects were explored as:

1. Their refusal to surrender to conventional design practices is grouped under “Questioning Conventional Architecture”, as a contrast to spatialization of suburbs discussed above;
2. Ecologically-driven do-it-yourself approach to design, under “Ecological Concern”;
3. Their provocative attitude and their rejection of societal norms, under “Anti-Mainstream Society”, which includes anti-war, anti-racist and anti-patriarchal beliefs as a contrast to the culture explored above, in the Technological Post-War Utopias; and
4. Dissent of mainstream media, under “Anti-Mainstream Media”.

Most projects are also exemplary of communal life. When the below network diagram of Figure 36 is analyzed, it shows that out of the most well-known and documented collectives or the projects selected that were formed during the Long Sixties in North America, Ant Farm and Drop City were the two most connected organizations, both to other collectives and to the main concepts of the period (Figure 37). The organic and amorphous forms adopted by these collectives are often reminiscent of or direct reproductions of the geodesic dome model developed by R. Buckminster Fuller in the early 20<sup>th</sup> century, connections to which were explored above in Technological Utopias of the Long Sixties. Similarly, both of the two main cases both directly and indirectly inspired the creation of the Whole Earth Catalog (Awan et al., 2013; Scott, 2019), also explored under Technological Utopias.



**Figure 36.** Network Diagram showing some of the most well-known projects (in blue) and the collectives (in orange) formed in the 1960s in America along with the most common concepts (in gray).



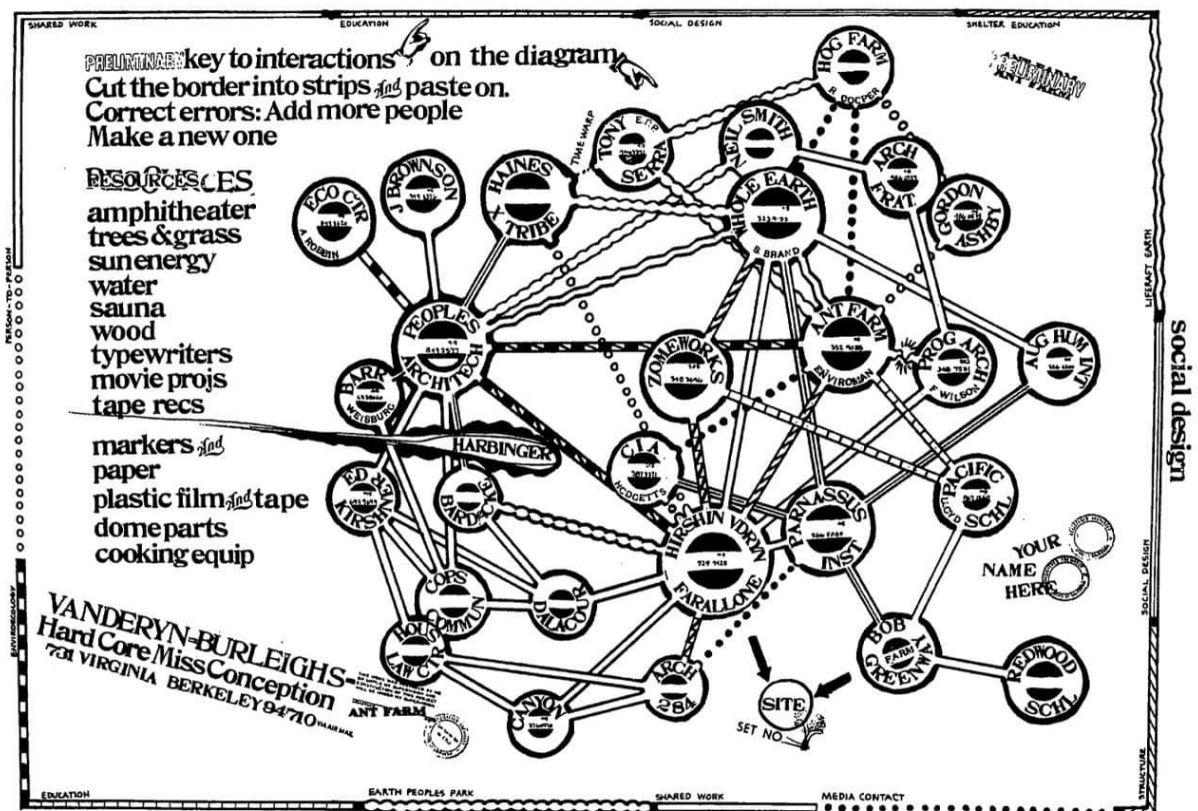
**Figure 37.** Network Diagram showing the most connected collectives (Ant Farm and Drop City) and the main concept each collective or project is tied with (Ecological Concern).

The collective of Ant Farm is a compelling case for this research as the group was formed during the Summer of Love, a social happening where approximately a hundred thousand people exemplars of the youth of the hippie culture gathered in the Haight-Ashbury neighborhood of San Francisco in the summer of 1967. Heavily influenced by the ideals of the liberation movements, the collective produced some of the most tongue-in-cheek artworks of the period. While Ant Farm produced many artworks, some of which have now disappeared, the projects that will be examined in this study specifically are *Inflatables*, *Cadillac Ranch*, *Media Burn*, *The Eternal Frame* and *The Dolphin Embassy*. *Inflatables* are examples of nomadic architecture, related to “Questioning Conventional Architecture”, “Anti-Mainstream Society” and “Ecological Concern”. *Cadillac Ranch* is an installation that critiques America’s fascination with automobiles depicted in Spatial Utopias in Post-war America. *Media Burn* and *The Eternal Frame* are video performances that examine the role of mainstream media in the creation of culture, as examples of “Anti-Mainstream Media”. Finally, *The Dolphin Embassy* will be analyzed through its relation to “Ecological Concern” and as an alternative to space colonies depicted in Technological Post-War Utopias.

The second case to be studied is Drop City which, unlike the Ant Farm collective, was an artist commune, thus instead of solely producing artworks in line with the countercultural ideals, the members of Drop City performed live art and lived together by those ideals. Drop City will be analyzed as a standalone project through all four aspects, “Questioning Conventional Architecture”, “Anti-Mainstream Media”, “Anti-Mainstream Society” and “Ecological Concern”.

Both Ant Farm and Drop City embody a disdain for the political situation and suburbanization. Their disdain is contrasted by both collectives’ fascination with automobiles, also discussed under Spatial Post-War Utopias; and science fiction and space colonies laid out in Technological Post-War Utopias. Likewise, both collectives were formed with ideals in line with liberation movements discussed in Political Utopias of the Long Sixties; are examples of the communes and collectives introduced in Spatial Utopias of the Long Sixties; and were inspirations for the techno-utopia of Whole Earth Catalog established in Technological Utopias of the Long Sixties. Whether they accomplished these ideals as planned will be discussed in the conclusion.

While it seems paradoxical to attempt to categorize the actors of the counterculture in a network diagram, the outline is one that mimics a chart called “Advertisements for a Counter Culture” that Ant Farm member Curtis Schreier visualized for the Freestone gathering of March 1970 (Figure 38). The diagram, published in the July issue of *Progressive Architecture*, lays out the actors which participated in Freestone. The gathering consisted “groups and individuals exploring communal life, ecological sustainability, alternative education, guerilla theater, and grassroots urban planning” that planned to “learn to design new social forms, new building forms, that are in harmony with life” (Castillo, 2015). Schreier’s diagram is modeled after “balloon diagramming from corporate informatics” according to Castillo. Out of the participants, only four are somewhat written about in architectural literature, Whole Earth Catalog, Zomeworks, Hog Farm and Ant Farm, two of which (Ant Farm and Whole Earth Catalog) are studied in this research. The chart is not definitive however, as even Schreier himself wrote on it: “Add more people: make a new one.”



**Figure 38.** Curtis Schreier, Freestone Chart, “Advertisements for a Counter Culture,” *Progressive Architecture*, July 1970 (Castillo 2015: 89).

As a result of the visually stimulating nature of the period and as these collectives did not adhere to a conventional architectural design understanding, the productions analyzed for this research are not limited to only spatial works but equally intriguing artworks, performance art, video art, editorial and instructional building manuals that were called “cookbooks”. While perhaps the well-known example of these self-published and self-distributed zines was the *Whole Earth Catalog*, the first was the *Dome Cookbook* by Steve Baer in 1967 (Figure 39). Another was the regularly published *Domebook* by Lloyd Kahn. Both Steve Baer and Lloyd Kahn were regular visitors of Drop City. The cookbooks were more like geometry textbooks, with elaborate calculations and suggested materials that may be needed for dome-building, a staple architectural style for the communes of the ‘60s. Cookbooks were a part of a larger phenomenon in publishing called “little magazines”.

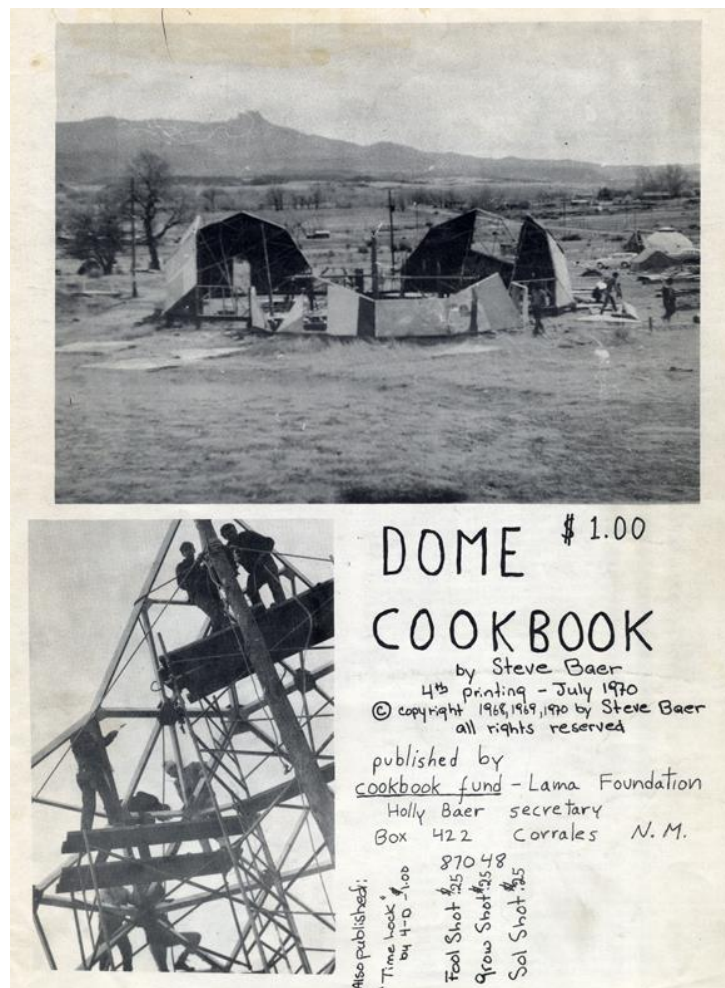


Figure 39. Cover of Dome Cookbook (Baer 1967).



The premise and the large, colorful pages of the cookbooks and little magazines soon inspired more established magazines to follow suit and dedicate sections for “ecology, counterculture, new materials, electronic technology, mobility and disposability” (Colomina, 2018). Beatriz Colomina also writes that transgression, ephemerality, and utopia were all concepts connected to one another in the 1960s and 70s:

“Bloody struggle in the street was combined with otherworldly utopias in the pages of disposable magazines. Images of light, airy, equitable, recyclable, inflatable, mobile, networked, throwaway architecture, maybe anti-architecture, may even have been in the pockets of people that were fighting in the barricades. Utopia was not isolated from political struggle. It was built in. Images of protest and images of new worlds often co-existed on the pages of the little magazines in architecture of the 1960s and 1970s.” (Colomina, 2018).



**Figure 40.** The Cosmorama section of Architectural Design: A.D. Starting from the February 1971 issue, the magazine included a catalog of design objects, similar to Whole Earth Catalog (Colomina 2018).

Researching and scanning little magazines, therefore, play an essential role in setting the methodology for this study as they serve as the “construction site”, in Colomina’s words, for the rural utopian projects that offered escapism from the political struggle on the streets.

The images of “light, airy, equitable, recyclable and inflatable” architecture that Colomina writes of was most evident in Ant Farm’s *Inflatocookbook*, a manual with diagrams and further suggestions on how to construct *Inflatables* with run of the mill, every day household items and materials (Figure 41). The cookbook, unlike its predecessors, included an instructional home video. Inflatables were a collection of formless inflated structures made out of plastic as a protest against the rigidity and heaviness of Brutalism and a cheap, communal, mobile and DIY alternative to postwar reconstruction.

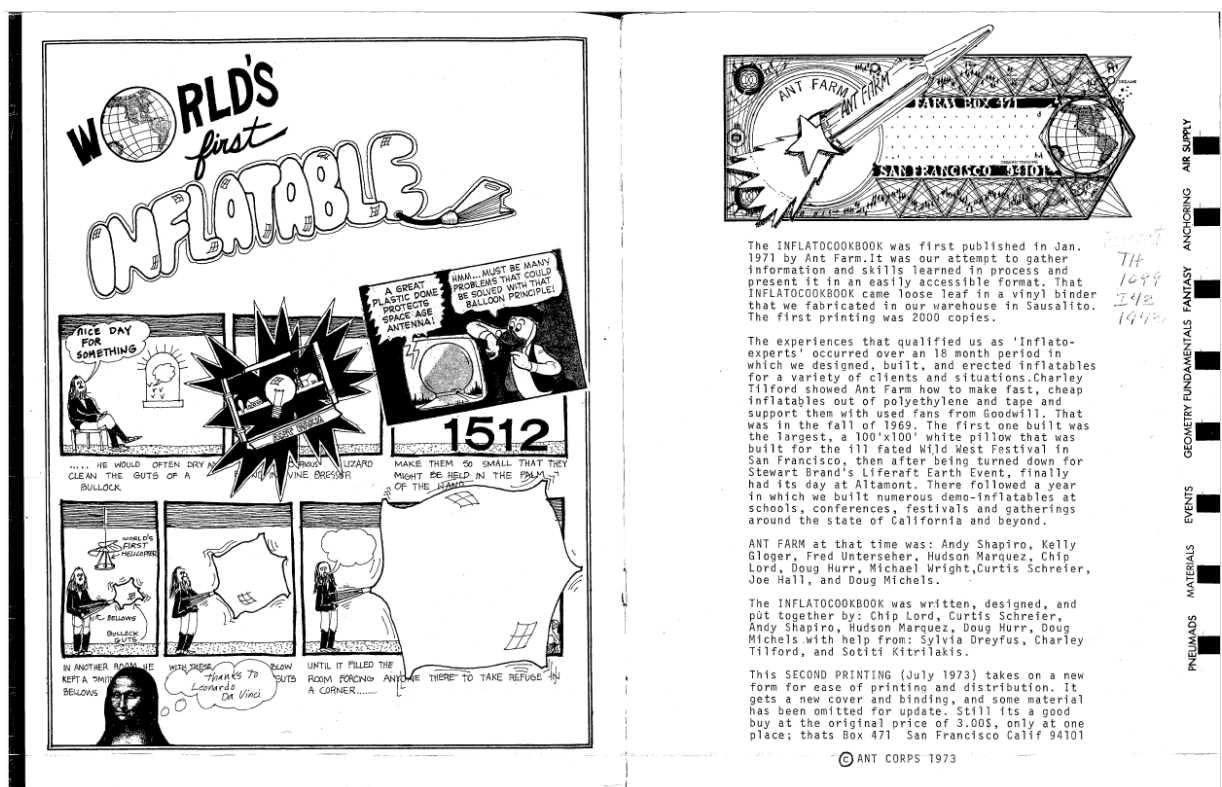


Figure 41. First pages of the second edition of “Inflatocookbook” by Ant Farm. Cover and introduction (Lord et al 1971).



## 4.1 ANT FARM

### Liftoff

Like the *Whole Earth Catalog*, Ant Farm was an architectural collective born in San Francisco in 1968, founded by architects Chip Lord and Doug Michels to be later joined by fellow architect and designer Curtis Schreier. The collective got together during the Summer of Love in San Francisco in 1967 with the plan to “do underground architecture” and got their name from a friend who likened their underground architecture to an ant farm. Ant Farm, in their own words, “wanted to be an architecture group that was more like a rock band” (Lewallen & Seid, 2004). They had the attributes of a rock band, too: they were young, fun and aloof and perhaps one of the few alternative architectural groups to be featured in a Playboy magazine article, which dubbed them a “cultural commando group” in 1973, a subtle hint at military and war, as inherent elements of American culture (Sorkin, 2004). Their *Inflatables* were featured in countless music festivals as temporary shelters. The radical collective inspired the Whole Earth concept and focused heavily on do-it-yourself architectural design, art, and video performances. Projects analyzed in this chapter are not necessarily laid out in a chronological order but with their relation to the four aspects of the Long Sixties, “Questioning Conventional Architecture; “Ecological Concern”; “Anti-Mainstream Society” and “Anti-Mainstream Media” discussed previously. While Ant Farm produced many works of art, the productions that will be analyzed in this chapter are *Inflatables* (1970-1971), *Cadillac Ranch* (1975), *Media Burn* (1975), *The Eternal Frame* (1975) and *The Dolphin Embassy* (1976).

The group originally got together with a goal to reform architectural education (Hasan, 2019). They were well on their way to do so as well: the two original co-founders met in their final years of their graduate school. Doug Michels had just graduated from Yale School of Architecture and was on his way to lecture at University of Houston when Chip Lord was in his final year of getting his Master of Architecture degree from Tulane University School of Architecture. When the two attended the Summer of Love festivities in San Francisco, they were joined by Curtis Schreier, who was a recent graduate of Rhode Island School of Design. As a

supporter of educational reform, co-founder Michels had arrived to his first lecture at the University of Houston in a coffin, as per the requests of the students, carried by an assembly of motorcycles as a fellow professor announced the “rebirth of American architecture” (Dewan, 1999). Their focus shifted from educational reform, however, as their only project that focused remotely on education was *Inflatables*. *Inflatables*, a series of inflated vinyl structures that are designed as a critique of conventional architecture and environmental issues, will be the first project to be analyzed in this chapter. By the mid-1970s, Ant Farm reestablished themselves as “media activists” or “architects of the image” in their own words (Aslam, 2008). Their later works consisted mainly of satirical criticism of media, consumerism, and automobile infatuation. The open-air installation known as *Cadillac Ranch* in Amarillo, Texas will be examined both as a monument and a funeral to automobilization. *Media Burn*, is a performance and video art piece in which the artists, dressed in astronaut suits, drive a Cadillac through a wall of television sets and setting off an explosion. The project will be inspected alongside *The Eternal Frame*, another video performance in which the assassination of JFK is reenacted. Both projects are exemplary of Ant Farm’s conflicting fascination with and aversion to media and automobiles. Finally, *The Dolphin Embassy*, which is also the collective’s last produced artwork, will be examined as a utopian space colony that contrasted O’Neill’s Colonies in terms of inclusion.

A year after the group was founded in 1968, Sony would release Portapak, a battery-powered, portable video recording camera, which became an essential tool for Ant Farm. The group recorded their experiments and their daily life, producing an invaluable documentation of the lives of the counterculture youth. In fact, all projects were documented on videotape, which can be viewed as an evidence of Ant Farm’s interest in technology, a fascination shared by both mainstream society and counterculture. The collective also presented their performances of *Media Burn* and *The Eternal Frame* on news channels, thus criticizing media by using the same medium. They also made appearances on talk shows, mostly in Australia, to criticize media on television once again. Likewise, *The Dolphin Embassy* was announced through a press release in Australia to reach a wider audience.

## Inflatables

**Type of work:** Architectural design, installation

**Designers:** Chip Lord, Doug Michels, Curtis Schreier

**Year:** 1970-1971



**Figure 42.** 50x50 Foot Pillow, installation by Ant Farm at Saline Valley for Whole Earth Catalog, 1971 (Awan, Schneider, Till 2013).

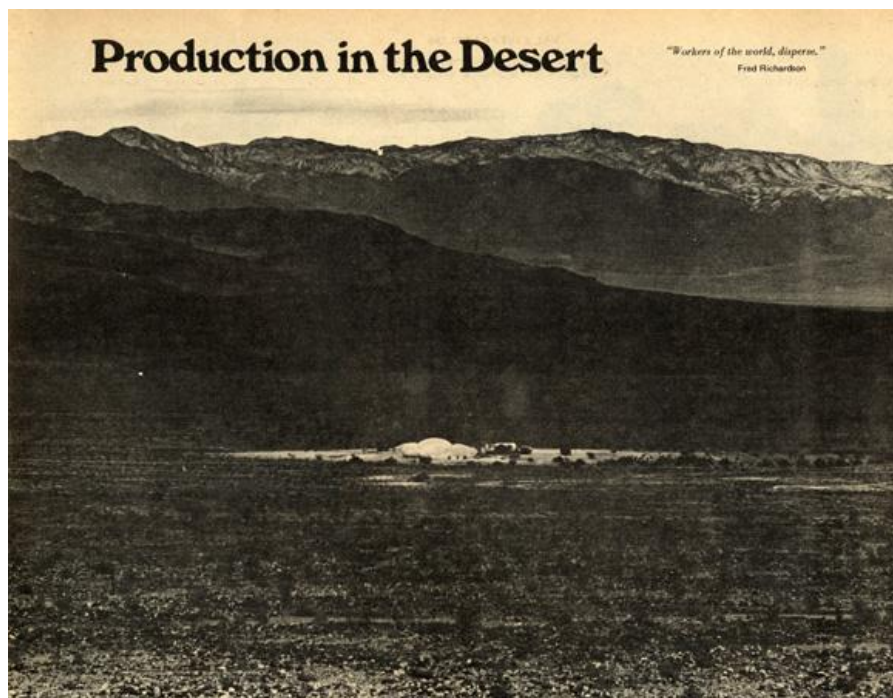
Ant Farm's first architectural and environmental experiment was *Inflatables*, which were large plastic bags inflated with heaters or fans. Ant Farm advertised one of their first inflatables in the *Domebook One* unclassifieds section as "air buildings, nomadic visions" (Kahn, 1970). The vaguely advertised air building was supposed to be tested at the Mount Fuji Rock Festival and while the festival was cancelled, the so-called "fifty-by-fifty-foot pillow" would be taken on the road the same year as part of Ant Farm's "Demonstration Tour" (Scott, 2019). The tour included a stop at the University of California, Berkeley, coincidentally on the first ever Earth Day, where the collective performed *Air Emergency* (Figure 43). For the performance, the members, dressed

in lab coats and gas masks, staged a “survival event” for which they designated the inflatable that they called *Clean Air Pod* (CAP 1500 for short) for the purposes of the performance, as the fallout shelter to survive air pollution. They told the audience in the event that they did not enter the CAP 1500 within 15 minutes, they would die from lack of clean air and fixed yellow circle stickers on the “victims” who remained outside. Felicity D. Scott, who researches Ant Farm extensively, wrote that the event showcased the “escalating sense of the destruction and the militarization of the environment” (Scott, 2019). The group had studied the fallout shelters of the 1950s while designing the performance, which was essentially a classic interpretation of pollution art.



**Figure 43.** Ant Farm standing in front of Clean Air Pod, Installation in Lower Sproul Plaza, University of California, Berkeley, April 1970. Air Emergency Performance. Courtesy of Chip Lord (Awan, Schneider, Till 2013).

A few months later Ant Farm was commissioned by Stewart Brand to design and produce a mobile facility in the Saline desert of Death Valley where he could produce an issue of the *Whole Earth Catalog*. The commission was captured on a supplement of the catalog, called “Production in the Desert” in January 1971 as well as on Super 8 film (Brand, 1971a). The main purpose of the inflatables was to break down the rigid borders and the walls of culture and domesticity; and to embrace nomadism, for which they claimed to be completely off-the-grid. *Inflatables* were not off-the-grid, however, as they stayed inflated with the electrically-powered heaters. As opposed to traditional architecture, inflatables were too light and to avoid the structures to float away, the collective had to anchor the vinyl domes with logs buried underneath, which they called “dead men”. Production of the issue had to be halted and moved to domes made out of more durable materials a few days later, as the inflatable could not withstand the extreme wind conditions.



**Figure 44.** Production in the Desert, supplement to the Whole Earth Catalog, 1971 (Brand 1973).



The idea behind the need to produce an issue of the catalog in a clear amorphous structure, according to Brand, was in order to “liberate other publications, schools, projects, all [other] wall-bound souls” (Brand, 1971b). After experimenting with the inflatable, he concluded that inflatables were “imaginative” but “not architecture at all”. Brand’s confusion begs the question “what is architecture”, to which Ant Farm writes in *Inflatocookbook* (Lord et al., 1973):

“In case you hadn’t figured a reason or excuse, why to build inflatables becomes obvious as soon as you get people inside. The freedom and instability of an environment where the walls are constantly becoming the ceilings and the ceiling the floor and the door is rolling around the ceiling somewhere releases a lot of energy that is usually confined by xyz planes of the normal box-room. The new-dimensional space becomes more or less whatever people decide it is – a temple, a funhouse, a suffocation torture device, a pleasure dome” (Lord et al., 1973).

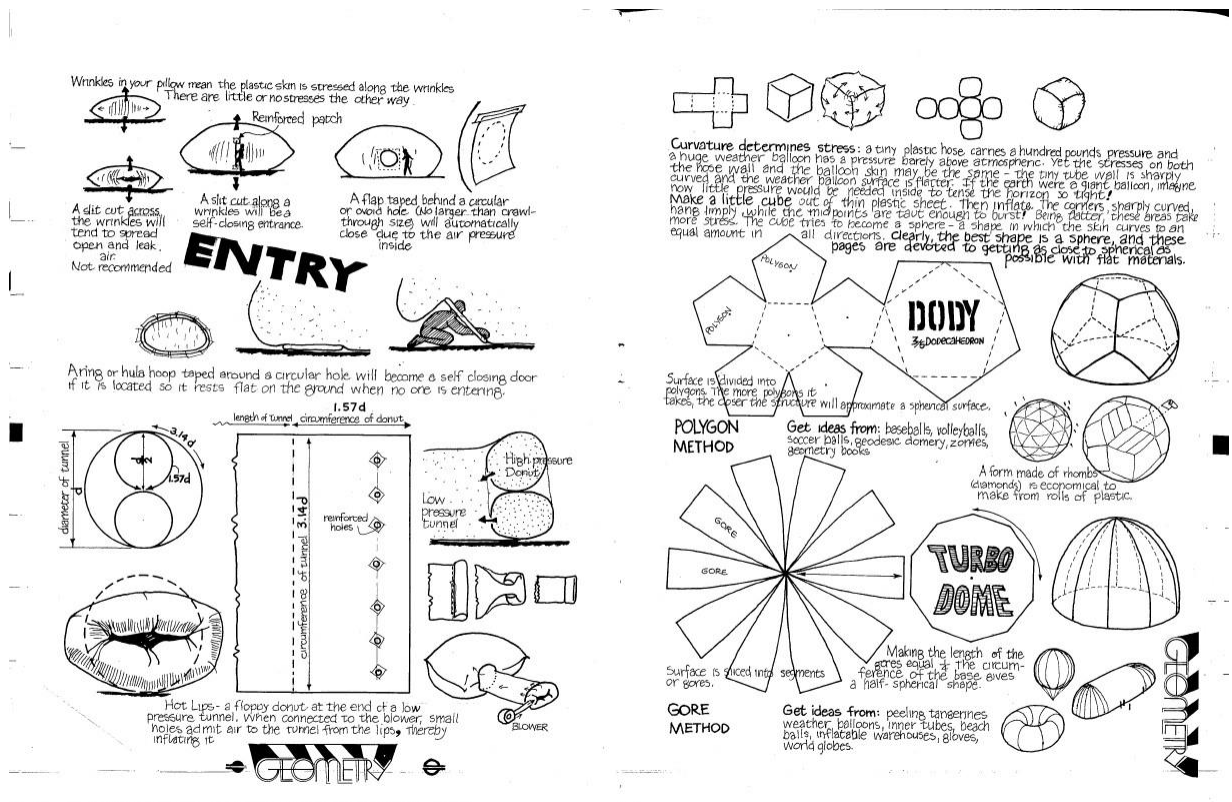


Figure 45. Pages of *Inflatocookbook* showing possible geometries of Inflatables, 1971 (Lord et al. 1971).

*Inflatables* reached a wider audience in 1971 when they wrote and distributed *Inflatocookbook*, a DIY instructional guide to build the structures at home. The guide was supplemented by a home video called *Inflatables Illustrated*. In the instruction video, we watch Schreier as he fuses together trash bags to create inflatable structures using a regular steam iron. The plastic pillows

are then inflated with the use of a heater fan into tent-like structures. The directions are pretty detailed for what is essentially a blown-up plastic bag in the 32-minute video. For instance, Schreier emphasizes that in order to create openings, it is critical to cut along the wrinkles of the plastic bag as the structure would deflate otherwise. Once openings are cut, the interior could “become whatever – a classroom or a bedroom”, in Schreier’s own words (Schreier, 1971). Different geometries of possible forms are then introduced, which are all found presented in hand-drawn technical drawings in the *Inflatocookbook* like architectural recipes (Figures 45-6).

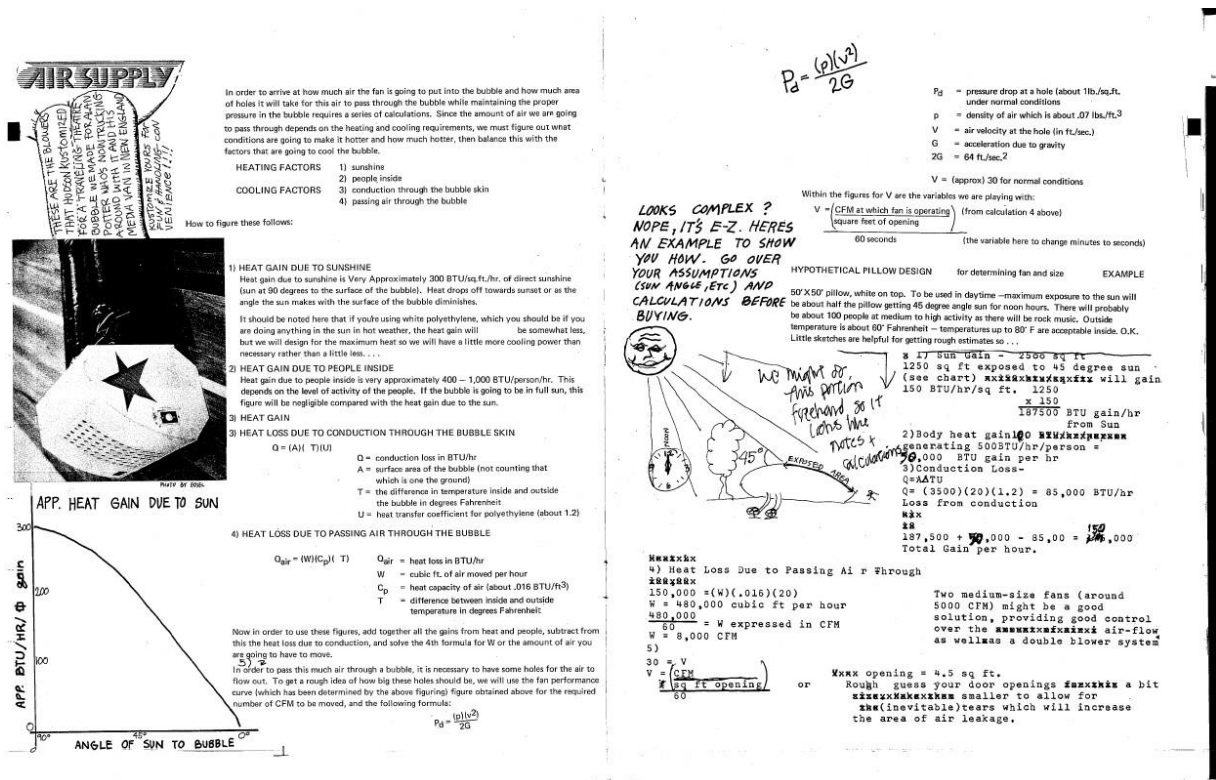


Figure 46. Pages of *Inflatocookbook* showing necessary calculations to make inflate the structures, 1971 (Lord et al. 1971).

The form-finding experiments of the *Inflatables* would lead to the design of the *House of the Century* in 1972 alongside architect Richard Jost (Figure 47). The *House of the Century*, named possibly as a nod to Alison and Peter Smithson’s *House of the Future* dated 1956 was, in form, an inflatable made out of chicken wire and sprayed on concrete, a construction technique similar to shotcrete.

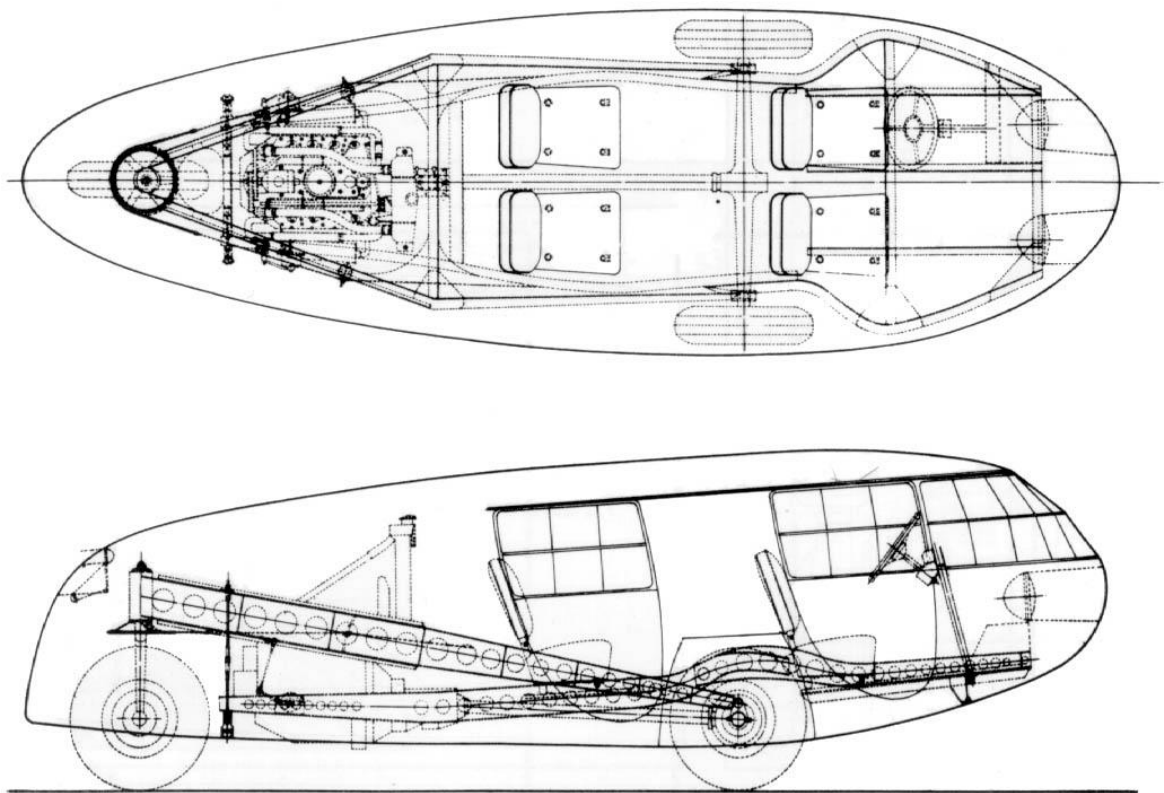


**Figure 47.** House of the Century, 1972. Photographer unknown, courtesy of Chip Lord.

While Ant Farm used inflatables to showcase environmental decay, their extensive use of plastic was ironic. Although they referred to their own art as “pollution art”, in the *Inflatables Illustrated* video Curtis Schreier uses brand-new trash bags and encourages the viewers to purchase plastic film from hardware stores (Schreier, 1971). In a personal communication with Felicity D. Scott (2020), she mentioned that the group was both not “as aware as we are of the harms of plastic” but that they often resorted to using materials from military surplus as well. It is clear, however, that inflatables, much like geodesic domes, were not suggested as the sole solution to a housing or educational problem but merely a means to question and break down the walls of the “wall-bound” architecture. Their use of plastic often feels like a commentary on the petrochemical industry, too, perhaps due to their satiric language and their questioning nature. After all, the collective displayed a constant enthusiasm for automobiles, Cadillacs specifically, that would otherwise be contradicting for a countercultural group to do so. Although Cadillacs were featured in most of their later work in the mid-1970s, their obsession with automobiles were noticeable in their earlier endeavors, too. In 1969, a year after the collective was formed, the three founders, Lord, Michels, and Schreier, famously “kidnapped” R. Buckminster Fuller before he was to give a lecture at University of Houston, where Michels,



too, was a lecturer (Rush, 2004). Pretending to be Fuller's assistant, they told the school that Fuller's plane had been cancelled and that there was no need to send anyone to pick him up from the airport. Unaware of the prank, Fuller was greeted by the members of Ant Farm, in a "rented Cadillac limousine" no less, and driven to Rice University instead, where Fuller's Dymaxion Car, which he had designed in the early 1930s was displayed in an exhibition. The extent of their conversation or why they took Fuller to the site of the Dymaxion Car remain unknown but their interest in automobiles is unmistakable. The look of the Dymaxion Car is not much different than an inflatable, which could fit eleven people thus it was, in a way, communal like an inflatable. Designed to resemble a plane, the smooth exterior of the car was an aerodynamically functional choice as it could be driven up to speeds of 90 miles per hour or approximately 145 km per hour.



**Figure 48.** Plan and section of the Dymaxion Car by R. Buckminster Fuller designed in early 1930s. Courtesy of Buckminster Fuller Institute (BFI).

## Cadillac Ranch

**Type of work:** Installation

**Designers:** Chip Lord, Doug Michels, Hudson Marquez, Stanley Marsh 3

**Year:** 1974-1975



**Figure 49.** Cadillac Ranch, 1974. Photographer unknown, courtesy of Chip Lord.

Five years after Ant Farm paid a visit to the Dymaxion Car with the designer himself, Chip Lord, Doug Michels along with Ant Farm member artist Hudson Marquez would compose the *Cadillac Ranch* in Amarillo, Texas, as commissioned by fellow artist Stanley Marsh 3. The open-air art installation consisted of ten partially buried Cadillacs in a wheat field, with the Cadillac's iconic tailfins visible above ground, which were one of the elements of the design of the Cadillac that attracted Ant Farm. *Cadillac Ranch* was supposed to be the American Stonehenge (Sorkin, 2004) and is an example of participatory art as it is open to public to freely draw on. The Cadillacs that were purchased were models that were manufactured from 1949 to 1964, from when the iconic tail fin was first introduced to when they were discarded. The buried

cars were then placed in a chronological order to highlight the change in the design of the tail fin. Serving no aerodynamic purpose, according to Lord, they were a means for the owner of the luxurious automobile to advertise their wealth (Weintraub, 2012). The installation could be read both as a grave to automobile culture and a monumental celebration of automobiles (Rush, 2004; Weintraub, 2012). Either way, the installation was a testament that the automobile and the tail fin specifically, which were elements of “cultures that glorify material consumption” (Weintraub, 2012). Writer Rebecca Solnit wrote of Cadillac Ranch, as reported by Constance Lewallen (Lewallen & Seid, 2004):

“As American as apple pie, but at the same time highly critical of the establishment, Ant Farm presented a wonderful alternative model where you can love cars and critique them, [...] where private passions and public issues can hit a kind of merge lane” (p. 3).

Critique and admiration were blended so well in Ant Farm’s works not only because the founders grew up in the peak of automobilization in the United States but because the nomadism that was embedded in counterculture could only be realized via motored vehicles (Sorkin, 2004). The automobile symbolized freedom for the countercultural youth that craved to discover the realms outside the confines of the suburbs. In 1975, a year after the *Cadillac Ranch* was erected, Stewart Brand invited Ant Farm to comment on O’Neill’s colonies as part of his magazine *CoEvolution Quarterly*. In response, Chip Lord likened “space colonies to automobile tailfins in their common roots of World War II technocracy – sharing at once media strategies and Americans’ addiction to machines” (Lord, 1976; Scott, 2016). He also noted that consumers in America responded “to images of technology in far greater numbers than they did to technological innovation.” Ant Farm shared America’s addiction to machines and media strategies and their designs often *looked* more technological than they really were.

## Media Burn and The Eternal Frame

**Type of work:** Video performance

**Designers:** Chip Lord, Doug Michels, Curtis Schreier, Doug Hall,

**Year:** 1975



**Figure 50.** Media Burn postcard, Ant Farm, 1975. Collection of SFMOMA, 1991.

In the same year Chip Lord wrote for Brand's magazine, Curtis Schreier would design the *Phantom Dream Car* that was featured in one of Ant Farm's most known performances, *Media Burn*. The Dream Car was designed to resemble a spaceship. On Independence Day of 1975, artist and friend to the Ant Farm collective Doug Hall would address the nation as President Dummy, dressed as John F. Kennedy in a nationally televised "media event" in Cow Palace, San Francisco. Doug Hall, like Michels, was an Ivy League-educated artist from Harvard College and according to Lord's commentary on Ant Farm Video, "that was why he could deliver a Kennedy-esque speech" (Lord, 2004). In fact, Lord mentions, the speech given was adapted from one written by the 1972 election opposition leader, George McGovern, for Rolling Stone magazine (Mellencamp, 2005). Followed by Hall's speech, in which he asks his audience "Now I ask you, my fellow Americans: Haven't you ever wanted to put your foot through your television screen?" (Lord, 2004; Mahall & Serbest, 2009), *Phantom Dream Car* is unveiled under a gigantic American flag, made out of vinyl and the national anthem is played as the flag is overlaid on images of war ships. "Artists Dummies" Michels and Schreier, dressed in spacesuits, then proceed to drive the *Phantom Dream Car* through a wall of television sets,

setting off an explosion. While the idea behind the performance was drafted by Doug Hall, Ant Farm donated their “company car”, which they had partially destroyed in a traffic accident, to the event and Schreier refurbished it as the *Phantom Dream Car*, which featured “bubble-like” fiberglass details reminiscent of Googie architecture of the Space Age and a tailfin protruding from the roof (Feldman, 2005). Mainstream media and news channels were invited to watch as the *Phantom Dream Car* is crashed into the TV sets, attacking the two sacred elements of American culture: the automobile and television. In the documentary of *Media Burn*, a news reporter from Channel 4, who when prompted for an interview, would not answer questions and walk away saying he would share his views on “Channel 4, from 4:30 pm to 6:30pm” (Lord, 2004). The chaotic and humorous nature of the collective is palpable throughout the footage. It rings true what the President Dummy concludes in his speech before the *Phantom Dream Car* is crashed: “The world may never understand what was done here today, but the image created here shall never be forgotten” (Lord, 2004).

*Media Burn* was not the last time Doug Hall had dressed up as John F. Kennedy. A month after *Media Burn* was filmed in July 1975, Doug Hall along with the collective which he was a part of, T.R. Uthco, joined forces with Ant Farm once again to perform *The Eternal Frame* (Hall et al., 1975). The video performance features Doug Hall as the President and Ant Farm’s Doug Michels in drag as Jacqueline Kennedy Onassis, or “Artist-First Lady”, as they reenact Kennedy’s assassination in 1963 on the actual site of the event. Meant to question the role the media plays in “historical mythology”, the performance is a definitely a cathartic and grotesque dramatization of the event, as the spectators on site react to the chain of events as if they are witnessing the actual incident and not a performance. The video of the performance features interviews with post-assassination Hall, both in and out of character, as well as interviews with some of the viewers. An unnamed onlooker says in the interview:

“The form of whoever put this thing together did it in was ambiguous, a little absurd and in such bad taste, because people take the incident so seriously, that it shook me up and noticing the crowd of reaction, it shook the crowd up, too” (00:21:23-00:21:40).

Hall has a different recollection of the spectators' reactions however as he looks into the camera and notices: "I thought the most interesting thing was watching the people enjoy it so much. How could they enjoy it so much?" (00:20:28-00:20:33). In fact, one interviewee describes the experience joyfully as:

"This is going to give me bad dreams and I'm not even sure why. I thought it was disturbing but I also thought it was entertaining" (00:21:41-00:21:49).

The video also shows some people cheering during the performance. Lewallen notes "saturation of tragic events is now commonplace" (Lewallen, 2004), and our generations have almost come to the point of being desensitized by violent imagery but the first incident of a tragedy burning into collective memory was the assassination of Kennedy. By the time Ant Farm and T.R. Uthco performed *The Eternal Frame*, images of the Vietnam War, too, were being widely televised, inevitably carving into the minds of American public. Lesser known than their other works, *The Eternal Frame*, is Ant Farm's position on media and television in a nutshell.

## **The Dolphin Embassy**

**Type of work:** Research project, architectural concept

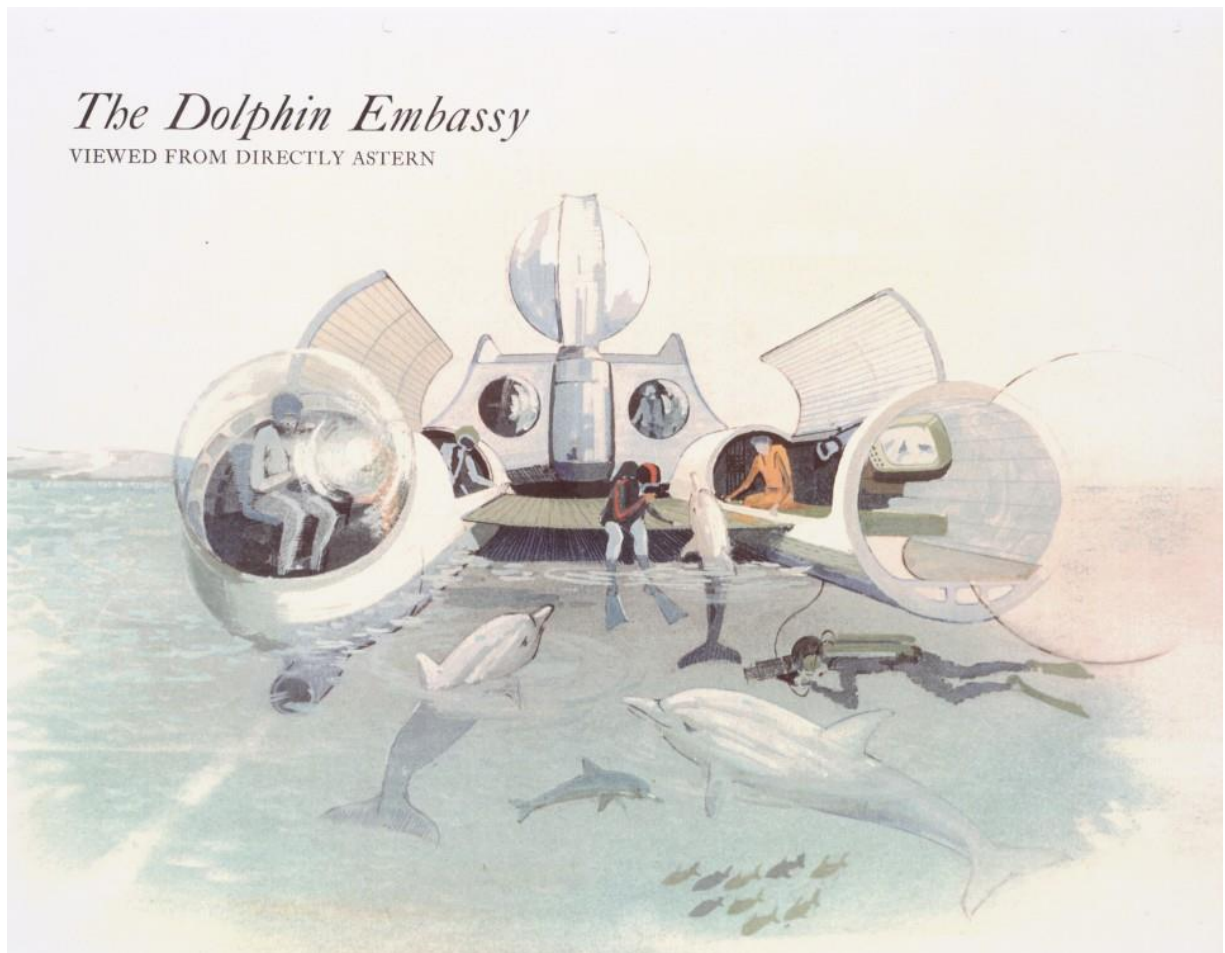
**Designers:** Doug Michels, Chip Lord, Curtis Schreier

**Year:** 1976

Ant Farm's works were often centered on both media and the environment. Marchessault likens their works on media in a "McLuhanesque fashion to include both manufactured environments – cars, roads, televisions, nylons, ashtrays, sunglasses" and on organic environment as "air, ocean, land, stars" (Marchessault, 2017). The tailfin to which they pay homage in most of their projects became a centerpiece in their longest running project, *Dolphin Embassy*. Drawing inspiration from neuroscientist John C. Lilly's work on human to dolphin communication, they called the initial underwater dolphin research center the "Research Vector John C. Lilly" or RV John C. Lilly, for short, as a salute to the nomadic motored vehicle (Survant, 2013). Similar to Chip Lord's fascination with the Cadillac and the tail fin, Doug Michels was fascinated with dolphins and would continue to work on the project until his death in 2003, even after Ant Farm



split three years after they conceptualized the *Dolphin Embassy*. The collective presented the project for the first time in the March 1975 issue of Esquire Magazine in an article titled “Embassy to the Dolphins”, an unlikely publication for an architectural project to be featured in for any other design firm but not for Ant Farm. Patricia Mellencamp has documented her meeting with the surviving members of Ant Farm, Chip Lord and Curtis Schreier in 2004 in a detailed and somewhat sentimental article, noting Lord avoided discussing the period that coincided with when the collective disbanded, which she suspected “was a difficult one for him” (Mellencamp, 2005).



**Figure 51.** The Dolphin Embassy Viewed from Directly Astern, illustration by Curtis Schreier, 1977 (Awan et al 2013).

The project started originally as an underwater laboratory for mutual interspecies research between humans and dolphins, or on the “delphic civilization” in Michels’ own words (Nakamura, 2020). Michels believed in the higher intelligence of dolphins, thus requiring their own embassy, and that they descended from extraterrestrial beings (Marchessault, 2017). Along with the confidence in dolphins’ intelligence, he held the ill-informed belief that humans would function better in environments with less Earth-normal gravity, in an “aqua terrestrial” domain (Michels, 1978). In true Ant Farm fashion, the *Dolphin Embassy* was a utopian project designed not only for humans but for non-human entities; this time for living beings instead of automobiles, locating humans in the same ecosystem as other animals, rather than on a mythological pedestal above animals. In their last project, instead of parodying and taunting media, the collective praised communication. As noted by Michels in a press release that was most likely staged, in *Video Communication Unit*, a video composed of the collective’s ventures in Australia (Michels, 1976): “The communication form would take the communication form of any beings whether human or non-human, post-human, sub-human that enjoy being with each other” (00:11:30-00:11:38). In the press release, Michels also emphasizes that the collective would not relate to the dolphins as scientists but artists, instead: that they would make music and art. In order to communicate with dolphins, they would videotape themselves playing with the dolphins and play it back to the dolphins, like a “mirror”, which would “allow them to see themselves in a different way” (00:08:13-00:08:17).

Ant Farm took the *Embassy* to Australia after being invited by the New South Wales Institute of Technology yet did not pursue the project further and instead focused on performances like the automobile opera *CARmen*; in which Schreier, or “Artist Kangaroo”, would conduct as cars honked and he hopped around in a kangaroo suit, holding an inflatable dolphin (Lewallen & Seid, 2004; Lord, 2004; Michels, 1976). It was Michels who would continue to work on the project alone following Ant Farm’s break-up after a decade of collaboration in August 1978, when their headquarters in San Francisco burned down and Michels separated from the group. Like O’Neill, and many utopians before his time, Michels believed the project could be realized. In the press release of the project, Michels (1976) tells the media that the construction of the project would begin in January 1977 in Sydney, Australia and would last six months (00:10:45-00:10:53). Once it became clear that the original concept set in Australia would not be realized,



Michels still kept working on the *Dolphin Embassy* and evolved it into a space colony for dolphins and humans by the name of *Blue Star* in 1987, all the while working for Philip Johnson and later for HOK (Gray, 2004). Much more utopian and somehow more inclusive than the O'Neill Colonies, *Blue Star* resembled an almost true to size model of Saturn where a glass sphere filled with water would accompany dolphins, with metal rings around the sphere in which humans lived (Johnson, 2003). The aim was to liberate both species from planetary restrictions. Michels later pitched his idea as an animated feature film called *Brainwave*, which never got picked up (Marchessault, 2017). The project eventually found its place in the virtual realm in 1997 as a short-lived video game called *Bluestar*. In the advertisement of *Bluestar*, Michels introduces himself as a “Space Architect” and notes that the ultimate goal is to actually construct the colony in the year 2025 (Michels et al., 1997).



**Figure 52.** Ant Farm co-founder Curtis Schreier dressed in a kangaroo costume, refusing to talk on the Australian TV program *A Current Affair*, screengrab obtained from the documentary “Off-Air Australia” by Ant Farm on Ant Farm Video, 1976 (Lord 2004).

## Denouement

The fire in 1978 destroyed a large portion of Ant Farm's work in their Sausalito studio, including megastructure projects *Convention City* and *Floating City*, both of which would most likely find their place in architectural history alongside the likes of Archigram's *The Walking City* or Cedric Price's *Fun Palaces*. In a personal essay that reads as an obituary for the late co-founder Doug Michels, Michael Sorkin (2003) writes of his fellow architect that Michels was, above all, a comedian (Sorkin, 2003). Ant Farm was in fact a company of comedians and perhaps, that is one of the reasons why the collective was disregarded in teachings of architectural history until recently, even though their utopian approach to architecture was not that different from the likes of alternative architectural collectives Archigram, Archizoom or Superstudio, all founded at the height of the 1960s. Any mention of Ant Farm in architectural publications does not appear until after the 21<sup>st</sup> century. What separated Ant Farm from their European counterparts was the way less serious outlook they had on both architecture and on themselves as architects.

In Sorkin's words, Ant Farm provided a "comfortable home for incompatible ideas, to insist that what can be thought can be expressed" visually. The members of Ant Farm were comedians in the sense that they took political issues and architecture both at their face value and lightly at the same time. The tongue-in-cheek and satirical visual language that they adopted did not lessen the severity of what they were protesting but instead highlighted them in a different light. Another reason the collective was overlooked in architectural circles might be that they blurred the lines between not only satire and seriousness but between reality and the abstract; art and architecture; utopian and dystopian too. Mainstream societies often fear what they do not understand, as was evident in mainstream media and the government ridiculing the counterculture movement. Ant Farm, despite appearing on national television, in whimsical costumes, nevertheless, were teased and taunted by media, too, thus the contempt was mutual. In the years when television coverage was plastered with brutal images from the Vietnam War, inescapably causing a collective trauma on the American youth who could be drafted at any moment, Ant Farm's deadpan critique of the media was most likely shocking and exhilarating at once. In one of the interviews on Australian television, "A Current Affair" (Michels, 1976), Doug Michels explains Schreier's kangaroo costume, and inadvertently summarizes the entire

concept on which Ant Farm produce their art by stating, in McLuhanesque fashion once again, “The image is the content. The image is the message” (00:17:07-00:17:10).

Ant Farm never publicly criticized American politics or suburbanization as the physical embodiment of those politics; or actively participated in liberation movement riots. By literally breaking the walls of culture by proposing wall-less structures as in *Inflatables* or burying automobiles into the ground as in *Cadillac Ranch*, however, they demonstrated a visual and spatial protest of the culture enforced by American policymakers. On the other hand, while Ant Farm protested against the norm, their very presence did not depict the same sentiment. The group consisted of white, college-educated, heterosexual men that could very well participate in the very culture they disapproved of, if they chose to do so. When the collective broke up, Doug Michels, for instance, had the luxury to leave the nomadic, countercultural life they upheld and opted instead for a life of corporate work. Similarly, *The Dolphin Embassy* was proposed as an inclusive counterpart to O’Neill’s Colonies yet reduced the entire humankind into a single box just as O’Neill did. While its intentions were pure, the project, if it could be realized, would take both humans and dolphins out of their natural environments, and imprison them in space. The collective’s freedom to critique media, society and politics were afforded to them due to their educational and social background. The moral beliefs of counterculture came to Ant Farm intrinsically but like members of the hippie movement, they could choose to leave the poverty playgrounds whenever they desired. Similarly, the environmental concerns they presented in *Inflatables* were dismissed soon after; and fascination with automobiles while criticizing suburbanization was another conflicting aspect of Ant Farm. Ironically, the tailfin which they were enamored with, was copied from a fighter aircraft of the Korean War (Papanek, 2000). Like the poverty playground, they could drop in and out of environmental issues or suburbanization as they pleased.

## 4.2 DROP CITY

**Type of work:** Commune

**Designers:** Clark Richert, Gene Bernofsky, JoAnn Bernofsky, Richard Kallweit

**Year:** 1965-1969



**Figure 53.** Drop City panorama, photograph by Clark Richert, c. 1967 (Awan et al 2013).

### Early Years

Although popularized by Leary, subversion of the term “dropping out” from meaning failure to finish education to intentionally forgoing societal expectations was adapted in 1961 by Gene Bernofsky and Clark Richert when they invented “Drop Art”. Students of University of Kansas at the time, Bernofsky and Richert would drop painted rocks on passersby on sidewalks to observe their reactions (Scott, 2007; Sternfeld, 2010). The idea behind the concept was to liberate art from the confines of the elitist world of museums and galleries (Miller, 1999) by dropping art into everyday life. Droppings were not limited to painted rocks but larger objects, too. Anything from a boot tied at the end of rope that they swung back and forth, which they called *Pendulum*, to a mattress that they dropped as people walked by could be Drop Art (Richert, 2013). Their art performances, like Ant Farm after them, were similar to pranks. While Richert was an art major, Bernofsky was majoring in psychology, therefore was a self-claimed artist. Calling themselves “Drop Artists”, they were interested in how people reacted to sights out of the ordinary. One lesser-known artwork by the duo was the “Egg Drop” (Figure 54), for

which they laid out a breakfast plate on the sidewalk, complete with eggs, bacon, orange juice and a cup of black coffee, and watched as people walked by and reacted to the unusual scene (Knopper, 2015).



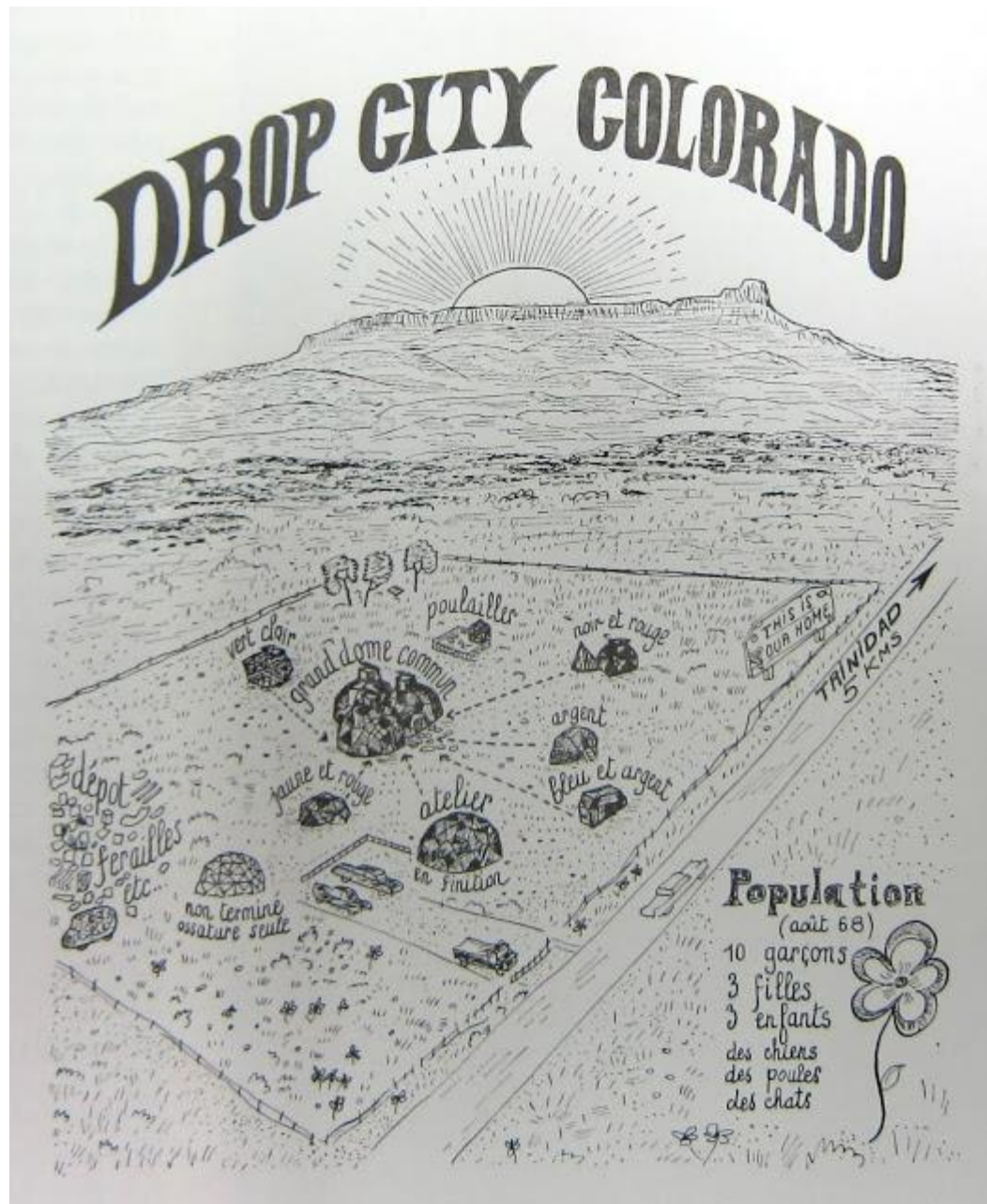
**Figure 54.** “Egg Drop” by Drop Artists in Lawrence, Kansas, 1962. Image retrieved from the documentary “Drop City” (Grossman 2012).

Both artists were fascinated with geometry from an early age as well. Richert recalled in an interview with Elissa Auther in 2013 (Richert, 2013) that Bernofsky, while “listening to rock music”, had a vision of a geometric pattern. With no experience in painting, he asked Richert for help to paint his vision on a large canvas and submitted the abstract painting to the Mid-America Annual at the Nelson Atkins Museum in Kansas, winning the Ford Foundation award, angering “serious artists” as a “prankster wins the big prize”.

In the early 1960s, Clark Richert took a trip to Mexico City where he printed around a hundred signs that read “Is This a Dropping” and pasted them around the city. During the same time Gene Bernofsky and his wife JoAnn Bernofsky were visiting communes around Africa. Upon their return to the United States in 1963, Bernofskys suggested to “start a new civilization” while Richert had a similar idea: To start an artist community (Knopper, 2015). Four years after they had started Drop Art, the three were joined by fellow artist Richard Kallweit to drop everyday life into art instead and formed the artist community of Drop City. They purchased a lot outside Trinidad, Colorado for \$450 on Richert’s birthday on May 3<sup>rd</sup> in 1965, and built, over time, a total of ten domes of various geometries (Grossman, 2012; Richert, 2013). Including the four

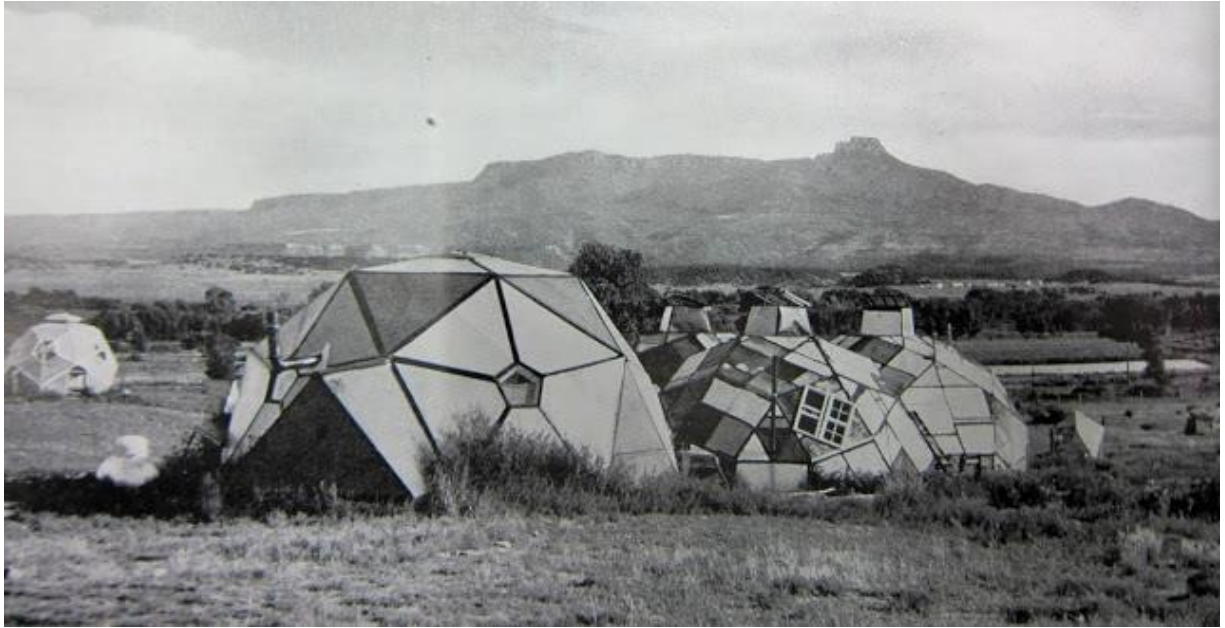


co-founders, the commune usually consisted of twelve members, with members joining and leaving every once in a while (Sternfeld, 2010). It is often reported that countercultural icons Timothy Leary, Bob Dylan and Jim Morrison were regular visitors (Moretta, 2017; Rabbit, 1971), although commune member John Curl has written in his self-published memoir that nobody he had spoken to had actually seen them (Curl, 2007).



**Figure 55.** Site map of Drop City in *Architecture d'Aujourd'hui*, issue no. 141 in 1968 (Kétoff 1968).

## Dome Structures



**Figure 56.** View of Drop City in *Architecture d'Aujourd'hui*, issue no. 141 in 1968 (Kétoff 1968).

The commune was also the first instance of Buckminster Fuller's geodesic dome design to be used for residential purposes, apart from Fuller's own home he built in 1960. Fuller himself awarded the commune with the first ever Dymaxion Award "for poetically economical architecture" a year after the community was formed (Sadler, 2006). Although Drop City is one of the most well-known instances of Fuller's geodesic domes, the original idea when Bernosfkys purchased the land was to build A-frame tents (Richert, 2013). After attending a lecture by Fuller in Boulder, Colorado in 1965 (Quimby et al., 2006) Richert, fascinated by geometry as an artist, attempted making his own geodesic dome at home out of straws and toothpicks (Daloze, 2016; Grossman, 2012; Richert, 2013). His dome was a misinterpreted version of Fuller's – based on "fivefold symmetry" instead of Fuller's triacontahedron (Richert, 2013). When asked by fellow Dropper Curl (Curl, 2007) why they chose domes to live in, Gene Bernofsky responded:

"Domes are advanced. All these rectangles make our heads into boxes. Living in a dome opens your fucking mind. No corners to hide in. Round like the sky. Living in a dome's like always sleeping under the stars [...] Domes are the simplest structure to build. The cheapest. [...] Do more with less. You put little

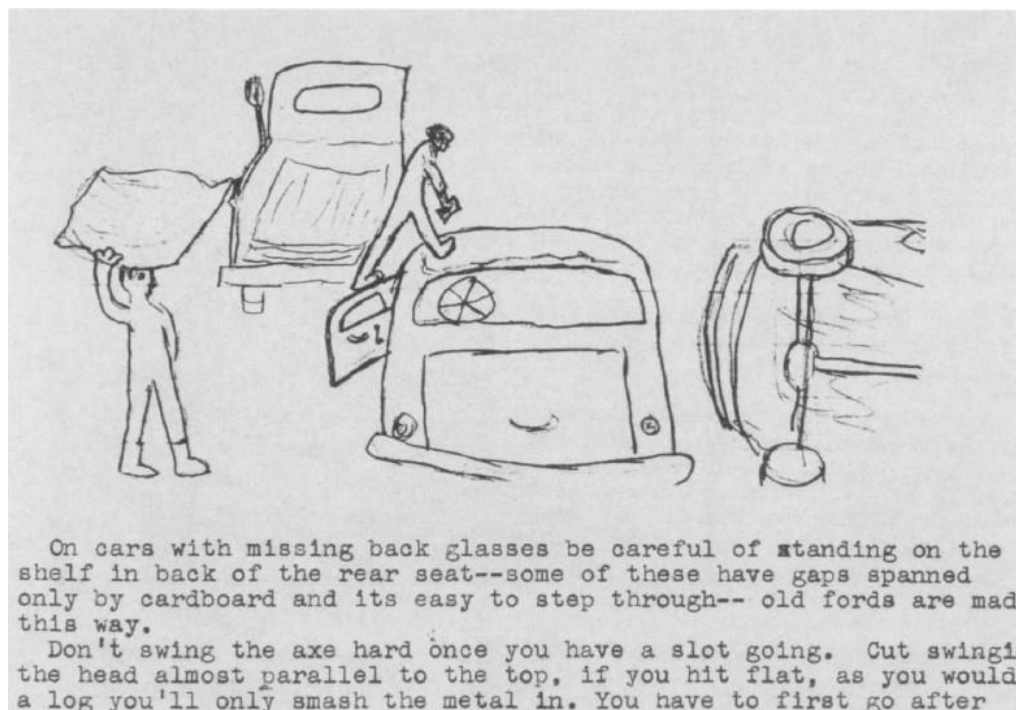
flaps along the sides and a skylight on top and, bingo, you got free, built-in air conditioning” (p. 12).

Combining climatic techniques of traditional vernacular architecture with Fuller’s engineering was almost like a metaphor for the techno-utopian yet rural commune. Victor Papanek (2000) refers to this phenomenon as a “sort of postindustrial example of vernacular building”. Adoption of geodesic dome had become a regular countercultural practice after Drop City, as it fulfilled desires to “do more with less”, a definition Fuller himself often resorted to when describing geodesic domes (Scott, 2007). To Fuller, geodesic dome becoming a monument for counterculture was logical. In an interview with Hans Meyer, he would describe the issues he had with his vision and that without corrective lenses, he would only see a “total polyhedral array of blurry colors” (Scott, 2006). By taking off his glasses, he had the chance to access the “vision” whenever he wanted, and he likened what he saw to “what kids [got] with psychedelics”. In another interview in 1967, he was asked whether he had been to a “mind circus” in one of his domes, hinting at affiliations with form and escapism, or rather introversion, of the counterculture. Scott notes that “many were ready to believe that doing-more-with-less one-world ideology of Fuller’s revolution by design was closely connected to the politics of anti-war protests, as well as to ecological and environmental movements” (Scott, 2006). While by “many” Scott is referring to mainstream media, Droppers, too, believed the geodesic dome was meant to be a uniting and freeing form, one without borders, corners, or straight edges. What the form of the geodesic dome symbolized was not the only reason it was adopted by Droppers or hippies. As a relatively easy structure to build, assembling domes did not require formative architectural education or construction experience, thus allowing all members to join in design and construction processes.

The act of construction was a uniting experience as well (Miller, 1999). In JoAnn Bernofsky’s words, not only were they “doing something out of nothing, but [they] were doing it together” (Grossman, 2012). Part of the reason dome-building did not require advanced construction skills was because the geodesic dome was not meant to be a year-round residential shelter and had many shortcomings. As it would be discovered and published by fellow dome-builder Lloyd Kahn a decade later, domes were not durable in most weather conditions and leaked if not properly covered and insulated.



What the Droppers lacked in construction skills, they made up for by being friendly eccentric characters, allowing them to easily consult their neighbors for advice (Miller, 1999). They learned that by covering their domes with stucco over tarpaper and chicken wire, as other local builders did, they could insulate their domes. The advice, however, was exclusive to orthogonal, boxy forms and could not be easily applied to the irregular faces of domes (Daloz, 2016; Grossman, 2012). To cover the remaining holes wherever the facets would not meet JoAnn Bernofsky resorted to a much more DIY approach and covered the holes with bottle caps that they collected from nearby markets (Grossman, 2012; Knopper, 2015). Put simply, structure of the first domes was erected by assembling railroad ties or wooden beams acquired from a nearby sawmill, which would then be covered by tarpaper and any remaining holes were covered by bottle caps. When Steve Baer joined under the pseudonym Luke Cool, he suggested to cover the domes with salvaged automobile rooftops instead (Figure 57) (Grossman, 2012). Glass from salvaged automobiles were also used for windows. Scott notes that not all automobiles were acquired from junkyards, but sometimes brand-new Cadillacs parked outside motels would somehow find their way to the commune (Scott, 2007).



**Figure 57.** Instructions on cutting cartops, illustration by Steve Baer in *Dome Cookbook*, 1968 (Baer 1968; Sadler 2006).

The four friends spent the summer of 1965 in the first dome made out of stucco and chicken wire, which only featured a small kitchen and a few beds. They started building a second dome shortly after, which would become “the kitchen dome”<sup>7</sup>. Their skills and know-how were slightly improving and for this second dome, they borrowed a ventilation technique from vernacular architecture and placed openable flaps on the bottom and an opening on top for air flow. By the winter of 1965, Richert would be the only remaining resident of Drop City, as Bernofskys moved back to New York due to JoAnn’s pregnancy and Kallweit moved to Albuquerque to receive his master’s degree. Richert worked on the construction of the Theater Dome on his own (Grossman, 2012).



**Figure 58.** The two-story “The Hole” where diJulios lived (left) and “The Complex” (right), c. 1966, courtesy of Richard Kallweit.

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<sup>7</sup> Richert’s recollection of the chronological order in which domes were built differ in various interviews and from Bernofskys account.

Appropriately for the commune of artists, The Theater Dome was the largest and most dazzling and stood as the main monument. Sadler likens one of the first domes built to be a theater to 19<sup>th</sup> century cities building opera houses as landmarks (Sadler, 2006). Over time, they experimented with larger domes, such as the two-story *Hole* (Figure 58); and *The Complex* (Figure 59), which was a combination of three domes (Richert, 2013). As Carol diJulio recalled, the construction of the two-story dome that diJulios lived in was realized by excavating underground with the use of dynamites purchased at a hardware store. Her husband Charlie diJulio, or as Droppers called him, “Alterisio”, cited his reason for building a dome of two stories was only to “be able to use some dynamite, a freedom we no longer have in this country” (Grossman, 2012). War might have been terrifying for Droppers, but much like Ant Farmers, they enjoyed explosions.



**Figure 59.** View of The Complex and first dome visible in the background, 1966. Photograph by Clark Richert, courtesy of Walker Art Center.

## Dropping Out of Society

Not surprisingly, Drop City is often referred to as the first rural hippie commune. The geodesic dome adopted by Drop City being appropriated by other hippie communes strengthened media's association of Droppers with hippies. Another reason they were equated to hippies was due to their stance on employment. The founders preferred the specific term "Dropper" to "hippies", according to Richert, who "hated the word hippie" ("Clark Richert and Drop City," 2018). Their discontent with being identified as hippies fueled Droppers' discontent with media, too, as Knopper reports that the Bernofskys, to this day refuse "almost all interview requests" as mainstream media still refers to them as the "h-word" (Knopper, 2015). The desire to disassociate from hippies probably stemmed from media's constant portrayal of hippies as lazy young people who did everything in their power to avoid work (Braunstein & Doyle, 2002b; Farber, 2016) the idea of which was clearly an atrocity in capitalist America. Droppers did not condemn labor. In fact, they enjoyed working but instead disdained gainful employment. In Gene Bernofsky's words, they believed (Miller, 1992):

"It's important to be employed; work is important, but we felt that to be gainfully employed was a sucking of the soul and that a part of one of the purposes of the new civilization was to be employed, but not to be gainfully employed, so that each individual would be their own master and we idealistically believed that if we were true to that principle, that if we did nongainful [sic] work that the cosmic forces would take note of this and would supply us with the necessities of survival" (pp. 88-89).

Although Bernofsky disregarded working for a living, he was offered a writing position for *The Heretics* series of *The National Insider* newspaper for \$20 per story. "Working for a living is insanity," he wrote in his article and noted that "We Droppers, dropped this gruesome responsibility months ago and we never intend to work again. We were raised as you were, to feel guilty about doing nothing" (Grossman, 2012). The manifesto-like article drew the attention of friends who held the same belief. Shortly after the number of residents of Drop City would increase to twelve. As an inspiration for Droppers with his geodesic domes, Buckminster Fuller, or "Bucky" as Droppers liked to call him, held the belief that gainful employment was unnecessary as well, lending support to the countercultural youth in a panel (Barlow, 1970):



“We must do away with the absolutely specious notion that everybody has to earn a living. It is fact today that one in ten thousand of us can make a technological breakthrough capable of supporting all the rest. The youth of today are absolutely right in recognizing this nonsense of earning a living. We keep inventing jobs because of this false idea that everybody has to be employed at some kind drudgery because, according to Malthusian-Darwinian theory, he must justify his right to exist. [...] The true business of people should be to go back to school and think about whatever it was they were thinking about before somebody came along and told them they had to earn a living” (p. 30).

Fuller’s belief that a single technological breakthrough would liberate all of society from work stemmed from a nation-wide conviction that, thanks to post-war economic prosperity, labor would be eliminated altogether. Since Droppers rejected the notion of gainful employment, poverty was a common theme within the community. The founders had used up their budget of \$1,000 when buying the land and a water meter. Droppers did not feel that they were poor even though they had no means of income. They believed that “poverty was a state of mind” (Miller, 1999). Given their backgrounds, most Droppers could afford to view material comfort as an offense and reduce poverty to a “state of mind”. Their ability and privilege to take material comfort for granted was another trait they shared with hippies. Despite their desire to differentiate themselves from hippies, Droppers’ poverty was similar to urban hippies’ performative poverty described by Braunstein and Doyle (2002b). Social and political awareness, too, were slightly performative but were at the same time inherent in communal culture. Richert claims the group was not fully aware of the political situation of 1960s, that he himself had a “dim awareness” of what was happening in Vietnam, only from a New Yorker article published long before American troops were drafted (Richert, 2013). With what little information they had, they still knew that they were anti-war and longed to drop out of the system. In an interview with Erin Elder, Bernofsky noted that the system Droppers detested the most was suburban tract housing. Droppers wanted to avoid the gridded configurations of the suburban communities and what they represented, which was mainly gainful employment (Elder, 2012). Speaking in a documentary in 2012, Bernofsky cited the reason for dropping out to be the depression caused by constant exposure to images of the Vietnam War (Grossman, 2012). Although they detested the grid of the suburbs, both Bernofsky and Richert claimed in the same documentary that they divided the land in equilateral triangles, which they hoped would extend to the rest of the world, which in reality would be equally rigid and constricting.

As there was no hierarchy within the commune, the state of their economy was communal as well. Newcomers, if they had any capital, would place their money in the commune pool. Since nobody theoretically owned anything, clothes would be gathered in a large dome so Droppers could take and wear whatever fit them (Grossman, 2012). Unsurprisingly for the anti-consumerist community, cars, which were the epitome of private ownership in America at the time, were also shared. As Timothy Miller reports from Clark Richert, “We were not in a state of poverty mentally, and no one ever went hungry” (Miller, 2002). Ownership of personal material possessions such as clothes or automobiles may have been a concept left at the door however private ownership of land, thus paying no rent and being “free of employment, free to create” was still a symbol of freedom (Miller, 1999). The land they owned was of arid soil, which meant it was not possible to live off the land. With agriculture proving unproductive, food had to be obtained from nearby markets yet with no monetary means to purchase goods, they asked for outdated products that would otherwise be thrown out. One source of income was the seldom donations they received from visitors or those sympathetic to their cause. For a commune that started off with only \$1,000, the most prominent donation must have been the \$500 check that came with the Dymaxion Award by Buckminster Fuller (Miller, 1999).

Food was not the only foraged commodity for Drop City. Building materials for the domes, too, were salvaged from nearby industrial plants. While Ant Farm broke the boundaries of American culture by building monuments of automobiles, Drop City built their own cultural monument using broken and reclaimed automobile parts. The practice can be likened to the artworks that would be produced during the Arte Povera movement in Italy mere two years later. They reused materials partly due to the ecological and do-it-yourself approach the droppers maintained; and partly because they could not afford to purchase construction materials. Mostly, it was because they held the belief, like the rest of the American public, that labor would become obsolete in the postwar economically prosperous America that was so affluent and wasteful that Droppers could live off “the leavings” (Moretta, 2017). As Drop City member Peter Rabbit, going by the pseudonym of Bill Voyd, recalled in an article, exhibiting a proleptical environmental awareness: “When one stops owning things another can begin to use them. Energy is transformed, not lost” (Voyd, 1969). The same Dropper, going by his birth name of Albin Wagner this time, likened the foraging of materials to a “new art form” by the name of “creative

scrounging”, stating they “dismantled abandoned bridges by moonlight” (Wagner, 1967). Droppers also believed they were transforming “weaponry to livingry” just as Fuller intended (Fuller, 1965, 1983; Scott, 2007) by dismantling automobiles dubbed as “killing machines” by Papanek (2000) and reassembling them as living spaces.

## Art

Creativity and art were at the center of the commune. Not only was each dome a three-dimensional collage, but there a myriad of sculptures and conceptual installations within the land, all of which have disappeared over time, leaving behind only a handful of photographic documentation. Drop City, altogether was a “large environmental sculpture” (Scott, 2006; Voyd, 1969).



**Figure 60.** Sculpture in Drop City, artist unknown, photograph by Richard Kallweit, c. 1967. Courtesy of Richard Kallweit.



Two pieces that withstood time, at least more than the others did, are the *The Being Bag* and *Ultimate Painting*. *The Being Bag* (Figure 61) was a black and white, silkscreened, hand printed comic book drawn by Gene Bernofsky, Richert, Kallweit and Charlie DiJulio. Similar to the likes of *Domebook* or *Inflatocookbook*, and little magazines of the time, they wrongly believed the comic was the first underground publication, printing two hundred copies. The proceeds from the sales, they hoped, could become a source of steady income. Droppers had to monetize their art in order to live, yet only a few copies of *The Being Bag* were sold. Of the comic book, Bernofsky said, “We wanted the writing to be mysterious and revolutionary and avant-garde”, much like Droppers themselves were (Miller, 1999). The copies of *The Being Bag* have mostly disappeared, yet the contents must have been interesting enough that it prompted Peter Rabbit to write “We welcome the feds and the postal inspectors who come to harangue us about its content. Our poet looks forward to the inspectors and their reading of his work” (Wagner, 1967). The poet in question is not mentioned, as there was no sense of credit or ownership.



**Figure 61.** Illustration from *The Being Bag* by Bernofsky, Richert, Kallweit and diJulio, c. 1966. Preview from Amazon.com.

They had higher hopes for the sale of *Ultimate Painting* (Figure 62), which was a geometric painting completed by “five Droppers, to make it five times better”, as written by Peter Rabbit (Wagner, 1967). Much like a kaleidoscope, the gigantic circular painting depicting geometrical patterns was rotated under strobing lights, powered by a motor (Rosen, 2009). Droppers put the painting up for sale at an asking price of \$60,000, a considerable amount for a commune that refused fiscal gain but also one that would ensure financial security for decades to come (Elder, 2012). *Ultimate Painting* has now disappeared as well, yet it was recreated by Clark Richert decades later for various exhibitions.



**Figure 62.** Ultimate Painting placed in front of The Theater Dome. Painting by Clark Richert, Richard Kallweit, JoAnn Bernofsky, Gene Bernofsky, Charles diJulio. Acrylic on canvas, 1966. Photograph by Clark Richert, 1966. Courtesy of Walker Art Center.

Another creative aspect of Drop City was their involvement in filmmaking. Founder Gene Bernofsky was an amateur filmmaker and documented all stages of construction. Although depicted as an off-the-grid commune, Droppers were, on the contrary, fascinated with

technology, as it was evident in the motor-powered *Ultimate Painting*. Explained best by Wagner, writing under Peter Douthit, in 1967 (Douthit, 1967):

“We want TV videotape recorders and cameras. We want computers and miles of color film and elaborate cine cameras and hundreds of strobes and tape decks and amps and echo chambers and everything. We want millionaire patrons. We want to use everything, new, junk, good, bad, we want to be able to make limitless things. We need the most up to date equipment to make our things. We want an atomic reactor” (p. 50).

Wagner’s demands were not fully representative of Drop City. The anti-consumerist commune was founded on the basis of living off wasteful America’s excesses, motivated by reusing and upcycling scraps left behind by a nation equally motivated by consumerism. Despite this outcry for “the most up to date equipment”, equipment Droppers acquired were mostly low-tech (Scott, 2006). Bernofsky had a 16mm Kodak Cinécamera, which he stated was communal, in the sense that anybody who wanted to use it, could. He called it a construction tool to “build a film” (Elder, 2012). Although there was a misconception in mainstream media that hippies were technophobic, the interest in technology or the desire to document happenings on film were not surprising. Droppers were born into a period of “Media America”, a term coined by Michael Shamberg (1971). Buckminster Fuller also noted the children that formed the counterculture were born into a “transoceanic air-traveling world” and were raised by the “third parent – television” (1969). Unsurprisingly, Droppers enjoyed science-fiction specifically. There was one television in the commune which was in the “Bernofsky dome”, where the group would gather to watch Star Trek (Grossman, 2012).

Timothy Miller accounts the constant name change of the members as part of their creative nature. The practice had started as a spur of the moment antic by Gene Bernofsky during the first interview with Droppers. When asked what his name was, Bernofsky would say “Curly Benson, off the top off his head” (Grossman, 2012; Miller, 1999). Continuing the joke, Clark Richert called himself Clard Svensen; Richard Kallweit became Larry Lard “to rhyme with Clard”. JoAnn Bernofsky would become “Drop Lady”. The tradition extended to all the members, eventually, with Albin Wagner going as far as to adopt three other names: Peter Douthit, Peter Rabbit and Bill Voyd (Mortensen, 2012). The stunt, to this day, causes confusion in literature, with Wagner often being mistaken for four different members. Due to displaced

documentation and because Drop City was usually never regarded as more than a hippie commune, the actual names, or the number of members at any given time remain unknown. Miller mentions one member called “UFO Marine”, whose real name was also unknown to the Droppers themselves. Droppers were too afraid to inquire anything about UFO Marine, who was a gun enthusiast and carried a fully loaded gun on him at all times, which he threatened people with (Miller, 1999). Apart from being too afraid to ask the likes of UFO Marine to leave, the open-door policy the commune upheld meant they could not simply ask him to leave either.

## **Dissolution**

As with each utopia, the elements that made the community desirable in the first place eventually served as its inevitable downfall. The open-door policy meant Drop City welcomed more people than it could accommodate, what with their limited resources. Fuller’s recognition of the commune with the Dymaxion Award most likely highlighted the value of Drop City within the counterculture movement; and most likely allowed them to survive for a period of time. The award was also one of the reasons the commune received more visitors and members than it could afford. Another reason for the downfall was the “Joy Fest” held in June 1967, organized by the infamous member Peter Rabbit against the wishes of the original founders. 1,000 people were invited to the event, as well as large media corporations like *Time Magazine*. Gene Bernosfky cited Drop City adorning the cover of *Time Magazine* with the title “Youth: The Hippies”, “symbolized the end of Drop City”, that “the powers of media had won out” (Miller, 1999). The community was founded as a protest against conventional, consumerist, war-prone American society, which meant that there were no means of hierarchal order within the people. Those opposing holding such a festival could express their concerns, but they could not actively proscribe it (Robinson & Robinson, 2015). Rabbit had also discovered by writing about Drop City in publications such as *Architectural Digest*, he could make money for the commune, which led to greater exposure and more visitors. Rabbit’s desire to make Drop City more known to the rest of the world made him the most unliked Dropper in all of Drop City, leading to an actual physical fight, which was “the beginning of the end” for Carol diJulio (Grossman, 2012). The open-door policy, along with the increased publicity and visibility from interested parties who

had heard of the commune through the award or the festival, led to the inevitable decess of the project. The Bernofskys left Drop City immediately after Joy Fest, which was swarmed with hippies.



**Figure 63.** Advertisement near Drop City after Joy Fest, 1967 (Grossman 2012).

A year after Bernofskys, Clark Richert left because he believed his pregnant wife could not get sufficient nutrients in the commune (Grossman, 2012; Miller, 1999). Peter Rabbit left soon after, to form Libre community. Libre community was a more advanced carbon copy of Drop City: Domes built in Libre costed up to \$2,000 as opposed to Drop City's \$7 domes. By 1969, all original members of the commune departed, and the open-door policy was abandoned. Drop City had entered a new era and the remaining members announced in an issue of *Modern Utopian* in a non-Drop City fashion that "new members must meet specific criteria" (Miller, 1999). The change in tone was accelerated by worsening living conditions and suicide of Dropper Michele Kelley, who noted in a letter to her family that she was worried about the "college riots" and the social injustices and corruption in America (Grossman, 2012; Scott, 2007). In the same letter, she wrote "What I'm curious about is how much straight middle-class people like you and your fellow types are aware of what's happening", highlighting the apathy



mainstream society had towards the liberation movements (Grossman, 2012). Departure of original Droppers also led to construction and creative production stopping altogether.

While Drop City may have not achieved its mission to be a prototype for future residential settlements, it was influential in that a handful of other counter communities sprouted in its place. According to Sadler and Lloyd Kahn, it was an influence on Stewart Brand when establishing *Whole Earth Catalog* (Grossman, 2012; Sadler, 2006). It was also the laboratory in which Steve Baer and Holly Baer developed what a regular visitor, Steve Durkee, named “zomes”, a combination of the words zonohedron and dome (Awan et al., 2013). Zomes were a building concept built on advancing Fuller’s domes into less constricting living spaces (Grossman, 2012). Combining their geometrical findings with their research and experimentation on passive solar energy systems, Steve Baer later went onto found “Zomeworks” with Barry Hickman and Dropper Ed Heinz in 1969. Zomeworks was one of the first companies to experiment with solar energy. Kallweit and Richert helped in developing the concept and advertising the company, most famously in *Whole Earth Catalog*. Steve Baer would do so, too, by publishing *Dome Cookbook* through the Lama Foundation, a spiritual community founded by Drop City regulars Barbara Durkee, Steve Durkee and Jonathan Altman.

Similar to Ant Farm, countercultural beliefs were an embedded element of Drop City. While Droppers chose to drop out of society altogether as a protest against culture, again like Ant Farm, they also enjoyed some institutionalized practices of traditional society. For instance, for a commune that dropped out due to disdain of traditional American values, the gender roles were extremely traditional. Construction was mainly done by men and housework, that would be described as social reproduction by Marxist feminism, was ascribed to the women of the commune. Carol diJulio mentioned that she “never saw a guy wash a dish” and along with JoAnn Bernofsky, the two would take care of the children and “spent a good deal of time doing laundry” (Grossman, 2012). Unlike Ant Farm, however, Droppers’ involvement in the poverty playground was more compatible with their backgrounds as some Droppers came from working-class families (Elder, 2012). Gene Bernofsky’s parents, specifically, were members of the Communist Party, and were well-versed in Marxist theory (Grossman, 2012).

The lack of diversity within the commune, however, also meant that they could drop back in society whenever they wanted, which they eventually did. The idea behind Drop City, no matter how pure its intentions were, was also reminiscent of American colonialism. The original concept for Drop City was planned for Africa, as their very own Manifest Destiny. According to JoAnn Bernofsky, the original idea behind Drop City was to build a new civilization near the River Nile, to which Bernofskys would have reached by riding horses that they purchased in Morocco (Grossman, 2012). For reasons unexpressed, it became clear soon enough that their plan could not be realized in Africa but had to be taken back to the United States instead. The lot they chose was purposefully in a town populated with “low-income and immigrant laborers, who were collectively some of the poorest in the state” (Elder, 2012). Droppers also called themselves “immigrants on our own native soil”, in a way, ignoring the struggles of Indian Americans (Scott, 2007). These afflictions strengthen the association of Droppers with poverty playgrounds, performative poverty and therefore with hippies, too, no matter how much Droppers disliked the connection.

Although Drop City inadvertently reproduced traditional gender roles of the ‘straight’ society they wanted to distance themselves from, they set an example for more mature and well-organized communes like the Libre community. Their anti-consumerist stance and use of alternative energy sources were revolutionary for the environmental movement as well. They may have failed in dropping out of or reforming society. They achieved more for the environmental movement than just raising awareness, however, and proved that alternative ways to live, produce and consume were possible.





**Figure 64.** Passive solar collector construction at Drop City, designed by Zomeworks. Photograph by Clark Richert, 1967 (Awan et al 2013).

## 5. CONCLUSION

In his account of Drop City for *Journal of Architectural Education*, Simon Sadler begins by posing the question “Why would an architectural journal revisit a dropout colony?” (Sadler, 2006). The question is a valid one for an architectural thesis as well. Sadler answers his own rhetorical question by stating that Drop City was a “new beginning for architecture”. Whether Drop City or Ant Farm, or other architectural practices mentioned in this study marked a new beginning for architecture is an arguable statement. Drop City’s use of geometric forms was a preliminary example of parametric design. Yet they had not developed the form themselves but instead borrowed from R. Buckminster Fuller, who had adopted it a mere twenty years ago. Buckminster Fuller was not the inventor of the form either, he had only patented Walter Bauersfeld’s design dated 1922. Ant Farm’s *Inflatables*, in Stewart Brand’s words, were “not architectural at all”. Similarly, Felicity D. Scott references Reyner Banham and states domes “are Not Quite Architecture” (Scott, 2006). By contrast, this study assumes the position of Hans Hollein, who stated in 1968 that “All are architects. Everything is architecture” (Hollein, 2005).

To conclude this study, this final chapter will summarize the accomplishments of Drop City and Ant Farm. What constitutes as an achievement in the case of these collectives will be explored as well. Neither collective intended to reform society or architecture altogether, at least not realistically. To assert that whether the founders of these collectives had full confidence that their projects would revolutionize society would be an ambitious claim. Achievement, in this case, refers to more a broad idea of whether they realized their initial goals when creating their collectives.

Ant Farm’s initial goals were focused on social reform through educational reform. These goals were not realized through nationwide demonstrations like liberation movements of the Long Sixties. Instead, Ant Farm merely questioned the validity of the current way the society was constructed. In Ant Farm’s case, Buckminster Fuller’s belief that “a problem adequately stated is a problem solved” (Fuller, 1965) was adopted.

Drop City had a less transformative aim than Ant Farm. Instead of setting out to reform the entire society, Droppers chose to distance themselves from said society. This arduous act of

disassociation was another way to critique society. Droppers' abandonment of the entire system displayed their lack of confidence that the 'straight' society had any chance for salvation. They also displayed that there were other ways to live besides the capitalistic *raison d'être* of gainfully working to consume. Without ever calling their commune a "utopia", which would imply that it was inherently unrealistic, Droppers attempted to produce an alternative society.

Perhaps most importantly for this study, when stating "Everything is architecture", Hollein wrote that humans' behaviors and design understandings were shaped by the community they belonged in. Both Ant Farm and Drop City were a part of a larger movement referred to here as counterculture. Counterculture, in its essence, questioned and critiqued regular societal norms and by extent, architectural forms. This concluding chapter will explore to what degree Ant Farm and Drop City achieved their ambitions through their relation to the four aspects of the period outlined in the previous chapters as "Questioning Conventional Architecture"; "Anti-Mainstream Society"; "Anti-Mainstream Media"; and "Ecological Concern".

### **Questioning Conventional Architecture**

As discussed in the previous chapter of "Spatial Utopias of Post-War America", the ideal American society was purposefully placed and confined in the suburbs. Suburban settlements acted as a closed system for white, middle-class, heterosexual nuclear families. While suburbs were advertised to the American society as utopias of the American Dream, the isolated settlements also acted as prisons, and the "little boxes" as jail cells. Suburbs were placed strategically on the outskirts of cities where people of different cultures and backgrounds socialized. The distance to cities ensured that suburbs could only be reached by automobiles, and thus only by people who could afford automobiles. Automobiles and freeways therefore were the gates to keep out low-income families. If a family did not have the economic means to purchase cars, they could not enter or leave these utopian islands built on land. Suburban families also required cars to socialize with one another due to low-density configuration of the settlements. There were often no built-in sidewalks in the suburbs, being the catalyst that ensured integration and tolerance within the community, as Jane Jacobs argued. Besides the spatial boundaries, there were also unwritten laws in place that ensured suburban families

remained white, middle-class, and heterosexual. Real estate agents could choose not to sell to families or individuals they deemed did not belong in the community.

Counterculture did not overtly oppose suburbs but instead the social foundations they were built on. Inspired by the racial equality movement and the women's liberation movement in the 1960s and '70s, countercultural figures had come to adopt a sense of community rooted in equality. Equality for counterculture, however, meant that every single person was the exact same, therefore should be treated the same. This holistic approach to community was innocuous yet gullible. The idea of "We are All One" adopted by counterculture inadvertently erased the separate identities of its members. Entering the portal of counterculture did not seem desirable or necessary for black activists or individuals coming from different backgrounds.

As counterculture preached community, sharing and communal living were at the center of the movement. Communes were therefore adopted as the main domain of counterculture. Communal living was not a new concept, it was rooted in the entire history of humankind. Communitarians did not only oppose suburban settlements but often cities, as well. While there were communes established in cities, back-to-the-land communes were more widespread.

While there were rural communes established in the United States centuries before '60s counterculture started living communally, Drop City is often cited as the "first rural" or "first hippie commune". Droppers preferred to call it the "first artist commune". This definition was more suitable for Drop City as well, as it was founded by a group of artists. The holistic idea of "We Are all One" was one that appealed to Droppers. Around the same time they set out to build their communes, they came across R. Buckminster Fuller's lectures on the geodesic dome. Droppers felt that the form of the geodesic dome was a spatial embodiment of the "We are All One" belief; a structure that acted as both walls and roof seemed to break the boundaries of conventional and rectangular architectural forms. Domes were easy to build and could be constructed quickly as well, which was an advantage for the Droppers who had no knowledge of construction.

What the Droppers were not fully aware of, however, was that as domes were easy and quick to build, they were often used in military bases. Project Horizon discussed earlier in this study

under “Technological Post-War Utopias”, for instance, proposed dome structures on the surface of the moon. The dome was similar in shape to the Dymaxion House or the Dymaxion Deployment Unit (DDU) developed by Fuller in the 1940s. The DDU had a curved roof like a dome so as to deflect bomb particles from possible air attacks. To Drop City, the curved structure of the dome was only meant to deflect the ‘straight’ society.

Domes were adopted by the military as they coincided with the *Existenzminimum* approach that was vital in army bases. Even on the surface of the moon, where there were vast open spaces to build, domes ensured economic efficiency. By contrast, Droppers discovered, thanks to the geometry of the geodesic dome, they could build their structures as big as they needed to be. Adoption of military building techniques was surprising for the anti-war commune of Drop City. It can be argued that without intending to, Droppers reclaimed the dome structure from the military. Over time, domes have become more associated in architectural circles with communes than they are with the military.

While for the military domes were nothing more than simple shelters, to Droppers they represented works of art. Composed of parts from different automobiles, each Drop City dome stood as a unique kaleidoscopic sculpture. These fragmented, colorful sculptures also possibly resembled the visions they had when under the influence of psychedelic drugs.

While conventional architecture prides itself in its use of new technologies and materials, Drop City chose to reuse materials to build their structures. Often, they used materials that were not conventionally seen as construction materials, such as salvaged automobile rooftops and collected bottlecaps. They believed the waste produced by the affluent American society could sustain them.

Domes were not the nonpareil realization of Fuller’s geodesic domes, however. To Fuller, the geodesic dome represented the peak of technology as it was lightweight. He had developed the concept by studying aircrafts and the unparalleled technology of military manufacturing. He believed by constructing buildings out of materials developed in the aircraft industry, a higher “performance per pound” could be achieved (Fuller, 2005). By contrast, Drop City’s domes made out automobile parts which were much heavier and bulkier.

Despite their heftiness, they were not durable either. Domes made out of automobile parts and bottle caps were not as sustainable as Droppers had predicted. Fragmented faces of the domes could not be insulated properly, especially with Droppers' building knowledge and skills. The domes leaked whenever it rained and Scott (2007) points out, were difficult to decorate inside.

Importance of lightweight buildings would be taken more literally by Ant Farm in their *Inflatables*. Made out salvaged or new clear vinyl, and inflated through heater fans, *Inflatables* were as lightweight as a "building" could be. They certainly did not have a higher "performance per pound" as Fuller suggested. They could not withstand harsh weather conditions. *Inflatables* however, not only provided shelter during light winds and light rain, but also made them pleasant to watch from the inside, as an Ant Farmer had recalled in the instructional video supplement to *Inflatocookbook*. Especially wind was a parameter that changed the form of the structure. In other words, the form was determined simultaneously and continuously by weather conditions. Their living environment was constantly shaped by their natural environment. Thus, by removing rigid boundaries of the structure, the common countercultural understanding of "We Are all One" became "We Are all One with Nature" in Ant Farm's case.

The lightweight structures adapted not only to their surroundings but to the movements of their dwellers as well, as dynamic extensions of the dwellers' bodies. What the *Inflatables* represented was the literal breaking down of walls and boundaries. While Drop City chose to drop out of society, Ant Farm chose to drop the physical limits of society. In *Inflatables Illustrated* (Schreier, 1971), Ant Farmer Chip Lord describes being inside the structure as a feeling that "frees up our environmental consciousness"; and "removes all the XYZ axes of space and begins to give somebody a feeling that there can be other spaces they can be in - that are very abstract". Lord's description is one of the reasons Ant Farm was chosen as a case in this study, as it was a direct answer to the initial research question of "Are there other ways of doing architecture"? To Lord's description, Curtis Schreier chimes in by saying, "Rectangular rooms have to do with rectangular limits". This statement alone is a testament to Ant Farm questioning conventional architecture. If "rectangular architecture" was a means to constrain human consciousness to curb potential inquiries of the system, removing those rectangular lines was a form of rebellion.

Ant Farm's questioning of conventional architectural forms can be extended beyond their inflatable structures to include their video art performances of *Media Burn* and *The Eternal Frame*. It was mentioned previously in this study that Doug Michels of Ant Farm described their seemingly bizarre performances as "the image is the message". This statement was a reference to Marshall McLuhan's theory that "the medium is the message". According to McLuhan, the form of a message would decide the way it is perceived (McLuhan, 1994). Similarly, Hollein's seminal manifesto of "Everything is Architecture" referred to inflatable structures, space suits, "simulated" buildings, holograms among other experimentations as "architecture". Buildings, according to Hollein, were "understood as the creation of a three-dimensional image". By performing media events, Ant Farm "constructed" images. The image of *The Eternal Frame* was a reconstruction of an event that possibly changed the course of American history. In the video, various images of a bloodied Doug Hall dressed as John F. Kennedy are frozen for uncomfortably long seconds to emphasize the message. Even the name of the performance alludes to the eternity of the images constructed and our perception of the events. In the case of *Media Burn*, the image was first immortalized not by video but instead through the form of a postcard. The video of the 1974 event was only released forty years later in 2004. In the artist commentary of Ant Farm Video DVD release, Chip Lord states the postcard of *Media Burn* was the highest selling postcard at the time (Lord, 2004). In her review of Ant Farm Video, Scott (2008) argues that the performance is a "truly multimedia work", the elements of which are designed and constructed; then performed to a live audience; ultimately being recorded on film both as a photograph and a video. The recognition of the constructed image, however, surpasses the prominence of the performance. The image, therefore, has truly become the message.

*Cadillac Ranch* was another way in which an image was constructed. As an installation, *Cadillac Ranch* represented "the death of the automobile" to some, while to others, it was a celebration of America's automobile culture. This division in perception can be seen as a supporting argument for McLuhan's concept. The form of the message, in this case ten Cadillacs buried halfway into the ground, shaped the way that message was perceived. While automobilization was a medium used to shape American culture, through countercultural belief, *Cadillac Ranch* should have been a denunciation. It has been argued earlier in this study, however, that automobiles represented freedom to counterculture. Fundamentally, whether Ant



Farm intended the project to be a funeral or celebration for automobilization is irrelevant. As Roland Barthes argued in “Death of the Author”, the content of the text, or the image in this case, should not be judged by its author or the author’s intentions (Barthes, 1977). The message representing contrasting perceptions to different spectators is a clue for the multiplicity of American counterculture.

*Cadillac Ranch* is the sole surviving work by Ant Farm that is still open to visitors. Visitors are encouraged to paint on the cars, thus contributing to the continuity of the installation. The more the art is “vandalized”, the more its image continues to evolve. The installation has become a collective palimpsest. Ant Farm allows the spectators to make the art their own by adding pieces from themselves. Whether the installation is meant to depict “death of the automobile” might be irrelevant, yet it is a demonstration of the “death of the architect’s ego”. This interactive and participatory practice also promotes the art being continuously updated and staying relevant. In June 2020, as part of the “Black Lives Matter” protests that emerged following George Floyd’s brutal murder by a police officer, *Cadillac Ranch* was painted all black, with the words “Black Lives Matter” printed in white letters<sup>8</sup> (Blay, 2020; Levine, 2020).

It should be noted that the use of “conventional architecture” in this study refers to spatial practices adopted in the United States at the time. Conventional architecture can be characterized by adoption of isolated and individualistic suburbs as the socio-spatial organization; rectangular architectural forms; durable and heavyweight structural properties; and conventional building materials such as concrete or bricks.

By contrast, Drop City embraced communal living as their socio-spatial organization; domes as their architectural language; and used salvaged materials for construction. Communes were only unusual in the American context at the time but operational in many other parts of the world. They did not only borrow their spatial organization from these parts but building techniques from vernacular architecture as well. Droppers had discovered by adding openable flaps to the

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<sup>8</sup> The gesture was reportedly organized by a white woman in hopes of showing solidarity with the black community. While a sincere effort, the act is evocative of Malcolm X’s argument in 1964 that white liberals were attracted to symbolic gestures as argued in the previous chapters.

bottom and to the top of the domes, they could stimulate air flow within the structure. This was a natural ventilation technique prevalent in humid, tropical regions of Australia and Asia.

In Drop City, domes were adopted to counter the rectangular forms of conventional architecture. Covering these domes with found materials that otherwise would not be used for construction was similar to the Italian Arte Povera movement. Usage of salvaged materials, however, increased the weight of the structures. The geodesic dome, according to Fuller, was ideal as it was lightweight. The heaviness of their structures, paradoxically contributed to their unconventionality. Similar to Drop City, Ant Farm adopted communal production as their socio-spatial organization. While Drop City strictly used dome-like structures, Ant Farm did not settle for any predetermined shape. Their ephemeral, amorphous structures were instead shaped by the material they used, which was plastic. Plastic also ensured that unlike conventional buildings, *Inflatables* could be lightweight, albeit not durable. Some of their architectural productions were not necessarily spatial, but instead a constructions of images.

Perhaps the most appealing aspect of Ant Farm and Drop City, and the unconventional architectural collectives of this period in general, was the ephemerality of their productions. Instead of constructing permanent architectural works that would dominate the future of cities, these collectives produced temporary and transient structures that were more concerned with the present rather than the future. With utopian architecture gaining popularity during the period, the Long Sixties foreshadow the architecture of neoliberalism a few decades later, which favors permanent, overbearing, individualistic, iconic, and outlying megastructures at the urban scale. Herein utopian architecture tends to be fascinating and inspiring on paper yet dystopian once realized. In other words, it is the impossibility of paper architecture that makes it appealing, yet impossibility being forced into reality, by contrast, becomes constraining. Within the next few decades after the Long Sixties, neither the architectural scale nor impossibility would be satisfactory for the starchitects of neoliberalism. The evanescence of Ant Farm and Drop City's productions, however, ensured that the fleeting essence of utopian architecture was upheld even when the outlandish structures were realized.

Every movement is born as a criticism of its predecessors. The experimental architecture of the Long Sixties is, in a way, a critique of modern architecture and the rigid forms dictated by

modernism. While the conventional path of criticism against modern architecture was postmodernist architecture, the unconventionality of the Long Sixties, or “hippie modernism” is another short-lived, lesser-known streak against modern architecture. Therefore, designating Ant Farm and Drop City’s architectural understanding as “Questioning Conventional Architecture” and not as examples of postmodernist architecture is a conscious choice. As Bernard Tschumi (2005) noted, the radical events that followed 1968 “made possible a concept of architecture as a theoretical project”. Ant Farm’s works in particular coincided more with this definition of “theoretical projects” than postmodernist architecture. A notable difference between hippie modernism and postmodernist architecture can be traced to Kenneth Frampton’s critique of “Learning from Las Vegas” (Venturi et al., 1988). Frampton argued that Las Vegas Strip to which Brown and Venturi hailed as the domain of postmodernism was a “manipulation of the American consumer through advertising” (Ockman, 2005). Drop City, while exhibiting most of the main characteristics of postmodernist architecture, was founded on the basis of anti-consumerism. Droppers built their entire stance and consequently their project out of America’s excesses. Ant Farm, too, was anti-consumerist, albeit their position on the issue was not as strict as that of Drop City’s.

While conventional or modernist architecture praised the architect as the sole author, Ant Farm and Drop City embraced collective production; dissolution of the author and abandoned the architect’s ego. In general, they hoped for their art to be reproduced. They also avoided limiting architectural production to buildings. To Ant Farm, plastic arts, video performances were architecture; whereas for Drop City, architecture was both art and building life. While conventional architecture dictated that architecture was limited, to these collectives everything was architecture.

### **Anti-Mainstream Society**

The founding characteristics of the American society were introduced earlier in this study under “Political Climate of Post-War America”; and the ways in which the opposition responded to those characteristics were explored in depth under “Political Utopias: Liberation Movements”.

This section will first delve into the reactions of Ant Farm and Drop City to building blocks of American culture analyzed in “Political Climate of Post-War America”; and then into their alignment with the liberation movements introduced in “Political Utopias”.

Apathy – and antipathy to societal expectations was an embedded asset of the counterculture and its actors. While those that did not stray from America’s understanding of a mainstream society would propose settlements in space that mimicked exactly the existing societal structures like in the case of the O’Neill Colonies, both Ant Farm and Drop City refused to follow in the footsteps of the likes of the suburban developers of Levittown or American policymakers. Neither collective explicitly denounced government policies, nor even the war in Vietnam. Their contempt towards the existing structures was instead displayed in their makeshift solutions and artistic productions.

By extracting parts from abandoned automobiles to build their domes, Drop City literally disassembled a building block of the American society and reassembled it within their own utopia. Ant Farm often resorted to military surplus and used plastic when constructing their *Inflatables* as well. Similar to Drop City, they cut up materials obtained from the ‘straight’ society and military; and restructured them as hollowed out, ephemeral and ethereal buildings.

It goes without saying that members of both collectives emphasized in this study purposefully separate themselves from the straight American society placed in white-collar office jobs and suburban settlements. Drop City’s separation from this model is more evident than Ant Farm, however. While Ant Farmers were based in San Francisco and exhibited their works in urban settings, Drop City denounced both urban and suburban settings and instead adopted a ‘back-to-the-land’ approach. Settling as far away from the city as possible, the group distanced themselves from the society not only mentally but physically as well. Had they been able to realize their initial goal of settling near the River Nile, this unannounced statement would have been even more noticeable. As argued above, Droppers’ disassociation from the society, in a way, displayed their lack of confidence that ‘straight’ society could be reformed. This argument could imply that Ant Farm had a more charitable stance against society. They avoided distancing themselves from the rest of the community. Instead, they exhibited their artworks to the public

in order provoke them to criticize the system as well. Equally important, Ant Farm enjoyed the spotlight as well as the freedoms and privileges ‘straight’ society enjoyed.

In *Media Burn*, Ant Farm “constructed” an image of media being destroyed by an automobile purposefully designed to resemble a space vehicle. It was discussed in the previous chapters that both media and the automobile were seen as building materials for the ideal American society. By crashing an automobile into a wall of television sets; they created an image that showed the two main elements of the ideal society colliding, and thus cancelling each other out through an explosion. It can be argued therefore that through the message of the image, Ant Farm attempted to question the validity of American society’s traditional values.

*Cadillac Ranch* demonstrated a similar judgment of America’s traditional values. While automobiles in general were the building blocks of American society, Cadillacs were symbols of affluence. Burying such a symbol nose-down into the ground could be seen as a denunciation of the affluent society. Contrarily, as it was argued above, such a monumental installation, likened to an American Stonehenge, could be a celebration of this symbol as well. It was also noted previously that Chip Lord believed the iconic tailfin of the Cadillac served no aerodynamic or functional purpose but instead was the utmost symbolization of economic wealth. Only Cadillacs that featured tailfins were chosen for this installation; and the cars were erected in a chronological order to present the evolution of the tailfin. By burying the cars nose-down, tailfins were strategically positioned to be highlighted. Knowing Ant Farm’s position on consumerism, celebration of the symbol of affluence can be satirical. Tailfins did not only symbolize wealth but military as well, as the design of the tailfin was emulated from war planes used in the Korean War.

Military was a means to preserve the sanctity of the mainstream American society. It was due to the military’s achievements that America could remain affluent, consumerist and capitalist. The government claimed it was communism that America was fighting in almost all the wars of the twentieth century. Whatever the actual reasons for America’s involvement in World War II, Korean War, Cold War and ultimately the Vietnam War, the reason advertised to the American public was that communism was an epidemic that should be contained in farther lands. The American Dream was based on the idea that capitalism was freedom. World War II, especially,

had provided the economic prosperity that counterculture enjoyed. The Second World War had created employment opportunities, albeit only for white people. Counterculture, like the rest of American society, was united under the assumption that the economic prosperity obtained from the war created a post-scarcity leisure society in which gainful employment would be eradicated altogether. Thus counterculture's and by extension Ant Farm's use of military designs was ironic but not surprising. Although strictly anti-Vietnam War, counterculture did not oppose all wars. Stewart Brand of the *Whole Earth Catalog*, for instance, believed that communism was a threat to individual freedom. While praising a Whole Earth understanding, Brand was an avid preacher of individualism as well. Although counterculture opposed a general understanding of 'society', it did not protest all the building blocks of society. Anti-communism and McCarthyism were so embedded in American culture that these practices undoubtedly blurred countercultural judgment.

The conflicting understandings of individuality and Whole Earth were both ingrained in counterculture. When Ant Farm designed a colony for humans and dolphins to communicate and live together in space, they displayed a more comprehensive understanding of unity than when O'Neill designed his space colonies. While O'Neill designed space suburbs for the "norm", Ant Farm's *Dolphin Embassy* was more inclusive of non-human entities. Space colonies, however, are anthropogenic and technocratic utopias where the main idea is for humans to be the governors of not just Earth but the universe. Ant Farm's project, like O'Neill, assumed that all humans were the same, erasing its potential residents' individual identities. In reality, surviving in space is an ability for only the toughest of people, both mentally and physically. There is no reason, at least not yet, to assume that space tourists or settlers would not have to go through the same intense training astronauts do. We can also safely assume that, under capitalism, if space tourism or settlements were to become prevalent, only those with the capital to afford such extravagances would be able to travel to space. The post-scarcity promise of post-war years had implied that financial capital could be overlooked when it came to space colonization.

Post-scarcity was a viable conviction for Ant Farm and Drop City because neither collective had actual experience in scarcity. Both collectives were composed of white, middle-class,

heterosexual men, with the exception of women that married into Drop City. Even though both collectives were founded on the basis of rioting against the norm or the “ideal American”, there is no presence, or at least documented evidence, of non-white, queer, or disabled people in either collective. The suburban life popularized in the 1950s cheerfully distanced themselves from diversity and O’Neill’s colonies failed to be inclusive even though O’Neill himself claimed to praise diversity. Likewise, Ant Farm and Drop City, just as many other countercultural collectives of the Long Sixties, lacked to promote diversity just as their ‘cultural’ counterparts did, even though they alleged otherwise.

Being white, heterosexual men afforded Droppers and Ant Farmers the privilege of criticizing the system they were in. They were not necessarily opposing what they experienced in that system, but rather what they observed. Especially Ant Farm could depict the inequalities they observed in their architectural productions; and exhibit those productions at institutions such as art museums or festivals that were generally equally white, middle class, heterosexual spaces. With their physical appearances and affluent backgrounds, both Droppers and Ant Farmers could choose to remain in the norm of “Us”. Instead, they consciously choose to be a part of “Them”, or of “the Other”, discussed in earlier chapters on the political climate of post-war America. Both Ant Farm and Drop City appropriated the viewpoints of the Other; and conquered the spaces that the Other could find solace in.

This study was initiated with the assumption that counterculture provided a space for the Other. While there probably were communes composed of people outside “the norm”, there is no evidence of any in the archives accessible in the breadth of a master’s thesis. There are, of course, some individual artistic, sculptural, or literary productions yet no architectural collectives were given as much attention as Ant Farm or Drop City in secondary literature. While the form of the geodesic dome or of *Inflatables* symbolized social unity and holism, their residents failed to be as inclusive. They were not completely oblivious to the objectives or ideals of the liberation movements. Instead, these collectives borrowed their contempt and anger from the liberation movements, without providing a space for the actual people involved in those movements.



Just like the “poverty playgrounds” or the “ghetto fantasies” observed in the previous chapters, Ant Farmers and Droppers were able to drop into these spaces that could be designated for the Other; and choose to drop back in society whenever they wished. They did so, as well. When Dropper Richard Kallweit realized his pregnant wife would not be able to receive the nutrients she needed in Drop City, the couple moved back into the city. Likewise, when disappointed in the trajectory of their utopia, the Bernofksys dropped back into the society. Similarly, once Ant Farm disbanded, Chip Lord went on to pursue a teaching career in various universities. Doug Michels of Ant Farm joined more corporate architectural firms such as HOK.

The founders of both Ant Farm and Drop City met during their university education, a privilege that is not afforded to all citizens of the United States. Ant Farmers, it can be argued, were even more privileged than Droppers. Doug Michels of Ant Farm had graduated from one of the most prestigious universities in the country, Yale University. Perhaps adorning this diploma was what handed him the luxury to approach the likes of Philip Johnson and corporate HOK with a resume in hand, even after making a mockery out of regular architectural practices and construction companies. He was also given a teaching position, as was Chip Lord. Higher education and teaching positions provided a platform for Ant Farm to critique and drop out of society, as well as a chance to re-enter said society whenever they desired.

While neither Ant Farm nor Drop City participated in protests of the civil rights movements, their works were peaceful visual protests. Nevertheless, their takes on counterculture are, in a way, exemplary of why Malcolm X objected to white involvement in civil rights movements. Their visual protests often whitewashed the liberation movements and reduced the efforts of demonstrators to watered-down criticisms of media, society, and politics. Satire, especially in the case of Ant Farm, dwindled the seriousness of their cause to some degree. Drop City was equated to “hippies” by the media. Overlooking and ridiculing these collectives on the part of media was of course a conscious choice. By controlling the narrative of groups who otherwise had no voice in mainstream media, Ant Farm and Drop City were depicted as bizarre anomalies to be entertained by but not to pay attention to.

Neither media nor the mainstream society differentiated between the countercultural collectives and the protestors of the social movements. Ant Farm and Drop City appropriating the anger

and the rebellious streak of the social movements, therefore, reduced the validity of the protests. While their visual protests displayed the support they lent to the social movements, they also caused the media to ridicule those movements.

Of course, the reluctance of the media or the society to support social movements cannot be blamed on these collectives. Neither collective purposefully hijacked the narrative of the liberation movements. Drop City, in particular, made no attempt to overtly seize control of social reform. Overwhelmed by societal norms, they merely took themselves out of the system. In some ways, this can even imply that they opened up the space for activists to speak out. Ant Farm, by contrast, was focused more on environmental issues and educational reform than racial equality or women's liberation. Their critique was important, but inadvertently damaging.

Both collectives were inspired by social movements but did not necessarily acknowledge them. They were more concerned with the building blocks of society, such as suburbanization, automobilization, consumerism and media. Discrimination, which was the ultimate means to construct the ideal society, was overlooked. By discounting discrimination, they inevitably reproduced the suppressive model of the American Dream. For instance, traditional gender roles of the ideal nuclear American family were emulated in Drop City. Likewise, there is no presence of women in Ant Farm. Even in *The Eternal Frame*, the role of Jackie Kennedy was performed by Doug Michels. Their visual protests, therefore, while meant to be constructive criticism, were performative.

Although they were not necessarily wealthy or affluent like the rest of the straight society, being white, middle-class, educated, heterosexual men granted them the privilege of employment opportunities. These collectives dropped out of society not out of necessity but out of pleasure. They were not discriminated against for their backgrounds or biological differences but for their preferences. Both Ant Farmers and Droppers could shed their countercultural opinions and bohemian lifestyles and walk back into the affluent society they to purchase a suburban home or work in corporations they condemned. Their past choices did not influence their future lives. Their refusal to be participate in the oppressive system is commendable. Yet much like the hippies they wanted to be disassociated with, they participated in the poverty playgrounds and quietly returned home to the ideal American society when playtime was over.

Ant Farm and Drop City's protests of the consumerist society are still relevant today. The pressure of the consumerist society which these collectives were criticizing in the 1960s is even more evident and calamitous. Mass consumerism, and in turn, industrial production, both heavily increased during the Great Acceleration and have reached an almost irreversible point, constantly widening the gap of economic inequality between upper and lower classes; and contributing massively to ecological degradation. It therefore seems insightful and inspirational to revisit the naïve anti-consumerist positions of these collectives from the point of view of our hyper consumerist reality.

### **Anti-Mainstream Media**

Antipathy towards mainstream media was a shared attitude among Drop City and Ant Farm. In the post-war years, if the suburbs acted as the prison for the ideal family, media was the prison guard with the locks.

By the 1950s, print media had already been prevalent for centuries. Magazines were abundant with advertisements of goods that were deemed luxurious at the time. Pristine images of automobiles, electronic home appliances such as vacuum cleaners or dishwashers fueled the affluence among the society. Women were often depicted as jubilant yet unintelligent housewives; and the ads implied that by using such consumerist goods, women would be productive and appealing to men. While magazines fueled the idea that consumerism would bring happiness to the post-war family, newspapers inflamed anti-communism and racism.

There was already a practice of avant-garde publications and "little magazines" at the turn of the twentieth century to counter mainstream print media. Yet underground print media did not have the reach television did. Television had just become accessible to the majority of American public, and this new technology inevitably captivated audiences. Situation comedies depicting happy suburban families were the ideal propagandic medium. News channels, similarly, showed communists and sympathizers as malignant individuals harmful to the ideal American society. Civil rights movements could be ignored altogether or shown in a harsh light. While print media

could be undermined through self-published underground newsletters and magazines, the more engaging and newer technology of television had a monopoly over the visual narrative.

By the 1960s, the happy suburban sit-com families were slowly replaced by more violent images of JFK's assassination, Bloody Sunday in Selma, Alabama, and footage from the Vietnam War. The way images of 9/11 were ingrained in our generations' collective consciousness, John F. Kennedy's assassination in 1964 appalled the nation. Those who had grown up during World War II had not experienced the brutality of war the same way they saw the Vietnam War. The Second World War was deemed the good war not only due to its economic implications but also to the way it was described in media. The brutality of World War II could be described in text but written word was not as compelling as the moving image.

In a way, Ant Farm was one of the first artists to be involved in underground video. Ant Farmers established themselves on television, often inviting news channels to present their projects. Ingeniously and mischievously Ant Farmers utilized the very medium they were criticizing. With emerging video recording technologies, they documented their daily lives as well as their performances, however their performances reached wider audiences through mainstream media. *Media Burn*, for instance, was performed to a live audience and news channels. Mainstream media still had the chance to control the narrative, they could present the performance as outlandish and preposterous, yet the image constructed in *Media Burn* was compelling enough in itself. By driving an automobile through a wall of television sets, Ant Farmers made media figures watch as they destroyed media's very own sanctuary. The explosive performance therefore demonstrated Ant Farm's aversion and anger towards news and media in the most unsubtle way possible.

This aversion was less subtle in *The Eternal Frame*. Ant Farm "reconstructed" an event that was in some ways a turning point for American history. In the performance Ant Farm and Doug Hall of T.R. Uthco recreated the brutal and bloody assassination of John F. Kennedy as a group of unsuspecting onlookers watched. They were arguing that televised events reached audiences in a fictionalized form and did not fully represent reality. What the artists were testing and what essentially made the performance thought-provoking was the reaction of the audience. Some people cried at the recreation of the event, yet equally shockingly, some spectators cheered as

Artist-President was fake-assassinated. Crying at an absurd and nonsensical presentation was performative on the part of the audience. Similarly, the absurdity of the event most likely enabled the adverse reaction of cheering. The audience became performers that depicted how media was altering perceptions. The reactions from the audience, therefore, confirmed Ant Farm's thesis that media, or rather, the form of the message manipulated the way events were perceived. Ant Farmers could very well recreate the events of the assassination by changing details, nevertheless they chose to portray the incident exactly as it happened. Altering the reality of history, pushing for a narrative of "what if" is a concept that often fascinates fiction writers. In every experiment, however, there needs to be a controlled invariable to observe accurate results of the independent variables. Portraying the assassination as accurately as possible was Ant Farm's controlled invariable.

When Ant Farm travelled to Australia to present *Dolphin Embassy*, they did more than hold press conferences for the project but presented themselves on television talk shows and news channels. Satire in Australia in the 1960s, as was mentioned earlier, was more prevalent than America at the time. While Media America did not fully grasp Ant Farm's antics, Australian audiences that were better versed in satirical comedy were the ideal target. This could very well be due to Ant Farm's object of criticism being Media America itself. Elsewhere, it was possibly less offensive. *CARmen*, the "automobile opera", for instance, was a performance criticizing America's building block of automobilization. As cars parked in front of the Sydney Opera House honked under the conduction of Curtis Schreier dressed in a kangaroo costume, they produced a collection of sounds that could not further from music. *CARmen*, in a way, was the soundtrack of America's infatuation with automobiles.

In their interviews on Australian TV, there is a subtle clue to Ant Farm's desire to be shocking and offensive. When audiences laugh at their presentations, they first laugh along with them but then push the boundaries even further. They do not want their audiences to completely in on the joke. In *Eternal Frame*, too, Doug Hall, still dressed as JFK but speaking as himself, is shown distressed and even disturbed at the audiences' reactions. To what degree the audience would get involved in the performance was something they could not anticipate. When the audience participated in the performance, Ant Farm's critique was co-opted and appropriated by the very

media society they were criticizing. Their performances would no longer be underground but instead feed the mainstream.

Ant Farm did not start out by reaching to mainstream television channels, however. They first advertised *Inflatables* in the *Whole Earth Catalog*, one of the most widely distributed underground catalogs. They were exhibited at Earth Day or countercultural festivals with no mainstream media publishers or producers openly invited. They filmed the experiment on their own, with their own video camera, and self-distributed the instructional guide of *Inflatocookbook*. The cookbook was one of the first underground publications by a countercultural collective. With handwritten texts and hand-drawn sketches of possible forms the inflatables could be “built” in, they hoped for their structures to be recreated. Releasing a how-to guide on their own designs meant that they wanted the design to precede their own name. By letting go of the “architect’s ego”, they hoped for *Inflatables* to benefit the community, to be built by people as houses or by schools as classrooms, where they would be present to oversee the “construction”.

Sharing the credit should have been a given in the holistic “We are All One” approach of counterculture. In the early years of Ant Farm, this approach was more palpable. Even the form of the *Inflatables*, as argued previously, supported this approach. Individualism, by contrast, became more desirable over time, both in general countercultural circles, and in Ant Farm’s own collective. Although one of the main ideas behind the communitarian settlement was to let go of one’s ego, to let go of hierarchy and private ownership, Droppers did not like that their experiment was adopted by others either. In Richert’s words, the concept of Drop City and the art they produced would be reproduced and “co-opted by the mainstream culture” and that “forms of idealism eventually reach a large audience and become diluted and corrupted in the process” (Moretta, 2017). Richert’s annoyance with being appropriated would prove to be true, with both the Ultimate Painting and Drop City lending their names to alternative rock bands in the 21<sup>st</sup> century. If the geodesic communes were to be standing to this day, they would undoubtedly be featured as backdrops to countless films, commercials, and advertisements. The kaleidoscopic geodesic domes were featured in magazines as they made attractive backdrops, making Drop City the physical domain of hippies. In the case of Ant Farm, as their performances

were filmed and some of their monuments still exist, appropriation ran deeper. *Cadillac Ranch* became a hit song for Bruce Springsteen and ironically, the installation was used as a backdrop for countless automobile commercials. These instances possibly strengthened their position on the media.

While Ant Farmers thrived by media attention, Drop City, by contrast, wished to stay out of the spotlight. Just like they were trying to distance themselves from society, they were trying to distance themselves from media as well. Media acted as the door the ‘straight’ society could walk into their alternative universe. Media controlled the narrative of the commune and their desire to close the door on media showed their lack of confidence that media would be kind to them. Droppers tried to control the narrative by publishing their own comic books or newsletters, but the general narrative was still directed by mainstream media. Trying to reach an audience may be conflicting in that sense. The holistic open-door policy adopted by Drop City meant they could not lock the door on visitors who heard about them through the media. Droppers were disturbed by their portrayal as “hippies”, yet media served as their downfall not because they called them “hippies” like they assumed, but because media portrayed them in such a colorful light that they gained popularity that they could not afford.

In both Ant Farm and Drop City’s case, media watered down their critique; and caricatured them as “stoner hippies” with less than intelligent judgment on the realities of life. Media engagement then became a vicious cycle. Both collectives needed to make their voices heard in some form or another. When they received attention, however, the results were not satisfying and incompatible with what they hoped to achieve. Mainstream media and common audiences still had more control over the narrative. The more they would get involved in this attention, the more they would stray from their own commentary. This cycle was broken by the dissolution of both collectives. Had Ant Farm or Drop City have access to wider audiences through their own means and not through mainstream media, they could perhaps survive today. If that were the case, however, they could very well be lost in a saturated sea of self-published commentaries and the cycle would begin once again.

Drop City’s critique of mainstream media was similar to their critique of the society. In both their stance on the society and the media, they merely wanted to isolate themselves. Ant Farm,



by contrast, enjoyed media attention. The medium they were criticizing granted them a platform to voice their criticisms. They correctly upheld that media controlled the narrative in which events or ideas were perceived. Their critique was rooted in media's hold over the society, and by extension, they reprimanded the society for not questioning media's power. If media was the prison guard for the suburban prison, their alternative media was the key to open up the locks.

As Hollein (2005) stated, "Architecture is a medium of communication [...] is cultic; it is mark, symbol, sign, expression [...] Architecture is conditioning of a psychological state". Media, overall, constructs images. When a single entity controls the narrative, the message created by those constructed images remains biased and subjective. In democratic societies, however, minority voices need to be amplified. Alternative media dilutes the strength of mainstream media by handing the megaphone to alternate sects of society. The image alternative media creates changes the way the message is received. Drop City and Ant Farm's attempt at voicing their concerns through alternative media is therefore a testament to their architecture as well.

## **Ecological Concern**

It was outlined in the previous chapter of "Political Utopias: Liberation Movements" that the environmental movement, although fueled by the protests of the racial equality and women's liberation movements, was not only a part of counterculture but also of a nation-wide campaign. Drop City and Ant Farm's involvement in the environmental movement was therefore not necessarily out of their countercultural nature. Neither Ant Farm nor Drop City overtly claimed to be environmentalist groups. Yet perhaps without meaning to, both collectives displayed an understanding of environmental awareness deeper than the environmental movement. Reusing salvaged materials, building off-the-grid settlements, and disassociating themselves from the societal model that is fueled by mass consumerism were all elements of their environmental consciousness.

Anti-consumerism was deeply embedded in Drop City. Droppers used excess railroad ties or wooden beams they acquired from a nearby sawmill for the skeleton of their geodesic dome. They would then dress the structures with salvaged automobile rooftops; and cover any

remaining holes with collected bottle caps. This understanding of “living off wasteful America’s excesses” was instinctively anti-consumerist, and by extension, ecologically sound. The settlement was off-the-grid; therefore, energy was obtained through solar panels. In the sunny desert of Colorado, solar power was the most efficient and inexpensive source of alternative energy. Food production through agriculture and livestock might have been the most viable solution for rural communes, yet the land Drop City was built on was on arid and nonarable soil. By foregoing agriculture, they inadvertently saved their invaluable water as well.

As Droppers were against gainful employment, reusing salvaged building materials was not only an anti-consumerist or environmentalist attitude but was done out of necessity as well. As they refused to participate in the oppressive system of gainful employment, they could not afford to purchase new materials, neither did they want to. They believed America’s waste would sustain them. Droppers were not versed in environmentalism per se, they were merely against the mass consumerism of the affluent ‘straight’ society. They were not fully aware of the war in Vietnam or its ecological consequences, either; they simply wanted to get away from it.

Yet their environmentalism was, at least to some degree, genuine. It has been discussed above that environmental awareness of the time, while helpful, was insufficiently transformative. Greenwashing or insufficient individual action, too, were argued to be detrimental to ecology. Drop City did not aim for transformative action; neither was their individual action enough to reverse the effects of mass consumerism. They only wished to avoid being active members of the capitalist society; and desired to salvage themselves from the cancer that was consumerism. In individualistic, countercultural fashion, Droppers most likely did not care whether or not the rest of the society thrived or even survived. Drop City had not been feasible in the long run; and the commune certainly had its shortcomings. Yet their alternative *raison d’etre* led to the formation of many other communes and eco-villages.

Ant Farm, by contrast, were more involved in the environmental movement. Their first inflatable was exhibited at the first Earth Day in 1970; and advertised in the controversial but so-called environmentalist *Whole Earth Catalog*. The first inflatable exhibited on Earth Day was not supposed to be a classroom or a house like the rest were either, but a prop for the environmentally alarming performance they called *Air Emergency*. Ant Farmers told the

audience that in order to survive an oncoming ecological catastrophe, they needed to enter the inflatable, aptly named *Clean Air Pod* (CAP 1500) for the performance, within the span of 15 minutes. This time limit was in a way symbol of the urgency of environmental issues. This dystopian performance suggested that only those who entered this technological domain would survive, leaving those who could not enter to suffocate. It was equally ironic that the structure that would save people from suffocation was made of plastic. Plastic was a product of the petrochemical industry, which also produced the toxic chemicals used as chemical warfare in the Vietnam War. While the performance of plastic as a building material strengthened Ant Farm's social cause, as discussed above, it reduced the validity of their environmental standing.

In reality, those who cause the most damage to the environment suffer from its consequences the least. Oppressed and underprivileged communities, by contrast, suffer the most. The deadly air pollution in Ant Farm's *Air Emergency* made no distinction between who would survive and who would be left behind. Similar to the exclusivity of space colonies, only those who had the privilege to escape in the limited time survived the supposedly deadly air pollution. There is a subtle clue to the importance of awareness in the performance, however. The people who entered CAP 1500 in time, did so willingly. By comparison, those who remained outside were people who did not engage in the event, perhaps because they questioned its validity or necessity. As in all Ant Farm projects, the performance might have seemed absurd and over-the-top. Yet this reluctance to participate can be extended to reluctance to participate in actual and substantive action.

Unlike Drop City, Ant Farm did not always resort to salvaged building materials, either. *Inflatables*, while they could be realized out of used plastic, were produced out of new vinyl instead. While plastic was abundant, it would still be ironically difficult to obtain used yet clean and clear plastic. This is also reminiscent of plastic recycling. Even today, only a small percentage of plastic is recycled due to concerns of contamination. Brand new plastic was therefore safer for Ant Farm to use in the short run; and most likely made their *Inflatables* more appealing to audiences. Usage of plastic in the long run and in the widespan, however, has been one of the main reasons for air, land, and water pollution. *Inflatables* were not off-the-grid like they seemed either but instead electronically powered through heaters or fans.

Ant Farm's take on space colonies, *Dolphin Embassy* was another ironic project rooted in environmentalism. Space colonies, as argued in the previous chapter of "Technological Post-War Utopias", were technological and utopian complements of the American suburbs. While advocating for diversity, space colonies, and in particular O'Neill's Colonies discussed in this study, failed to improve upon the austere limitations of the suburbs. As a space colony designed for dolphins and humans to live together peacefully, "We are All One with Nature" belief that Ant Farm seemed to align themselves with was sufficiently evident. Yet in utopian fashion, the project was essentially a technocracy. The aim of the project was to liberate both species from the limits of the planet. Based on furthering interspecies communication between humans and dolphins, the project essentially proposed to remove dolphins from their natural environment and instead imprison them in a glass sphere in outer space. As a space colony, *Dolphin Embassy* was inherently rooted in the anthropogenic view that humans were the masters of the universe. The project was inevitably reminiscent of Brand's opening words for the *Whole Earth Catalog* of "we are as gods". Although the project clearly honored dolphins, or even worshipped the "delphic civilization", separating dolphins from their natural environment was an arrogant act of colonialism.

Even the name of the project suggests a vague understanding of other species. Doug Michels had discovered that dolphins were intelligent creatures and thus concluded that they should be granted their own embassy. Granting dolphins with supposedly respectable platforms that humans fabricated for the capitalistic system was not necessarily a means to honor them. It would be nonsensical to assume dolphins would benefit from such a platform.

Ant Farm's environmentalism, much like their criticism of society and media, was trivial. Their commitment to the environment was not long-lasting either. It was argued earlier that America's commitment to environmental issues lasted longer than expected, which was "miraculous". Ant Farm's engagement was similarly short lived, and their understanding of the issues changed drastically. The transition from the compelling *Air Emergency* performance highlighting the urgency of environmental issues, to the anthropogenic *Dolphin Embassy* is evident of their changing attitude. While is also possible to view the project as a parody of space colonies, there is no substantial proof to support that claim. Their environmental outlook shifting is also evident

of the weakening of the environmental movement. Even in the beginning their use of plastics for *Inflatables* or explosives for *Media Burn* was questionable.

Drop City's anti-consumerist environmentalism was not only evident throughout its lifecycle, but also increased over time. By investing time and the little financial resources they had in alternative energy sources, Drop City portrayed a commitment to the environment more than most communes or collectives of the time. This could be due to the commune dissolving before the decline of the environmental movement. That alone does not diminish Drop City's efforts and awareness of the issues. Ant Farm, similarly, had an awareness of environmental emergencies that should not be overlooked. It was discussed earlier that awareness alone was insufficient, yet these collectives worked as much as they could with what little information they were given. They could not yet realistically predict the catastrophic consequences of environmental deterioration, nor should they be expected to do so. Drop City's adoption of alternative energy sources and Ant Farm's *Air Emergency* or *Dolphin Embassy* were, in fact ahead of their time.

### **The Ultimate Conclusion**

Ant Farm, when introducing *Media Burn*, called the performance "the ultimate media event". Drop City, similarly, produced *The Ultimate Painting*, believing it would be the solution to their financial problems. It may be a coincidence that the desire to be "the ultimate" appears in both Ant Farm and Drop City's language. Whether they believed themselves to be the final effort in social reform could be up for debate. What is certain, however, is that they believed their art would be their own salvation.

Ant Farm's "ultimate media events" of *Media Burn* and *The Eternal Frame* had the capacity to shock people into questioning the validity of media. Drop City's equally shocking stunt of settling in a rural commune led to the formation of a myriad of other communes. Both collectives unintentionally facilitated a discussion of alternative ways to live, to produce, to consume, to create art and to construct. Much like the radical feminist collectives of the 1970s, they participated in consciousness-raising without being conscious of the practice themselves.

In reality, neither collective was the final effort in social reform or ecological improvements. Their presence and art merely highlighted the wrongs of mainstream society. They were not activists in the conventional sense: They did not participate in the turbulent and transformative liberation movement protests. They instead attended the more peaceful and enthusiastic hippie gatherings such as the Summer of Love. The Summer of Love, while historically influential, was attended by a group of people who were individualistic, and oblivious to social issues. The event was, in a way, similar to Ant Farm and Drop City's critique of the society, as neither of them were nowhere near as transformational in social reform as the influential figures of liberation movements. Ant Farm and Drop City were more involved with anti-consumerism and environmentalism than racial equality, women's liberation, or gay liberation. Their efforts were more similar to the student movements, as they were white liberals that were affluent to poverty as well. They were allies to the movements, without participating in direct action.

While they were likely supportive of the cause of the liberation movements, they did not possess the capacity to understand the underlying social issues. Overall, the youth of the counterculture visited and occupied poverty playgrounds, which were often spaces of underprivileged, low-income black people or immigrants. With the exception of the racial equality movement, counterculture consisted mainly of white, middle-class, heterosexual, affluent youth; and often failed to be inclusive of the groups it was advocating for. The governmental policies adopted during the postwar years had become so embedded in the American culture that counterculture inevitably replicated the principles on which the mainstream American society was formed. Being children of white and middle-class families, countercultural youth could leave behind the poverty playgrounds and return to the straight society whenever they desired. Similarly, members of both collectives essentially differed from the mainstream society only in a state of mind. Unlike black activists or some women activists, Ant Farmers and Droppers both had the privilege of returning to the 'straight' society when their participation in poverty playgrounds no longer satisfied them.

Gil Scott-Heron declared in 1971 in his spoken word poem "The Revolution Will Not Be Televised" that activists would "not be able to plug in, turn on and cop out"; that revolution would be live instead. Timothy Leary, similarly, called out to the crowd at San Francisco Human

Be-In to “turn on [one’s own senses], tune in [to the world around], drop out [of society]”. Drop City and Ant Farm produced art in off-the-grid settlements; dropped out of society; discovered alternatives in their own realms; did not necessarily turn off mainstream media but looked at it through a different lens.

Drop City or Ant Farm’s revolution was not televised either, at least not widely, but visualized instead. These visual protests were equally appealing and appalling to the society and media that they were criticizing. Similarly in the context of this study, researching these unconventional architectural collectives has been compelling. With no technical drawings such as plans or elevations to observe, what stood out was their art and architecture. Just like Hollein’s statement, everything was architecture to Drop City and Ant Farm. Both collectives designed ephemeral buildings and constructed images. The ephemerality of their art contrasted the stability and permanence of conventional architecture. Their unusual structures were constructed with equally unusual building materials, such as plastic and salvaged automobile parts. Reusing found materials displayed their anti-consumerist, anti-capitalist stance against the capitalistic, consumerist architectural production. Their emphasis on collective production and communal living offered an alternative to the individualism that conventional architecture often embraced. Their life, art and architecture were a statement in themselves.

These collectives did not transform American architecture or society altogether. Yet Ant Farm and Drop City while sufficiently providing an answer to “Are there other ways of doing architecture?”, also proved that there was another way of existence beyond the American Dream. The alternative ways to do architecture could be embracing this ephemerality, dropping our ego that pushes us to create everlasting buildings. Conventional architectural production often outlives its author and leaves behind a permanent, physical reflection of the author’s own motive and desires. Drop City and Ant Farm showed that satisfaction with the legacy or the message our architectural production leaves behind could be enough. As Jane Alison wrote, architects should create alternative solutions, even if it is on paper. Construction of everlasting images and ideas could be embraced, rather than structures. Our planet can no longer sustain conventional construction techniques and requires regenerative praxis that is rooted in anti-consumerism. Instead, materials could be reused not only for their intended purposes but

alternative ways to utilize them could be sought. Like René Magritte did in 1929 with his painting “This Is Not a Pipe”, we should be able to look at objects and techniques and question their reality or intended purpose.

Hollein in “Everything is Architecture” directs the question to “Numerous tasks and problems will continue to be solved traditionally, through building, through architecture. Yet for many questions is the answer still architecture as it has been understood, or better media not available to us”? Drop City and Ant Farm proved that better media are available, if we learn to search for them.

It was argued earlier in this study that while the countercultural Long Sixties resulted in a series of accomplishments of great magnitudes for racial equality and women’s liberation, the environmental movement failed to achieve the similar results. Within the last five decades, to feed our overpopulated planet, unsustainable agricultural practices have become widespread, consequently eradicating natural fauna and flora. Inefficient irrigation to sustain industrial agriculture has led to water scarcity. Offshore oil drilling could not be abolished as the movement advocated for, and many more oil spills occurred since then, killing millions of underwater life and birds. To keep up with the demands of consumerism, unsustainable production has exploited natural resources and human labor, often in less developed parts of the world. Greenhouse gases from industrial production has caused the average global temperatures to rise, which in turn, causes sea levels to rise. Sea levels rising consequently puts cities at low elevations such as Venice and Dubai at the risk of completely sinking underwater within the century. Terms like climate change and global warming no longer sufficiently describe the state of the ecological crisis we are in. Instead, the more alarming “climate crisis” has been adopted. It has even been recently uncovered that loss of biodiversity and deforestation increase the risk of pandemics (Tollefson, 2020). Therefore, even the global COVID-19 crisis we are currently experiencing at the time of writing are partially rooted in these socio-environmental factors (Bernstein & Salas, 2020). All of these crises, among others, required complete social and industrial reform, which the environmental movement was not sufficiently conscious of. The environmental movement of the 1960s and ‘70s was satisfied with diluted collective action and with deficient political changes.



Again, earlier in this study, individual action in activism was argued to be insufficient in reversing ecological devastation. Yet Ant Farm and Drop City's individual action can be excluded from this discourse, as both collectives displayed a seemingly naïve yet influential environmental awareness. Ant Farm and Drop City were selected as case studies for this thesis for their unique understanding of environmental and social issues. Neither collective had the platform to incite complete systemic change. Yet they had a grimmer and more serious tone when it came to the urgency of environmental issues than the rest of the environmental movement. This sentiment is summarized best by Denise Scott Brown and Robert Venturi (Venturi et al., 1988) as:

“Although architects have not wished to recognize it, most architectural problems are of the expedient type, and the more architects become involved in social problems, the most this is true. In general the world cannot wait for the architect to build his or her utopia, and in the main the architect's concern should belong not with what ought to be but with what is – and with how to help improve it now. This is a humbler role for architects than the Modern movement has wanted to accept; however, it is artistically a more promising one” (p. 129).

The planet could not afford to wait for Drop City or Ant Farm to build their utopias either. While individual action is insufficient especially today, within the context of architectural discourse of the Long Sixties, merely questioning social or environmental issues was ample. These collectives, within their limited platform, helped in improving what was happening then, through a praxis of collective production and cohabitation; emphasis on anti-consumerism and alternative media; colorful artworks and unyielding self-expression. Communes or collective production may have not become alternatives that the majority of society adopted, however these collectives proved that suggesting alternative solutions were possible. Cohabitation may be extreme, yet collective production, whether it is social reproduction or artistic production, gives power to the individual. Again, countercultural “Whole Earth” understanding may have had its shortcomings; yet it provided a different lens to look at our established system of oppression. We know now that actions both small and large affect not just a small group of individuals in a specific area but affect many other areas and people of those regions. Like Ant Farm and Drop City, practices that will be beneficial to a small community, which in turn will be beneficial for the whole world could be adopted instead.

The utopias of Drop City and Ant Farm were influential enough to be replicated, which is what can be expected of small architectural collectives of the time. Neither collective was “the ultimate” effort, instead they were some of the first. While it is important to be critical of these collectives’ lack of understanding of systemic issues, focusing on the awareness they had is equally crucial. Sébastien Fevry wrote in 2019 that “although activist memories may rely on painful emotions, the challenge for activist movements also consists in paying attention to the energizing force and hopeful spirit that looking back on an activist past can provide” (Fevry, 2019). To overlook shortcomings in activist movements is functional in order to carry the beliefs to the next generations. It ensures a certain inspiration for the future generations to look back on and contemplate on significant ideas, without falling into the trap of nostalgia.

Dolores Hayden argued communal production should spread to cities to alleviate women’s responsibilities at home; that isolated communes would not be a sufficiently meaningful solution. Similarly, this study does not claim that communes were the ultimate solution to environmental or social issues. Instead, it simply advocates that every aspect of the current reality and system should be questioned and that alternative ways to live and to produce should be sought. Repackaging consumerism as green, for instance, is not the transformative solution that large corporations advertise it to be. We can instead adopt the anti-consumerist stance from communes, produce and consume at a minimal rate. Reforming the entire capitalistic system will never be embraced by governments or large corporations. Yet even if our small individual actions may be insufficient in reversing environmental deterioration or social oppression, the cynicism of Ant Farm and Drop City could be adopted in order to find more transformative individual actions. To borrow Fuller’s words once again, “a problem adequately stated is a problem solved”.

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