2017

Conflicted Commons: A Local Makerspace in the Neoliberal City

Caitlin Cunningham

Conflicted Commons: A Local Makerspace in the Neoliberal City

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science
at Virginia Commonwealth University.

by

Caitlin Anne Cunningham
Master of Science
Virginia Commonwealth University, May 2017

Major Advisor: Jesse Goldstein
Assistant Professor, VCU Sociology

Virginia Commonwealth University
Richmond, Virginia
May, 2017

Table of Contents

Abstract

CONFLICTED COMMONS: A LOCAL MAKERSPACE IN THE NEOLIBERAL CITY

By Caitlin Anne Cunningham, M.S.

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University.

Virginia Commonwealth University, 2017

Major Advisor: Jesse Goldstein, Assistant Professor VCU Sociology

Keywords: makerspace; neoliberalism; creative economy; commodification; commons; social reproduction

The commodification of culture, space, and resources is incentivized by neoliberal urbanism. In response, we have seen an attempt to develop collectively organized, oppositional spaces within urban places. The tensions that arise when considering the production of commons in the development of the neoliberal city are the central focus of this paper. As I will observe, these spaces are subjected to commodification as they become increasingly de-politicized through neoliberal ideologies. In order to theorize about these contradictory elements, I observe a makerspace in Richmond, Virginia called HackRVA. Specifically, I consider HackRVA as an urban commons. Through in-depth interviews and participant observation, I consider how HackRVA engages with the neoliberal city of Richmond and how the organization and maintenance of their space and their community reflects commoning as social reproduction. I

find that HackRVA's relationship to the city is complicated as the community within the space

both contests and assimilates to the creative economy.

Introduction: The City and HackRVA

Literature around new urbanisms and the neoliberal city suggest an underlying need for the reclamation of commodified spaces and collective organization (Brenner, 2015; Brenner, 2000; Brenner and Theodore, 2002; Bresnihan and Byrne, 2015; Crossan et al., 2016; Esteva, 2014; Eizenberg, 2012; Federici, 2012; Harvey 2012; Huron, 2015; Sevilla-Buitrago, 2015; Stavrides, 2016). The commodification of urban space in recent years has been strategically reinforced by theories and policies supporting new creative economies. Urban revitalization projects, privatization practices, and uneven spatial development are catalysts of "demographic inversion" (Cohen, 2014; Ehrenhalt, 2012) causing interesting patterns of gentrification and justification for the displacement of already marginalized groups. This new economic model places value in entrepreneurism, appropriation of public art spaces, and institutionalized support of wealthier and whiter populations. Narratives around these processes often include the celebration of artists and craftsmanship, sustainability, local business and the development of public spaces for community engagement and support. But what are these community spaces and which communities are they for? The contradictions that arise when thinking about the role of community and common spaces in the development of the neoliberal city are the central focus of this paper. Neoliberalism encourages individualized growth and entrepreneurship, and so to assume that these forms of neoliberal urban renewal will cultivate strong and sustainable communities is paradoxical.

In light of these developments, there has been movement towards reclaiming urban spaces and uniting communities in ways that might dilute the impact of neoliberal urbanization. Local food groups, urban gardens, bike shops, housing co-ops, book stores and the like have seen

a resurgence of popularity in urban areas. These sorts of grassroots initiatives can be traced back through the 20th century, and linked directly to modern forms of do-it-yourself culture (Bresnihan and Byrne, 2015; Carlson, 2008; Crossan et el. 2016; Eizenberg, 2012; Ferguson, ed. 2014). Critiques about how these kinds of alternative spaces work alongside and through the same apolitical free market system that they might critique can often result in dichotomizing logic. As a result of the structural isolation and the assimilation of historically counter-cultural initiatives (ex. Do-it-yourself movement) into the new economy, we also see the de-politicization of social reproduction more broadly. This de-politicization of everyday life and livelihood- or "making a living"- makes it difficult to discern what forms of social reproduction incentivize these co-opting practices and which do not.

In his book *Nowtopia*, Chris Carlson writes:

At its best, [DIY] embodies a revolutionary exodus from the capitalist division of labor and its attendant hierarchies of elite expertise and inaccessible technologies. At worst, it becomes institutionalized as a business or non-profit organization that is better understood as a type of 'farm team' for capitalism, where necessary reforms begin to percolate and develop. This frequently happens when a movement survives long enough- it becomes co-opted back into the larger dynamics of the world economy. (p.47)

The best case scenario is a radical alternative to capitalism, and the worst is a reinforcement of capitalism, but it is the space in-between that is necessary to carefully observe as it is here where we can analyze the actual, lived work being done to both resist and assimilate. I consider commoning as an expression of the social reproduction that occurs within these in-between spaces (Caffentzis and Federici, 2014; Federici, 2012).

It is important to categorize the commodification of common spaces as a social process, just as it is important to understand commoning as a social process. In order to better understand the tensions that occur when commoning spaces emerge in neoliberal places, I have conducted an ethnographic study of one makerspace, HackRVA.

HackRVA is a member-run makerspace in Richmond, Virginia, a city that is representative of the aforementioned creative economy and neoliberal landscape. It is the longest standing makerspace in Richmond, and has a larger membership than any other makerspace in the city. Originally, HackRVA was hackerspace, meaning its primary function was to provide an open, organized space for coding, computer programming and engineering. Members of HackRVA transitioned to a more diverse makerspace model in an effort to attract a larger crowd of makers. HackRVA is entirely run and operated by membership fees that members pay each month. This is a fact which actually separates HackRVA from other makerspaces that are typically located within libraries or schools, meaning they have institutional support, or from spaces funded by grants or private owners. My research at HackRVA looks specifically at the role of community, the process of maintenance and forms of organization that arise in this space. I analyze the contradictions that arise when communities emerge with somewhat non-capitalist narratives, while still mirroring a-political and neoliberalized ideas.

As part of the ethnography, I have interviewed seven members of HackRVA. To reach these members, I attended one of HackRVA's member-only meetings and requested permission to send out a call for participants. The members I interviewed are representative of varying levels of participation within HackRVA. Four of these members have leadership roles and are responsible for the direct organization and maintenance of HackRVA. The other three are less involved and have varying relationships to HackRVA. All of the members I interviewed are

white, employed, and do not live in the neighborhood where HackRVA is located. Out of the seven interviews, two participants are women. One is the founder of Women of Hack, which has been the primary attempt at diversifying the demographic makeup of HackRVA. The other woman is a librarian at a local school, and has been less involved because of alternative time constraints. Between the men I interviewed, one was appointed president for some time, but has since relinquished the title. Another male interviewee has been around HackRVA from its beginning, and continues to provide insight into maintenance protocols and member experience. The other two gentlemen are far less involved. The first simply enjoys the fact that HackRVA exists, but does not see a need to go too often, and the other found HackRVA when searching for ways to develop a project for his new term faculty position at Virginia Commonwealth University.

The meeting place for each interview varies, but all range from two to three hours in length. The themes that emerged from the interviews center around makers and making, community, the commons, neoliberalism, and urbanism. I use mentions and definitions of makers and making to understand "maker" as an identity within HackRVA. Mentions of community reveal the formation of a collective identity and the purpose of that collective. The commons emerge as a theme in terms of the reproduction of space and culture at HackRVA. I emphasize the commons both as a theme in the interviews and as a theoretical framework in my discussion. Neoliberal concepts emerged primarily around thoughts about the creative economy in Richmond. The creative economy can be thought of more specifically in terms of the relationship between cooperative spaces, art spaces, and the like, to free market ideologies, entrepreneurialism, and the emergence of precarious forms of production and consumption. Urbanism emerges as a central concept as I consider the role of HackRVA within the city space

itself. In the interviews, mentions of privatization, location, gentrification, and what I consider commodification of space point to the general theme of urbanism.

The language used by members of HackRVA to describe what it is they are doing at the makerspace, why they are there, and how they have persisted illuminates the tensions that often emerge when groups work to disengage from core elements of the capitalist system. As one member states:

> "We're not a business incubator. We can't tell you anything about starting up a business or that kind of thing. In fact, we have people come sometimes to visit, and they'll ask you what are you working on? And you tell them what you're working on and they say well how do you plan to monetize that? And the answer is no no, we don't. That's not how we think around here." –KD

Makerspaces are particularly interesting in this case because of their relationship to production, to leisure, to entrepreneurship, and, as I will argue, to the commons. In my interviews, many members spoke of a certain "mentality" that they felt emerges inside the makerspace, where the profit motive behind creating or inventing sort of disintegrates. I argue that makerspaces must be understood as part of a far more complex narrative about the interconnection between the do-it-yourself makers movement, the creative economy, neoliberalism, and the necessary social reproductive work required to make these spaces feel alternative.

In what follows, I will first, give some historical context to makerspaces, the maker movement and to Make Magazine as a branded agent for the commodification of makerspaces and making as a form of production. Second, I use data from interviews to discuss the

complicated identity of being a "maker". Then, I begin to analyze the role of community inside

HackRVA, followed by a brief discussion about the commons and the role of commoning as a

socio-political project. This section discusses the process of establishing and reproducing

commons through space and as a form of collective work. Lastly, I discuss how HackRVA is

organized and maintained, and the role of neoliberalism in the de-politicization of city spaces,

specifically as this process relates to HackRVA. I will then discuss the attitudes of HackRVA

members about entrepreneurism and its relationship to the creative economy.

What is a Makerspace?

Makerspaces have emerged across the country (and the world) as an extension of the

maker movement. The maker movement is a sort of simulation of different do-it-yourself,

technology-based and artisan subcultures. They act as social spaces for communities of tinkerers

and makers to engage with one another. Makerspaces are typically located in cities, most

commonly in the larger metropolitan areas of the country where tech and creative industries are

located, but can also be found in smaller cities and suburban areas. The general purpose of these

spaces is to provide tools, technologies, and space for makers, tinkerers, and artists to learn,

teach, and cultivate communities centered around creating things. The average makerspace

typically makes a variety of technologies available to it's members, such as CNC routers, VVR,

3D printers, and laser cutters, along with more basic computers, artistic resources, and power

tools. These are the selling points for most makerspaces, and what encourage members to join.

Makerspaces work somewhat like public garages with tools and space made available through

monthly membership fees allowing individuals to have access to these technologies, some of

which are often difficult to come by. In many ways, these spaces have come to represent the maker movement as a whole.

Characterized by democratic, open source policies, makerspaces speak to a larger commitment to "pooling resources and time-sharing technology" (Hollman, 2015). These characteristics are actually influenced by earlier movements and advocacy for free and open software and computer programming. The push for an open source movement in the 1980s represents an important moment where new global technologies, the internet, and a rapid growth of IT and technological professionalism all expanded rapidly. The democratic, open source ethos influenced the fluid definition of makerspaces across space and time. While some consider a makerspace to be a public work space others have referenced them as the democratization of design, engineering, and education (Sheridan, et al. 2014; Taylor, et al. 2016; makerspace.org; Educase Learning Initiative, 2013), suggesting that it is not just a place where people come to build and create things, but is in fact an alternative space that can resist the enclosure of certain forms of knowledge.

> "People want to continue to learn, create, produce etcetera…they don't want to pay for it…they don't want to keep going to school forever so I think this is kind of like an answer to that (makerspaces are). Some people call it an echo to the library…That's what we're doing but it's the democratization of tools and to some degree the democratization of learning and teaching." -AN

The integration of makerspaces into a maker movement began in Germany with a place called 'c-base'. In 1995, a group of computer programmers concerned mostly with coding and software development, decided that they wanted a space of their own to work out of, to bounce ideas from, and to deviate from a mainstream model of computer engineering. This space is now

known as the first hackerspace. C-base served as inspiration for Metalab, established in 2006 in Austria, which was the first internationally recognized hackerspace. This group developed a model and an ethos for maintaining open source policies, organizing collaboratively, and keeping bylaws that allowed for freedom in experimenting with ideas. The "hacker mentality", which I think refers to the originally proposed ethos back in 1995 at c-base, has remained evident in more recent makerspaces, such as through suggestions that a member might be a maker by trade, but a hacker in principle. In 2006 the early 2000's, a group of American tech enthusiasts went to see c-base and decided upon their return to plant these kind of hackerspaces in major U.S. cities.

Around this time, the maker movement was taking shape in American cities. The maker movement in the U.S. is essentially an extension of DIY culture in that it encourages individualized skill building and production, but also has more recently worked towards encouraging communities to form around general 'making' interests. The central resource for the maker movement has been Make Magazine. The magazine was first published in 2005, and has since published 54 issues. The magazine is marketed towards makers and the like, and usually has various guides for projects, materials, and tools. After it's first year, Make Magazine started the annual event known as MakerFaire. The first MakerFaire happened in 2006 and was promoted as a celebration of making, crafting, and the DIY 'mindset'. MakerFaire and smaller versions of the event have been replicated internationally for the past decade.

What is a Maker?

Under the influence of Make magazine and the growth of the DIY/maker culture, hackerspaces began to become more technologically inclusive, adding different kinds of technology and skills to their repertoires. The inclusion of various skills besides programming

and code in hackerspaces is what led to the use of the term makerspaces. It has served as a generally safer term that not only avoids stigmas associated with the word 'hacker', but also speaks to the community building that the movement hopes to encourage. This evolution, of the hackerspace turned makerspace, has blurred lines making it difficult to define the various kinds of maker-oriented spaces, making activities, as well as who and what a 'maker' is, even while a proliferation of other terms like tinkerer, geek and nerd have been introduced to aid in preserving a collective identity.

When I asked members of HackRVA what or who they thought a maker was, a pattern emerged. First, I was given some statements that did the honorable work of bringing *everyone* in as a maker.

"A maker is someone who has the ability to change something to their liking."

"A maker is somebody that is being creative."

"I think it's someone who is interested in how things are made, and that drives them to make things."

In most cases, members would then pause to think about what sort of specified classifications they could make. The following are some clarifying descriptions:

"I've seen more geeky/nerdy/techy people who are interested in new technologies."

"They're creating things. Maybe they're things that just don't exist in the market, or

maybe it's just *for the fun* of making things." (emphasis added by me)

"Maker is the antithesis of consumer."

And in each case, the conversation led to discussing the contested and somewhat confusing idea of makers and making in general.

"If you generalize it too much, then it almost loses it's meaning completely".

In an honest attempt to define what a maker was, to give some clarifications to who might be a part of this world, members at the makerspace struggled. One of the cleanest definitions that seemed to come up was in reference to how maker world and do-it-yourself culture has become branded and appropriated:

"If you participate in any of the activities in Make Magazine, you're a maker."- AN

A few moments later, AN added…

"It's almost easier to say who is not a maker. And I think that is someone who is not willing to pick up a tool."

How is it that Make Magazine is setting the rules/boundaries of who gets to be called a maker, when, as expressed in an earlier quote, being a maker is supposed to be antithetical to being a consumer? Is it true that Make Magazine is the only reference we have for defining a maker? What about prior to the creation of Make Magazine and the phenomenological acculturation of making and creating? Make Magazine has been influential in appropriating certain forms of making or collective creating into the new economy as extensions of entrepreneurial culture. In fact, it is the perfect example of how branding and advertising works to commodify what could or would be a countercultural phenomenon (Frank and Weiland, 1997). The term "maker" has become an identity for an eclectic mass of people who are doing the work of providing for themselves and perhaps working against typical conceptions of consumerism, and who are engaging with some form of invention or creating, like the typical artist might. For members at HackRVA it was easier to describe the kind of skills and activities being done within the makerspace as forms of "making" rather than using them to define the qualities of being a maker. If the idea is to build the knowledge necessary to be able to "alter things that already exist into something new"-in other words to hack them- or "to bring

10

something into the world that wasn't in it before" (these are statements made by members of HackRVA), then we can conclude these do-it-yourself type of justifications are directly related to the process of building practices that are arguably antithetical to life as a consumer in the traditional sense of the word. At HackRVA, there is an eclectic group of makers, tinkerers, coders, and more recently artists. Members of HackRVA have expressed a desire to disengage from the traditional role of being a consumer. They want to produce and reproduce for themselves, as opposed to passively buying and consuming mass produced items produced somewhere else, out of site and out of mind.

A similar narrative can be traced back to the DIY culture of the 1960s and 70s and the Whole Earth Catalog. At a time when utopian visions of high tech societies were growing, this catalog emerged as a kind of how-to guide for a particular kind of socio-cultural shift. Fred Turner's book *From Counterculture to Cyberculture: Stewart Brand and the Whole Earth Network* (2006) is famous for explaining in detail the counter-cultural movement and the way in which the Whole Earth network ultimately embraced certain elements of mainstream politics and culture that allowed for mutual gain between capital, the state, and the network of people looking to form alternative ways of living. Make Magazine can be similarly understood as a newly commodified product that represents counter-cultural ideas. Makers are like the New Communalists in this sense. The ideas about making that come out of Make Magazine can certainly be thought of as a tool available to this crowd, however, it is important to call the magazine what it is. It is a branded extension of an effort to commodify maker culture. This sort of appropriation is directly connected to the financialization and marketization of meaningful and sustainable grassroots activities. The information presented in Make Magazine is a viable method for diffusing this kind of information to the people who are interested in it. But when

foundational terms and principles become difficult to define, it raises questions about who is making the rules, defining terms and who is actually participating in the reproduction of this culture. To this point, by thinking back to the development of hackerspaces, and the appropriation of these into an Americanized makerspace model, we see how the expansion of what it means to be a maker in the modern context remains closely attached what Make Magazine has essentialized as the new DIY model and how it has had an explicit impact on the makerspace models. While the DIY projects outlined in the magazine might not be solely informed by profit-motives, they do not stray far from the Silicon Valley gospels of innovation and technology development as the new economic frontier.

These are narratives that directly inform and cultivate the creative economy which can generally be understood as a part of the new economy driven by and through neoliberal incentives and ideologies about producing innovation and creativity. The creative economy has become a major piece of urban renewal on a national (and global) scale to fuel urban revitalization projects, build public-private partnerships, further the decentralization of markets, and to deconstruct politicized labor affiliations. Richard Florida (2002) is most noted (and criticized; see Kratke, 2010) for his work on the creative capacities of cities and the creative class, which is evidently comprised of primarily wealthy, well educated, young white folks. The labor performed by this class of people, created by a decentralized market, is an active part of the depoliticization of counter-cultural products and spaces as it devalues collective labor, reestablishes class divides, and appropriates emerging cultures and cultural products. When critics of neoliberalism talk about the "commodification of everyday" life or "accumulation by dispossession", this is the sort of process they are referring to (Frank and Weiland, 1997; Harvey, 2004).

In part, this research is about critiquing the tensions that come out of this neoliberal commodification of cultural products and initiatives. In the case of HackRVA, there seems to be an agreement between members that the corporatization or commodification of their makerspace is worth resisting. This is a group of makers- however we choose to define it- who have found a way to develop and sustain an ethos that is devoted to open source policies, not just when it comes to letting people in to use the space and resources, but by encouraging individuals who come in to be part of the knowledge production and the learning process. The maintenance of this ethos requires a sort of formalized cultural identity that is itself relatable. As one members explains,

> "I think the makerspace itself has the ability to define how slim of a maker community they are going to provide for...but I don't know that we should the judgmental community that says you aren't a maker, or you aren't involved, you can't be a part of us. It's more like 'hey we have the tools for this kind of making, your making is cool, but we don't have the tools for that." -SL

In other words, HackRVA itself has the ability to decide what sort of makers or making is going to happen within its space. Despite the dominant makerspace model, practicing skill building and innovation inside localized spaces may create a different context for defining makers and making.

In many ways, the production of HackRVA is comparable to the production of art spaces in urban landscapes. Although artists and makers seem to have become different categorizations, makerspaces and art collectives or studios might have similar roles in the development of urban space. Gentrification of city space is a process that is both caused by and reinforces a cyclical

13

relationship between capital and culture (Mathews, 2010), and has become increasingly common as an implication of the the creative economy. Mathews (2010) calls the arts a "catalyst for urban change" in that as the arts are often associated with emerging cultural forms, the production of artists spaces spurs and informs consumer preferences and makes way for new economies that eventually commodify those cultural products. HackRVA is located in one of the most recently commodified areas of Richmond called Scott's Addition. Scott's Addition was a mostly abandoned industrial park that had been home to many white business owners and local industries. Since the start of the neighborhood's revitalization, orchestrated by the Scott's Addition Boulevard Association, it has seen the quick establishment of a creative economy, increasing the number of young, wealthier individuals and their businesses into the area. Part of the appeal of 'creative' economic growth, is that it is often paired with the production of spaces that appeal specifically to the group producing them. Evidently, the neighborhood has been turned into a lively area with many locally owned breweries, coffee shops, marketing and ad firms, and chic industrial lofts for single people or small families, along with a couple art spaces and HackRVA. Towards the north-west corner of the neighborhood, HackRVA has located inside a sub division. (Their space had previously been the refrigerator for a milk delivery company). HackRVA actually moved into Scott's Addition while it was still largely abandoned, and many months prior to the fulfillment of any plans for neighborhood renewal. Relative to art spaces and their role in gentrification, HackRVA has felt some of the tensions of incoming economic shifts. In fact, it may even be plausible to argue that HackRVA has faced some of the cultural shifts of the area, as other sorts of art spaces have moved in, and as Richmond's art scene has diffused across the city. This would only be evident in the case made earlier about accepting different 'forms of making' into the space. Many members have expressed an interest

in being inclusive to the arts and working to collaborate with these spaces. On the other hand, this sort of a partnership may be more necessary considering the vulnerability that art spaces too are subjected to as the gentrification process evolves. In the later stages of gentrification, the argument is that financial investment and the value of rents and property will grow to the point when artists, who are typically attracted to the areas because of low rents and centralized locations, will be eventually forced to leave the area (Mathews, 2010).

If a localized space like HackRVA, in facing the pressures of an effort to homogenize what could work as exciting cultural enclaves, still feels like it is able to control the kinds of makers or making activities that are moving into the space, what does this tell us about their autonomy? What does this tell us about the influence of makers in a community? What possibilities of production and consumption could happen if HackRVA were to resist these pressures? What about within the context of their own city? What neoliberal narratives and pressures can be identified as actively working to commodify and appropriate HackRVA within the context of Richmond?

It's About the Community

"You've got to have the members to get the space and the tools…and you have to have the space and the tools to get people to join." –KD

"So basically, we provide the building and tools, you provide the community and the desire to learn and the desire to teach. Without the people it's nothing. It's just a building." -SL

When HackRVA was just beginning, their membership-much like with any other new project- was quite small. The group rented out a portion of a studio space in the Old Manchester area of Richmond and essentially created a hobbyist space where they could come and mess around with the few pieces of equipment or technology that they had. Today, HackRVA has a steady membership of about 150. One of the members I spoke with, who has been around since the beginning of HackRVA described to me how community has been one of the most important parts of his experience at HackRVA and is the reason he has stuck around all these years.

> "I was unemployed, so I asked if I could work sort of as a lurker, or a person that watches but doesn't participate...basically what I meant was I don't have the money for the tools, I don't need the tools, I don't plan to do anything but I enjoy talking and hanging out with you guys, and they were like oh yeah that's fine." –KD

One of the most significant things about being involved with HackRVA is the sense of community that is instilled in the space. Every member I spoke with was eager to tell me about how important the people there were to them and to the movement. This varied slightly depending on how often the person was able to be there, but even those who were not regular participants took notice of how important the sociality of the space was.

> "I miss those people; I miss that energy." -MB

> "People in HackRVA are especially kind and generous…I mean tons of sharing ideas. It's so encouraging to be a part of that community." –DY

And then there were those who are around multiple days a week, making decisions, and creating…

"One think I really like about hackerspaces and this kind of world is you get to have friendships with people that are based on doing things…I enjoy the people. I like doing the stuff, I have aspirations technologically, but it's the fun and the satisfaction that comes out of doing it with people that's really driven me." –AN

"…Even if I don't feel like I have time [to be at HackRVA], I feel like hollow and lonely if I don't go by and at least say hi. So there's this familial thing that happens. It's outside of work, and it's outside of my personal life but it is my personal life." -SL

These voices are people who represent HackRVA. They are organizers, makers, and they help to cultivate a sort of cultural narrative within their space. These ideas about feeling like a community and needing the support of other makers in HackRVA is necessary for developing socio-political alternatives as these relational processes inform and serve in the social reproduction of the space.

The process of creating a community has important implications when it comes to the neoliberal city. The term 'community' itself is an important and increasingly utilized concept when it comes to the development of cultural enclaves and group identity. At HackRVA community is oriented around open-source policies and infrastructure. The push for open-source information and learning comes from a desire to democratize access to information and the means of knowledge production (Bradley, 2015; Carlsson, 2008; Diez, 2012; Ferguson, 2014; Hollman, 2015). Open source was one of the foundational principles in the early development of hackerspaces. HackRVA has adopted these ideas of sharing, collaboration, open source, and applied them to the inner working of their body of makers. In democratizing access to these

goods, the goal is to minimize competition and reorganize the exchange of knowledge and skills for the common good.

> "We are a very open source kind of maker place, where if you want to know something, you can ask someone something and they will tell you openly and freely. There are very few secrets." –KD

Terms like 'open source' and 'community' have become loaded concepts as they reflect a continual effort to universalize the makerspace and the maker community. HackRVA has built its membership around these ideas that there will be open access, open communication and everything will be open to *anyone* and *everyone* who might be remotely interested in the technologies they have acquired over the years. Currently, the community at HackRVA is made up of self-proclaimed makers, some of whom have jobs while other do not, some of whom will never make anything they find important or worth their time and others who will do so on a weekly basis. Many members work as engineers and in IT industries, or are librarians and artists. However, even though the rhetoric says anyone can potentially be a maker and therefore a member of the community, in actual fact this membership is predominantly male and predominantly white. (These are characteristics that will be observed later). The sociality of the space and the community that occupies that space is less concerned with the demographic makeup, and more concerned with the skills being presented and acquired and the comradery built into the maker ethos. Especially in the case of an open-source community, we can assume potential success in cultivating opposition to the privatization of knowledge and products. But there are a couple of ways to understand 'community' and the process of developing a social body.

The role of a community should not be taken as a completely inclusive and egalitarian thing unless it proves to operate outside of already existing systems of oppression, exploitation, and exclusion. Perhaps, community is romanticized as a tactical method for opposing traditional forms of oppression and exclusivity among groups, when realistically, we should be critiquing the complicity that modern forms of community engagement exercise within the capitalist system. Joseph (2012) offers this perspective and identifies how we conflate the universality of values formed by liberal communities with those of the broader social environment which historically has exhibited forms of racist, misogynistic, and nationalistic organizing. Often times, "community" is used as a catchword to create a sense of social cohesion in an increasingly isolating system of markets, in an attempt to fill the voids that everyday people are subjected to. Community itself, in this context, has become a diluted term. For example, a few members told me that if we consider the makeup of careers that are in HackRVA, many members are engineers who have skills that already allow them some cultural capital within the makerspace as they already know how to build and learn technology and code. These individuals are evidently attracted to the makerspaces because it allows them to use their skills in a more creative and innovative setting where they aren't being monitored or their creative capacities aren't being diminished by profit-motives.

> "Our makerspace is a reflection of the demographics that are involved in those professions. If you look at gender participation and minority participation in engineering and computer science, it very closely reflects what is going on in our makerspace. But if you go to the arts or softer sciences, I think there's more diversity there." –AN

Perhaps HackRVA is open ended in the sense that there is space for free thinking and experimenting with different learning tactics outside of mechanic working environments. The trouble with this is not that these workers are seeking particular forms of growth or maybe even some form of refuge, but that their identity as a community remains complacent with the systems in which they operate and can become socially and politically homogenous to dominant culture. This seems to be true of the maker movement and makerspaces in general. Thinking about community as merely bringing people together is not sufficient in defying these circumstances. Community might reference space, as in a neighborhood or an office, just as well as it could reference any sort of coalition or group of like-minded people. This fluidity in understanding community and who a community might or might not include explains why such groups are often disengaged from one another, possessing separate motivations and means of obtaining power and influence over their own perceived realities in addition to power over designated outsiders.

At HackRVA, the purpose of the space is to create a cultural enclave specific to making and makers within the city of Richmond. It is a group that has shared interests, a shared purpose, and shared resources that ultimately allow them to produce a sense of commonality with one another. Considering the unanimous response that members of HackRVA feel most attached to the people there, we know that it serves an important role, and so part of the work here is to identify why that is, and what it means as far as defining the role of HackRVA in Richmond.

> "You need to find a space in society where you can find or have value. And the
> makerspace is open ended in that sense." –AN

Why does HackRVA feel open ended as a place to come and reclaim value? The need to be valued within a space or community, apart from our day to day labor and institutionalized social practices is a critical point that speaks less to why HackRVA exists (although it certainly helps in understanding that part) and more so to the isolating systems of power within liberalized markets and economies. Within these circumstances, people often seek spaces like HackRVA as they serve as a space for leisure or for social interaction. In fact, HackRVA is probably serving its membership in each of these ways and will be explored later in this research. Another way to understand this is to analyze HackRVA as a space that is actively reproducing particular forms of organization and knowledge that, as I will now show, can be considered as a form of urban commoning.

Commoning as a Socio-Political Project in Urban Spaces

Stavros Stavrides' (2016) definition of the commons as a social space is, I think, the most helpful to considering HackRVA as a place for commoning to occur. He writes:

"Understood as distinct from public as well as from private spaces, 'common spaces' emerge in the contemporary metropolis as sites open to public use in which, however, rules and forms of use do not depend upon and are not controlled by a prevailing authority. It is through practices of commoning, practices which define and produce goods and services to be shared, that certain city spaces are created as common spaces" (p. 2).

Earlier research on the commons helps to make sense of the cultivation of these social spaces that allow strangers to engage with some collective goal that will lead to a resourceful outcome (Bresnihan and Byrne, 2015; Caffentzis and Federici, 2014; Crossan et al, 2016;

Eizenberg, 2012; Esteva, 2014; Federici, 2012; Hardin, 1963; Harvey, 2011; Huron, 2015; Ostrom, 1990; Stavrides, 2016). Traditionally, resources might include food, water or land, things necessary to sustain the livelihood of a community (Hardin, 1968; Ostrom, 1990). More recently, literature on the commons turns to the knowledge commons, which focuses primarily on the sharing and development of intelligence, programming, or skill (Carlsson, 2008; Brenner, 2015; Esteva, 2014; Harvey, 2011). Spaces that are geared towards collective organization and social change are of particular interest to new conceptions of commons and commoning, (Caffentzis and Federici, 2014; Crossan et al, 2016; Eizenberg, 2012; Esteva, 2014; Federici, 2012; Ferguson (ed.), 2014; Huron, 2015; Stavrides, 2016), but just as we will see with HackRVA, there are certain powers at work to disrupt the commons and the social processes that constitute them. We need to understand the commons not simply as a physical space or place where things are shared but that the purpose of the commons is informed and reproduced through commoning as a social process (Federici, 2012, Harvey, 2011).

The benefit of reaching beyond a conception of what has been traditionally categorized as common or public land and resource, is that if we understand commoning as a social process, we can understand how and why the tragedy of the commons does not rest in some innate inability to manage resources or to be stewards of our own capacities, but that the commons have historically fallen victim to capitalist pressures that seek to enclose commoning practices, understood as forms of social reproduction (Harvey, 2012). Indeed, it is the process of co-optation, the assimilation of counter-cultural developments into profit-oriented schemes that requires consistent and nuanced attention to how commons can be reproduced today. In his critique of the "bourgeoising" of the counter cultural DIY movement of the 70s, Thomas Frank (1997) writes "the anointed cultural opponents of capitalism are now capitalism's idealogues" (p.

35). While this perspective may be critiqued as essentializing, meaning it is a rhetoric that undermines the ability of reproducing agents to resist capitalist power by consistently lending itself to an ideology that nothing can be done (Gibson-Graham, 1996), it does speak to the reality of the ability of the market and the state to confuse the relationship between counter-cultural and commodifiable goods. Theories of commoning have shifted around the maintenance and distribution of resources both natural and manmade, material and non-material, often following a historical narrative that emphasizes the critical tension between capitalism and attempts to defy its commodifying reach. To this point, and in an attempt to create a realistic, but still hopeful narrative, research into new forms of urban commoning can and should facilitate discussion about the more radical possibilities that may come out of the *use of* commodfied spaces to produce knowledges and cultures that counteract or resist the forces of capital. The commons have been written about extensively as they represent opportunities for this oppositional reproductive work. This means developing dynamic social networks within shared social spaces, where those networks are working diligently to oppose the cooptation of their space and the work being done there.

What makes HackRVA interesting is not that it's a radical self-produced, post-capitalist reality, because in many ways it is not any of these things. What is interesting is that in it's history and in becoming something that represents the process of the commodification of space, knowledge, skills, and networks…the people who make up the space-the social actors who inform and control what happens there- adamantly express a reluctance to engage with the products and culture of the new creative economy in Richmond, Virginia. They are more than interested and willing to avoid the influence of capital (which for makerspaces, happens directly through privatization, institutionalization, and grants, and indirectly through the promotion of

entrepreneurship) and are working to maintain the sorts of spaces and relationships that they feel are foundational to creativity and 'making'. In order to make sense of these commoning practices, I now turn to how HackRVA members organize and maintain their space, what priorities or ethos they operate by, what challenges have emerged as the space has grown and how they deal with working alongside and against the creative economy.

The model for how makerspaces operate varies often depending on location, population density, and other makerspace competition. The prevailing model for makerspaces now is to be owned by an individual or private entity. HackRVA has managed to stray away from private investment and keep their funding and operations a group effort. They have been focusing for the past few years on building their membership because that was the best possible way to become financially sustainable and to actually grow peoples interest in making. Therefore, the space is collectively owned and operated. Instead of having one person in charge of making all the financial decisions, or any other kind of decision besides those involved with legal transactions, HackRVA uses what they refer to as a "flat structure".

> "That basic geek mentality is that we don't like rigid rules and things, so rules of order are completely out of the question. So instead, it is not really governed, but it's more of a consensus." –KD

HackRVA has monthly meetings where any individual member can come and sit at the table. In these meetings, there is usually one person- who has been involved for a while- facilitating discussion. Things that might come up are what to do with the spending budget, who is going to fix that machine, who wants to run that workshop class? The question of maintenance and the effort it takes to maintain a space like HackRVA is very important and can tell us about the way

the commons must be maintained and organized as well. It is a collaborative effort. Members who spend a lot of time at HackRVA are in constant communication with each other. The challenges that have been mentioned have a lot to do with accountability- making sure the space is cleaned and equipment is stored properly, bills are paid, classes are held, and skills or knowledge is always being shared and formed. The meetings typically end with a round-table check in to make sure that everyone's voices were heard and considered.

"It's like whoever is there is kind of who makes the decisions." –AN

On paper, HackRVA is registered as a non-profit, which requires the space to have a labeled president, vice president, secretary and treasurer. Because of the larger number of people that have joined, these no longer translate into the actual organization. Instead, the space has organized positions for "coordinators". Members decided that instead of directors, which sounded too legalistic, they would have coordinators. Coordinator positions range from Member Experience to Safety to Community Outreach and Diversity. The idea behind using a flat structure, where anyone who spends enough time and is active in the space can be a coordinator implies that there is a concern for and need for democratic decision making. Out of all the members who are paying dues at HackRVA, there are many who might show up once a year. These members seem to justify their $30.00 member fees as contributions or donations to a good cause and never actually plan to be makers. That leaves a smaller percentage of people who are intimately involved with making HackRVA an autonomous, operable common space. This is an intentional strategy for organization. It means there is room for various levels of involvement and a sort of central space/group who willingly take on the responsibility of organizing for others. What this does is raises interesting questions about who informs how the culture of the space is constructed and how.

Depoliticization by Neoliberalization

"The politics sometimes come down to just the personalities involved...I mean that's a geek characteristic…you know we don't do rules; we don't take authority. So if you don't take authority then you just gotta get along." –AN

At the surface, this is the sort of rhetoric that may lead an outsider to believe that the makerspace is inherently an anti-establishment, even radicalized place. The practice of democratic organizing, the consistent evidence that this is a somewhat self-reliant, self-sustainable space producing its own knowledges and culture according to the ideas and personalities of the people that are present, certainly seems like a lot of what the aforementioned theories of commoning suggest are central to the development of anti-capitalist commons. It is important to remember that makerspaces are inherently intertwined with larger 'maker' markets and typically find themselves as freely producing agents either for large tech companies or for Make Magazine to sell stories about. It would also be fallacious to think that this makerspace has not reinforced the same gender and racial politics that have been reproduced and advanced in broader society, especially in the tech sector. Thinking back to the demographic makeup of the space, it is safe to assume that sitting at the decision-making-table are mostly working white males. This is the trouble with the universalizing statements like 'community' and 'open source', as these are typically informed by liberal ideologies that tend to de-politicize the spaces and people who claim them (Frank and Weiland, 1997; Stavrides, 2016). In other words, preaching community does little to reach beyond what or who markets and institutions have historically decided who is worthy of inclusion. As Silvia Federici writes,

"Most importantly, we cannot build an alternative society and a strong self-reproducing movement unless we redefine our reproduction in a more cooperative way and put an end to the separation between the personal and the political, and between political activism and the reproduction of everyday life" (2012).

This is what the role of the commons is in the development of future societies that operate "against and beyond" (Caffentzis and Federici, 2014). More and more, however, the de-politicization of groups and spaces that are engaged in commoning has become something of a larger battle. When I asked members if they felt like politics were ever a focus of their makerspace, they expressed that "being political" will keep people from coming in because politics can be polarizing and its not the "makerspace thing". The de-politicized efforts of HackRVA are in many ways actually political, but they have wilfully normalized their rhetoric as not oppositional to, but non-compliant with dominant culture. Still, the potential political work of the space is arguably embedded in the ideas and stories being shared within while still keeping this separation between the personal and political.

While there is plenty to discuss about the strategies pulled off by state-sanctioned campaigns and organization to effectively minimize the political identities of the public, I will focus on the effective work of neoliberal markets in this process (which is not to imply the two are mutually exclusive). Brenner and Theodore (2002) outline the stages or pathways that have led to a neoliberal capitalism including the "ideological project" of building a utopia of deregulated markets- a political project in and of itself. They argue that alongside the ideology behind neoliberalism- the freer the market, the freer the people- there is "actually existing neoliberalism" which emerges through the socio-political processes of changing spatial formations. Brenner and Theodore (2002) note that "cities are not merely localized arenas in

which broader global or national projects of neoliberal restructuring unfold. On the contrary…cities have become increasingly central to the reproduction, mutation, and continual reconstitution of neoliberalism itself during the last two decades" (p. 375). Private property rights are at the heart of this argument as they and other privatization practices are identifiable reasons for the uneven spatial development of cities as it reconstructed neighborhoods, public space, and devalued the need for personal politics or collective action (Harvey, 2005; Huber, 2013). As cities become the place for growth and economic revitalization, they encourage demographic inversion moving wealthier and whiter folks in to enjoy their condominiums and creative businesses at the expense of less privileged people who are then systematically expelled from their city homes. While historically, cities have served as sites of struggle and radicalized political movement, the changing spatial formations, which again, are intimately connected to the creative economy, also force these narratives out and either suppress or appropriate them.

For example, HackRVA members have an interesting situation as far as risks involved with being gentrified out of Scott's Addition.

> "The landlord will have to sell the entire building complex. And unless that's something he wants to do, we're in a freezer. You can't even use it as a freezer. We are also kind of in the one spot that no one really wants to rent and therefore we kind of feel safe. There's not a lot of competition and our rent doesn't go up very much because who else would [go] for it at all." –SL

Competition in terms of small or local business owners who want to move into the area may not be as much of a threat however, this may not be so true of the city of Richmond. The city of Richmond has a long history of displacing groups and incentivizing development projects

that adhere to new, affluent cultural forms and disadvantage the already economically

disadvantaged.

The threat of the city stepping in to take up this section of Scott's Addition, brings up an

interesting point about the role of state and city governments in what are typically thought of as

open spaces or public spaces, which differ quite greatly from the commons. Public spaces are

essential belongings of the state and are crucial to capitalist development (Harvey, 2012). Public

spaces like parks, streets or sidewalks are really only used as spaces for collective organization

during political protest and occupations. Otherwise, they remain subject to enclosure by policing

and by certain forms of maintenance, festivals, and other things that are usually enforced by and

through ideas about making the city a profitable place with wealth in the form of bodies

migrating in. When the city of Richmond has embarked on developing public spaces,

infrastructures and utilities in the past- all of which I will acknowledge are fine and necessary for

modern living- the city has often been simultaneously responsible for strategic displacement of

bodies and places with historically rich cultures (Campbell, 2012). This is actually quite a critical

point in differentiating between places of business, public spaces and the commons in urban

places. Considering the politics of public space, the politics of commons must be informed by a

public whose actions and attitudes ultimately oppose these forms of neo-colonialism.

This sort of creative destruction- understood "not as a unilinear transition from one

coherently bounded regulatory system to another, but rather as an uneven, multi-scalar, multi-

directional, and open-ended restructuring process that generates pervasive governance failures,

crisis tendencies, and contradictions of its own" (Brenner and Theodore, 2002), is an important

critique of neoliberalism as it pertains to spatial development and political disengagement

(Harvey, 1996; Harvey, 2012). It positions the production of space and commoning at a crucial

point, as these processes themselves become vulnerable to commodification. Creative

destruction, then should also be applied to the transformation of already existing forms of social

reproduction within and between urban places. HackRVA continues to serve as a site for

observation as I turn to address the immediate tensions that exist specifically in Scott's Addition.

In order to keep HackRVA up and running as it has been, members have to be willing to

take on positions for action and accountability. By thinking about the organizational structure,

the intentional work being done to maintain the space, it is possible to analyze the social

reproductive practices that are happening as well. While it is increasingly difficult to bring a

collection of people together to build and maintain a common goal, and although HackRVA has

not done sufficient work to cross some of the social barriers and boundaries that certainly exist

throughout the city of Richmond, they have been actively practicing the work of constructing a

social space that has become a place where certain makers in Richmond can have full ownership

of their work and the means by which they produce it, away from private or corporate interests.

HackRVA and the Creative Economy

"…the big loud narrative out there is much more economically driven. And I mean,

we've been chastised for not wanting to partner with people or not taking grant money

multiple times. We don't want them telling us what to do." -AN

New co-working spaces have emerged across Richmond to serve as "incubators" for

entrepreneurs; 804RVA, Campfire Funds, Gather, Gangplank, to name a few. This is part of

Richmond's push to become a city that caters to start-ups and individual entrepreneurship in an

attempt to build its own creative economy. These co-working spaces exist to sort of

operationalize some of previously mentioned neoliberal transformations. They serve as spaces

for doing individualized labor *together*- a sort of play on words to universalize and stagnate the

role of community. Richmond's creative class is typically the audience as these spaces are

suitable for individuals who are working on their businesses but also provide a place to cultivate

networks and meet with investors. When I asked if HackRVA was welcoming to

entrepreneurship, the response was not completely affirmative.

> "We try to tell people we aren't really a place to run a business out of…we are more in
> the business of keeping other people from getting our money." -KD

Members have expressed a tension with business builders and one member suggested to me that

the primary difference between these spaces may actually be professionalism. To this point, there

are many credentialed workers at HackRVA, but as Carlsson (2008) suggests, "rejection of

professionalism goes hand-in-hand with the emergence of grassroots do-it-yourself communities,

often sustained by the donated labor of former or coulda-been professionals who turned away in

search of a more rewarding life". In this sense, the kind of production happening within the tin

walls of HackRVA may just be categorically different from the work being done in one of these

small-business incubators or let alone in a factory.

> "We understand that this works if we don't try to go for making money because that will
> kill the good time that we're having." –AN

There are two key distinctions to be made here. One is that while there are probably different

ideas about what exactly is being produced in these separate spaces. As we have seen, HackRVA

people are tied intimately into their collective identity, the idea being that they are most creative

and innovative when they are surrounded by people who are working together to share and

produce knowledge and activity rather than in a corporatized space. In these other co-working spaces, the need for group collaboration may not be lessened, but it operates through a very different, explicitly market-oriented motive. The second distinction has to do with livelihood and leisure. Making a product to sell in order to live is an implication of living within a capitalist society regardless of the scale of production. But in the same vein, making things as a form of leisure, hobby, escape, etc. is also an implication of living within a capitalist society. As for the co-working spaces, the purpose is purely economical, and simply uses sociality, which is necessary to the reproduction of labor and knowledge, as a tactic. The makerspace, on the other hand, creates other incentives for collective work. This is where critiques of leisure are important as HackRVA is indeed a type of space that is supposed to be a "fun" and "inspiring" environment for do-it-yourself activities, as a form of escape from the disillusioned workday. These critiques include criticisms of the creative class and their social, economic, and political abilities to even choose to become an independent laborer or to have space and time to play in between the average work day hours. In this sense there is little separating HackRVA from 804RVA because although they deviate a bit, at their core, each represent the neoliberalizaiton of daily life. Members of each space remain intricately connected to and reliant on the free-market system, they simply have different ways for navigating it. While I agree that the social prowess of the market is strong, I want to elaborate a bit upon this point of tension by turning to Gibson-Grahams's (1996) work, although there are many others who have considered and written about the tension of capitalist formations outside of actual markets and waged labor.

"Overdetermination as an anti-essentialist practice" (Gibson-Graham, 1996) is I think an important theoretical concept in this case as it presents a particular perspective about capital's "constitutive others" and "contradictory outsides", assuming that these are in constant flux,

informing how the neoliberal environment is shaped and reshaped, and in turn being informed by capitalist logics. This sort of perspective situates these concepts so that they can be analyzed as social processes, reinforced by the actors and institutions that maintain them, much like commoning and much like the market. It is the work of separating the nuances of constitutive others from capital rather than constructing them as similar to or subsumed by capital that provides room for non-capitalist economic forms to emerge. This is helpful as we continue to understand how *the difference* between HackRVA and other co-working spaces might lead to further understanding commoning in the commodified parts of the neoliberal urban landscape. The difficult work is to sort through the commonalities and the conceptual meanings ascribed to these spaces in order to determine what contradictory elements of capital can be exploited (Gibson-Graham, 1996). One means of doing this is to continue to engage in theoretical and empirical interpretations of the situations that exist in and between by expanding upon the cultural identities and political undertones of these collective spaces.

The cooptation and appropriation of spaces and culture, the universalizing terms used to depoliticize commoning practices, and the role of the state in incentivizing free market ideologies are all realized in the spaces that highlight matters of contradiction and contestation in the modern neoliberal setting. Much like the coffee houses of Instanbul (which has another interesting historical progression in terms of globalization), HackRVA is comparable to spaces that are directly connected to commodified goods and services, consistently subject to enclosure through privatization or marketization, yet serve as spaces that produce cultures of resilience and historically, resistance. However, this distinction has become far more complicated in terms of the new economy and its ideological pairings. Resilience is often critiqued as being embedded in neoliberalism as it "encourages people to live with insecurity because the status quo is

insurmountable" (Diprose, 2014) meaning is has become a means for survival. In other words, and working alongside these concepts of overdetermination, resilience as an operationalized concept serves to stagnate the political will of individuals as they are forced to reconcile with and take responsibility for their own situations rather than collaborate with others who are subjected to the same careless system. Diprose suggests that resilience, while it has specific manifestations, serves in these times to form "habits of resignation rather than resistance" (2014).

Once again, HackRVA seems to have a complicated relationship with this distinction. We can situate the members of HackRVA as a resilient group as they have found their place in an increasingly commodified area and are consistently choosing to reconcile with their differences from other makerspaces who have been more willing to become part of the creative economy, but as outlined above, they have created a structure of ordinance to continue to resist unwanted changes imposed upon them. Resistance requires standards of opposition and political nuances that push past the assumed responsibilities and commodified comforts of successful living by utilizing collectivity and collaboration. The maintenance of collectively organized spaces for resistance is precisely the sort of work that the commons and commoning should emphasize. For HackRVA, the production and reproduction of the space, for the production and reproduction of knowledge outside of neoliberal institutions has political undertones, but is not used as a framework for active opposition for fear of actually losing some of the resources they have gained. Without the political will and collaborative action to actually resist the status quo, and to not simply learn to exist in it, HackRVA and spaces like it, will remain pinned between constantly having to negotiate the neoliberalization and commodification of the city of Richmond and the maker movement broadly.

Conclusion: Future Research and Theoretical Incentives

"The makerspace itself is a means to an end because of the culture that rises out of being

involved in this…It's much better to build something and build relationships. Honestly

participating in this stuff, is one of the most useful…learning to work with a team of

people who have no incentive to do something other than just to do it, is way harder than

paying someone and telling them what to do. You learn a lot about yourself." –AN

The case of HackRVA, again, is interesting because of its complicated relationship to the city of

Richmond, the creative economy, commoning, and the a-political narratives within. In this paper,

I have outlined the diffusion of makerspaces and the construction of the maker identity. I have

connected and related the social reproductive processes within HackRVA to commoning

practices and have sought to understand how these processes of building a productive social

environment are encouraged. I situated HackRVA into the neoliberal economy and urbanization

practices which are both internalized and resisted by members of this makerspace. Finally, I have

sought to explain how the de-politicization of urban social spaces is both a product of

neoliberalism and a catalyst for further commodification of spaces and cultures. I now have a

few thoughts about how this research might be further explored and analyzed, as well as some

thoughts about possible futures for urban commoning.

During my interviews, conversations around race, gender, and class specifically were

sparse, but they did emerge. Specifically, gendered divisions within HackRVA were made an

important project among members to both learn and understand and to try to eliminate. Women

of Hack is a group that was created specifically geared towards traditionally feminine crafting

and to serve as a social space for women at HackRVA to share knowledge and experiences

without the pressures of being in a space mostly run by heterosexual men. The information I

gathered from interviews is arguably insufficient to make any definitive claims, but could and should be followed up on. My expectation is that this is a project being shared and run by members who, because of the overwhelming representation of male dominated trades and careers, have experienced gendered oppression both inside and outside of the makerspace. Matters of race were less commonly discussed, most likely because the space is dominated by mostly white folks, and again, trades and career paths that are predominantly white as well, which theoretically and empirically tells us that HackRVA is in fact a white space constructed by and for the preservation of white interests. Conversations about diversity were the closest anyone came to discussing the racialization of HackRVA and the creative economy, although the concept of diversity in a neoliberal framework is worthy of extensive critique itself. The subject of race and the racialization of makerspaces broadly is a subject that this piece of research cannot speak adequately to and requires more time in the field, especially in terms of the racialization of city spaces, dispossession and displacement in the face of neoliberal urbanization.

"If commoning has any meaning, it must be the production of ourselves as a common subject. This is how we must understand the slogan 'no commons without community' [coined by Maria Mies]" (Caffentzis and Federici, 2014). There is a bountiful amount of research and theoretical knowledge being produced across academic fields about the concepts and social processes addressed here. It is important to continue to find and assess sites like HackRVA, or urban gardens, co-ops, art spaces and the like, critically utilizing insider perspectives about how these spaces are constructed and maintained. These are the constitutive others that because of their precarious positions to commodification and neoliberalization, also could be considered points for resistance, and even retaliation. In trying to understand the possibilities of commoning in commodifying urban landscapes, I have come to understand that even besides the

commodification of physical space, it is the commodification, the de-politicization, and the appropriation of cultures and creative, dynamic group identities that makes it increasingly difficult to embody and vitalize a sound politics of moving against and beyond normalized socio-economic processes. For it is in this social reproductive processes, it is through commoning, and it is through claiming the physical spaces where people can gather, that groups become empowered.

List of References

Bradley, K. (2015) Open-Source Urbanism: Creating, Multiplying and Managing Urban Commons. *Delft Architecture Theory Journal*, 16, 91-108.

Brenner, N. (2015), Is "Tactical Urbanism" and Alternative to Neoliberal Urbanism? http://post.at.moma.org/content_items/587-is-tactical-urbanism-an-alternative-to-neoliberal-urbanism

Brenner, N. (2000), The Urban Question: Reflections on Henri Lefebvre, Urban Theory and the Politics of scale. *International Journal of Urban and Regional Research*, 24, 361–378.

Brenner, N. and Theodore, N. (2002), Cities and the Geographies of "Actually Existing Neoliberalism". *Antipode*, 34, 349–379.

Bresnihan P. and Byrne M. (2015) Escape into the City: Everyday Practices of Commoning and the Production of Urban Space in Dublin. *Antipode*, 47, 36–54.

Campbell, B. (2012) *Richmond's Unhealed History*. Richmond, VA: Brandyland Publishers Inc.

Carlsson, C. (2008) *Nowtopia*. Oakland, CA. AK Press.

Caffentzis, G. and Federici, S. (2014) Commons against and beyond capitalism. *Community Development Journal,* 49, 92-105.

Cohen, Daniel Aldana. "Seize the Hamptons". *Jacobin*. Retrieved from https://www.jacobinmag.com/

Crossan, J., Cumbers, A., McMaster, R., and Shaw, D. (2016) Contesting Neoliberal Urbanism in Glasgow's Community Gardens: The Practice of DIY Citizenship. *Antipode*, 48, 937–955.

Diez, T. (2012) Personal Fabrication: Fab Labs as Platforms for Citizen Based Innovation, from Microcontrollers to Cities. *Nexus Network Journal* 14, 457-468.

Diprose, K. (2014). Resilience is Futile. *Soundings*, 58, 44-56.

Ehrenhalt, A. (2012) *The Great Inversion and the Future of the American City*. New York: Alfred A. Knopf.

Eizenberg, E. (2012), Actually Existing Commons: Three Moments of Space of Community Gardens in New York City. *Antipode*, 44, 764–782.

Esteva, G. (2014) Commoning in the new society. *Community Development Journal*, 49, 144-159.

Federici, S. (2012) Feminism and the Politics of the Common. In D. Bollier and S. Helfeich (Eds.), *The Wealth of the Commons: A World Beyond Market and State*. The Commons Strategy Group.

Ferguson, F. (ed.) (2014). *Make_Shift City: Renegotiating the Urban Commons*. Berlin: Jovis Verlag GmbH.

Florida, R. L. (2002). *The rise of the creative class: And how it's transforming work, leisure, community and everyday life*. New York, NY: Basic Books.

Frank, T. and Weiland, M. (1997) *Commodify Your Dissent: Salvos from the Baffler.* W.W. Norton and Company.

Gibson-Graham, J.K. (2006) *The End of Capitalism (As We Knew It)*: *A Feminist Critique of Political Economy*. University of Minnesota Press. (Original work published 1996)

Harvey, D. (1996) *Justice, Nature and the Geography of Difference*. Cambridge, MA: Blackwell Publishers Inc.

Harvey, D. (2005). *Brief History of Neoliberalism*. Oxford: OUP Oxford.

Harvey, D. (2005). *The New Imperialism*. Oxford; New York: Oxford University Press.

Harvey, D. (2011) The Future of the Commons. *Radical History Review*. 109, 101-107.

Harvey, D. (2012) *Rebel Cities: From the Right to the City to the Urban Revolution*. New York: Verso.

Hardin, G. (1968) The Tragedy of the Commons. *Science*. 162, 1243-1248.

Huber, M. (2013). *Lifeblood: Oil, Freedom, and the Forces of Capital*. University of Minnesota Press.

Huron, A. (2015), Working with Strangers in Saturated Space: Reclaiming and Maintaining the Urban Commons. *Antipode*, 47, 963–979.

Hollman, W. (2015) Makerspace: Towards a New Civic Infrastructure. Retrieved from https://placesjournal.org/

Joseph, M. (2002). *Against the Romance of Community*. Minneapolis, US: University of Minnesota Press.

Kratke, S. (2010). 'Creative Cities' and the Rise of the Dealer Class: A Critique of Richard Florida's Approach to Urban Theory. *International Journal Of Urban And Regional Research*, *34*(4), 835-853.

Mathews, V. (2010) Aestheticizing Space: Art, Gentrification, and the City. *Geography Compass,* 4(6), 660-675.

Mumford, L. (1934). *Technics and Civilization*. New York: Harcourt, Brace and Company, Inc.

Ostrom, E. (1990) *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press.

Sevilla-Buitrago, A. (2015), Capitalist Formations of Enclosure: Space and the Extinction of the Commons. *Antipode*, 47, 999–1020.

Sheridan, K., Haverson, E., Litts, B., Brahms, L., Jacobs-Priebe, L., and Owens, T. (2014). Learning in the Making: A Comparative Case Study of Three Makerspaces. *Harvard Educational Review*, 84(4), 505-531.

Smith, A. and Light, A. (2015) How to Cultivate Sustainable Developments in Makerspaces. *Centre on Innovation and Energy Demand*.

Stavrides, S. (2016) *Common Space: The City as Commons*. London: Zed Books Ltd.

Taylor, N., Hurley, U. and Connoly, P. (2016) Making Community: The Wider Role of Makerspaces in Public Life. Retrieved from http://www.nick-taylor.co.uk/

Turner, F. (2006) *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*. University of Chicago Press.