Expanding Women's Agency in the Built Environment: Understanding How Employment Has Impacted Women's Access to Space in Rural Andean Ecuador

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For centuries women's agency in the built environment of their homes, communities and workplace was limited by an absence of ownership and control of these spaces. Even as women gained equal rights to land ownership, their capacity to develop that land was limited by social and cultural structures. Access to employment changed for women living in rural areas when the rose industry developed, especially around Cayambe and Cotopaxi, creating jobs near their home communities. Over fifty-one percent of current industry jobs are held by women, with higher number in the early years.

Using participatory research methods, women employed at four rose farms in Andean Ecuador were invited to take photographs from a list of questions. These prompts centered on themes of home, community and workplace. The photographs served as a springboard to in depth interviews to study the participant's levels of agency at home, in their communities and at work.

The research builds a picture of the impact employment in the formal job market has created for women. Beginning with access to credit lines, training and education at work, these women have been able to break cycles of gender violence. The photographs, taken by participants, and narrative interviews give us a unique perspective into these women's agency in their built environment. Most significantly perhaps, is the impact of hearing their experiences recounted and documented from their perspectives. This paper will record and disseminate those experiences to a greater audience.

INTRODUCTION

This research studies issues of agency for women working at rose farms in Andean Ecuador, through a cultural landscapes lens. The boom of the floriculture industry in the region researched lead to the creation of jobs, especially for women in their rural communities. Economic opportunities drove the evolution of communities and a boom of the built environment around rose farms. Years of witnessing these changes and an interest in their impact on women's lives prompted the investigation. The hope is that the research can lead to better understandings of the driving forces and have an impact on women's agency while advancing women's rights.

Focused predominantly in the region of Cayambe-Tabacundo, where the concentration of rose farms in the highest in the country, this paper examines women's agency in their built environment. Women's agency has increased because of their employment on rose farms and the growth of the industry in their communities. Their agency is best reflected the built environment of their homes.

First, we examine the historical context of land and power in the region. Second, we document the consequences of education and the evolution of farms as spaces for education. Finally, we study current spatial conditions based on photographic research and interviews with women, to understand how their built environment reflects agency, empowerment and aspirations.

RESEARCH METHODS

Lived experience is more complex than single data points and requires a more integrated approach to understand. Qualitative methods were selected to allow for flexibility to adjust along the way and sensitivity to individual circumstances. The challenge lies is in finding a proven method to follow and to process the data collected. Participatory photo mapping has allowed researchers to create a more complete picture of a research question. The tools selected emerged from the need to gather data that adapted to the setting and allowed for an integration of multiple forms of qualitative and transdisciplinary research methods.

Beginning with ethnographic methods, being inserted in various areas of the floriculture industry in Ecuador, provided important qualitative information to understand the context and complex relationships. Contextualizing the insider's perspectives of the industry with documented research and news articles, was the basis of understanding the history and evolution of the region.

Participatory photography was used for the second phase of research. Twenty disposable cameras and a list of prompts were given to women working on four rose farms. The selection of participating women was arranged by the human resources and social workers on the farms. The photo prompts were based on three categories: home, community and workplace. With the developed photos as a starting point, narrative interviews



Figure 1. Overlooking a portion of the Cayambe-Tabacundo valley. 2017. Image by Author.

were conducted to gain an understanding of the motivations, desires and perspectives of women and their built environment.

HACIENDAS: HISTORY AND STRUCTURE

Ecuador has around 4,000 hectares of floriculture, in thirteen different provinces. Of the 4,000 hectares, approximately 75 percent are in the Cayambe-Tabacundo area, making it the largest concentration of rose farms in Ecuador . Cayambe has a long and well documented history. From the colonial period through the 19th century, these lands were haciendas owned by Spaniards, descendants of Spaniards and the Catholic Church. Agency on these estates was held solely by hacienda owners. Control of the land denoted both power and influence, creating the structure within which the mestizo and indigenous populations lived. The issues of agency and structure steaming from the current rose farms, as a modern depiction of haciendas, are worthy of their own research and not addressed in this paper.

The social structure of a hacienda was pyramidal. Hacendados, the Spanish or high-class mestizo owners were at the top of the pyramid. Below them was a majordomo, a mestizo that reported to the owners and ran the day-to-day operations of the hacienda. At the base of the pyramid where the indigenous workers, most of which were huasipungeros that received a piece of land called a huasipungo – meaning huasi-house and pungo-door – in exchange for labor on the hacienda. Over time the indigenous workers accumulated debt that tied them to the hacienda.

During the era where hacendados had power over land and people, the role of women was tied to their class and always one level removed from their husbands and fathers. For the indigenous women, at the bottom of the pyramid, this meant having no agency in their roles. Their worked was centered in the domestic sphere, on the hacienda house and in some cases in the city homes of the owners. Dolores Cacuango, the daughter of indigenous laborers of the Hacienda of Pesillo, was sent to the city to work at the hacienda owner's home. Rural-urban migration was forced upon poor women.

The early agriculture of haciendas was dairy farming. Milking the cows was women's labor in the huasipungo structure. Based on anecdotal stories, despite the economy of the area changing from dairy farming to floriculture, the numbers of cows and resulting dairy production is larger today than when the area was predominantly dairy farming. Families living on small plots of land and with employment are able to purchase a cow, creating an additional source of income. Large corporations, such as the Nestle factory in Cayambe, in turn purchase milk from these small dairy producers.

AGRARIAN REFORM

Huasipungueros gained their independence and legal ownership of their plots of land as part of the Agricultural Reform of 1964. Despite the perceived independence and land ownership, as smallholders they lacked the resources to support their families from these small plots of land leading them to migrate to the cities for employment. Despite women being allowed to own and inherit land by law, a married woman was not allowed to control of her land. Husbands had power over a wife's belongings, including land. Spatial agency was male centric and contributed to structural violence against women's rights.

MIGRATION AND EMPLOYMENT

Labor driven migration to the city, would continue until the floriculture industry began in the 1980's. Women represented the highest percentage of rural-urban migration, as the pattern of migration mostly to the capital city of Quito continued. With agency in their communities and homes limited by traditional gender norms, they were forced to seek income elsewhere.

"Nationally, Ecuadorian women made up 56 percent of the rural-urban migrants in the 1960s and 50 percent in the 1970s. In the particular case of the Sierra region, unequal distribution and small average farm size, combined with a highly imperfect capital market and limited off-farm employment opportunities (especially for women), has led poor rural families to use both temporary and permanent migration is clear. In the particular case of Quito, the largest city in the Sierra, it is estimated the rural-urban migration contributed 55 percent of the overall population growth between 1974 and 1982. The most recent data from the 1990 population census suggest that women make up over half (52 percent) of the total inter-provincial migrant stream into Pichincha, where Quito is located."

-World Bank Report 2000, 44-45

The floriculture boom in the 1990's activated a reverse urban-rural migration pattern. The return of women to their home communities was possible with the new employment opportunities on rose farms. Women have always been at least 50 percent of the employees on rose farms, based on gender statistics tracked by the industry. Currently women represent 51 percent of the employment in the industry, lower that the highest point at 60 percent.

Based on accounts by industry professionals, as firsthand witnesses following the economic impacts of the industry's growth, the Cayambe-Tabacundo area went from being among the poorest canton's to being the fastest growing with a strong economy. Cayambe has become a point of migration, for people returning to their home communities and for many people from the coast and foreigners. Unemployment is low due to the direct and indirect labor opportunities from the rise of the floriculture industry, which has in turn lead to an increase in the local standard of living.

EMPLOYMENT AND OPPORTUNITY

Each rose farm hectare creates employment for 11.8 people. This is high, in comparison to other agricultural employment. Broccoli farming, another predominant crop in the region, only requires one worker per hectare. Greenhouses and the post-harvest work areas are considered superior working environments by women who had worked in other agricultural jobs. These spaces were perceived as more protected and created shelter. Carmen compared her current work in a greenhouse to the difficult conditions that working on a broccoli farm in the past had created. Being wet often and back pain that came from carrying the harvested broccoli had affected her health. Working on a farm she is in a greenhouse, where the environment is protected from the elements and tools have been developed to create working conditions that were not strenuous on her body.

Work on farms is only one form of employment available. Women also tap into indirect forms of employment generated by the rise of industry in the area, for example local seamstresses being hired to sew aprons for the farm workers. Dynamic local conditions generate prospects for women in their local communities that allow them to have options and make choices on their employment preferences.

ROSE FARMS AS SPACES OF EDUCATION

Ecuador has one of the lowest education achievement levels in Latin America with women in rural areas receiving an average 4.1 years of education. Less than ten-percent of women receive a high school education. Dropout rates for women in rural sierra regions were 70 percent after sixth grade, coinciding with the years women in the study would have been in high school. Teenage pregnancy is one of the highest factors leading to girls dropping out of school early. Based on the 2010 census 20.3 percent of teenage girls, between the ages of 12-19, had given birth to a child at least once . There is no doubt that these percentages are higher for rural girls, whose years of schooling are lower than those of girls in urban areas.

Differences in status are a result of social conditions and access to knowledge. When women are not given access to knowledge in the same capacity as men, gender stratification of space intensifies. On average, the women participating in the study began working on farms at the age of 20. Forty-percent of these women began working on the farm while they were teenagers. Their access to knowledge and skills in their work on the farms gave them a new knowledge status.

Ecuador's Ministry of Education initiated an alphabetization program in 2010 to address the high levels of illiteracy in Ecuador. Social workers at rose farms identified women who would benefit from the government programs and connected them to programs held in their local communities. The ability to read and write transformed the capacity of women to participate in the workforce. It improved the capacity to interact, leading to higher paying positions.

Women working on rose farms receive training through workshops, making the workplace an important space of education. Women who demonstrate leadership skills are promoted to management positions providing them with salary raises and additional training.

Programs are typically delivered by outside providers such as the Area of Social Responsibility of Expoflores, the National Association of Producers and Exporters of Flowers in Ecuador. The training they receive addresses both the soft skills needed for management and technical training such as computer classes. Ubaldina, a field manager, shared a story of how buying a computer for her son to do his homework at home was a good economic decision, when she realized how much she was spending on computer time at the local internet café.

MOVING BEYOND VIOLENCE

Overcoming a structure of oppression can only come when the oppressed works to free themselves. In this path to freedom from oppression, an individual or groups awareness must shift. Awareness on gender based violence has been built through workshops given at the rose farms to both women and men. In a culture where you hear women say "he has a right to beat me, he is my husband" one must start shifting this mindset with education and awareness that gender based violence is a human rights issue.

Based on statistics from the World Bank, we learn that 71 percent of women with their own income in Ecuador reported being physically abused. The extent to which this study considered the effect of gender based violence, was to understand how it affected women's access to space. Women in the study talked about they were able to leave abusive relationships and build their own home for their children. Participating in the formal economy allowed them to qualify for bank loans independently. Realizing the negative effects a violent home has on the development of their children was a driving factor to taking the step towards independence. Direct access to and control of income gave women the freedom to leave abusive relationships. In the past the need to stay, despite intimate-partner violence, was driven by the need to provide for their children.

Social status and architectural space can go hand in hand. When a space is exclusively or predominantly occupied by a single sex, a hierarchy of power is created. With women's increased access to income came empowerment and freedom from economic dependence, breaking down social and power structures. Economic independence allowed women to leave abusive relationships. "It is better for my children" was a phrase several women used to describe their motivations for building a single mother home. Breaking the cycle of violence, that their mothers lived, is an optimistic step in the work towards gender equality for future generations.

CHANGES BASED ON ACCESS TO CREDIT

Unfinished structures are a common sight in developing countries. Construction is a slow process that occurs brickby-brick, as the family is able to purchase materials. This is a traditional way in which they save. With limited access to credit, and a risk of currency fluctuations, building little-by-little is the most secure form of building an investment.

Employment in the formal economy shifted the construction timeline of their house. A job presented access to lines of credit and gave them the ability to save, allowing a larger construction to be built at one time and paid for over time. Half of the study participants had savings built up before starting construction. One woman described how her salary was used for their monthly expenses and her husband's salary was used to save towards building a home. This economic shift allowed them to hire a builder, typically a community member or family member, to execute the construction. The layout of the houses were based on the number of rooms desired and input from the builder who had prior experience.

Over half of the women received a credit from a local bank or credit union. These loans were all paid off in three to six years. Only one participant used a government financed loan. For the other women, a government loan was not an option because their salary only allowed them to get loans of \$1,000, "which is not enough to build". Banks and credit unions were more willing to extend loans for higher amounts from \$3,000 to \$6,000 dollars. Based on construction costs and information shared by the participants we can estimate that their homes cost between \$10,000 and \$20,000 to construct.

THE IMPACT OF TECHNOLOGY

Appliances traditionally address work done by women in the home. An increase in the types of appliances a woman has access goes a long way in alleviating her workload. The days of cooking over a wood fire a long past and the presence of gas burning stoves are almost ubiquitous in homes around the country. With their own income women have the agency to decide which appliances to purchase. The impact of purchasing a refrigerator has the most impact on a women's daily home sphere work. They are able to reduce their daily trips to the store for perishable items.

Several participants had washing machines and others were planning on purchasing one. The reduction in workload, from having to wash clothes by hand, to having a washing machine, allows women to spend more time with their children. One study done by Ximena Peña at the Universidad de Los Andes in Colombia found that women spent eleven hours a week washing clothes before they had washing machines. With their own income they are able to decide and afford the purchase of tools that alleviate their workload.

Beyond the impact on the lives of women, appliances reduce the burden on children. Girls especially have suffered from having to become "step-in-moms" for their younger siblings as their mother's care for the house. When a mother's home workload is reduced, her reliance on her children to help is reduced. Children are free to continue their education and enjoy their childhood years. The photograph taken by Maria Celia of one



Figure 2. Son of Maria Celia Llenera Cuascota on a homemade swing in their chakra, a small agricultural plot typically found at a rural home. 2017. Image credit Maria Celia Llenera Cuascota, photo project participant.

of her son's on their home made swing captures the impact of a child free from a cycle of child labor. A child who experiences the joys of childhood and of a mother who has the agency to create this space for her children.

OUTCOMES OF AGENCY

The ability to makes seemingly mundane choices, such as the color to paint the exterior of house reflects achievement of aspiration. A progression beyond survival. Selecting a paint color "because it is pretty" is a visual manifestation of a women's desires being manifested in the built environment. Beyond the agency of women, the children's aspirations are reflected in their home spaces. One mother shared how her children requested their rooms be painted with their favorite colors – pink, blue, orange – a detail reflected in each of their individual rooms. The ability of a mother to give her children, which are her purpose, a choice is the ultimate level of agency for women.

An exercise to draw plans of their current home and future expansions resulted in a reflection of aspirations. Current spaces and their descriptions of intent reflect a desire for privacy between the private bedroom and communal living spaces. Bathrooms have been upgraded to have running water and electricity, although often remain detached from the interior. Outside they create structures for small animals, chickens and guinea pigs, to provide a secondary source of income. Chickens can easily be sold to cover the cost of a uniform required at by their child's school. Confidence and pride in their ability to provide for their families and have greater financial independence motivate the spaces they create.

Future plans reflect their desires for greater agency. A hair salon, reflects dreams of a future where she works for herself, while providing a service for other women in her community. Guest rooms that are both a spatial luxury and allow for communal support. A library for a daughter, to drive the importance of education and knowledge for her future.

Children are the driving force behind these women's agency. Striving to give their children a safe home and an education so they can become professional's keeps women focused on their jobs. Awareness developed from workshops at the rose farms, coupled with their financial independence, empowered women to leave abusive relationships and built their own homes. If these developments of agency can be continued with the next generation, the cycles of structural violence can be broken. An empowered generation can use their agency to propel new ways of living and share their own research initiatives.



Figure 3. Painted exterior of house with details. 2017. Image credit Daniela Mendez, photo project participant.





Figure 4. Guinea Pigs. 2017. Image credit Maria Celia Llenera Cuascota, photo project participant.

Figure 5. Floor plan of current house and future desired addition, by Daniela Mendez. Highlight added by author.

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AUTHOR BIOGRAPHY

Heather Rule is a Fulbright Fellow and licensed architect whose research explores issues of agency, the built environment and women's rights. She received her Bachelor of Science in Architecture at the University of Michigan in Ann Arbor and Master of Architecture at the University of Texas in Austin. She has practiced professionally in North Carolina and Texas.

ENDNOTES

- 1. Agency refers to an individual's capacity to make and implement decisions.
- A cultural landscape, as defined by the World Heritage Committee, is the "cultural properties [that] represent the combined works of nature and of man."
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- Samuel F. Dennis Jr., et al. "Participatory Photo Mapping (PPM) Exploring an Integrated Method for Health and Place Research with Young People." Health & Place 15 (2009): 466–73.
- 5. The selection of participant by the farms human resources department and/ or social workers can lead to a bias. The facilitation participant selection was a necessary step in building trust. These authority figures were not present in the interviews and the confidentiality of the participants was respected.
- 6. Based on statistics tracked by Expoflores, the National Association of Producers and Exporters of Flowers.
- 7. Barry J. Lyons. *Remembering the Hacienda: Religion, Authority and Social Change in Highland Ecuador.* (Austin, TX: University of Texas Press, 2006)
- 8. The use of the word hacienda represents both the land and production which carries an implication the social structure.
- Erin O'Connor. Genero, Indigenas y Nacion: Las contradicciones de construir el Ecuador, 1830-1925 [Gender, Indian, Nation: The Contradictions of Making]. (Quito - Ecuador: Abya Yala, 2016)
- 10. Dolores Cacuango became one of the leading feminists and indigenous activists in Ecuador.
- 11. Marc Becker, Silvia Tutillo. *Historia Agraria y Social de Cayambe [Agrarian and Social History of Cayambe]*. (Quito Ecuador: FLASCO, Sede Ecuador and Ediciones Abya Yala, 2009), 63.
- 12. Huasipungeros where indigenous workers on haciendas that worked in exchange for living on the land. Historia Agraria y Social de Cayambe (Quito: FLASCO, Sede Ecuador and Ediciones Abya Yala, 2009), 212-13.
- Erin O'Connor. Genero, Indigenas y Nacion: Las contradicciones de construir el Ecuador, 1830-1925 [Gender, Indian, Nation: The Contradictions of Making]. (Quito - Ecuador: Abya Yala, 2016), 176-7.
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- 22. El Comercio. "UNESCO galardonó a Ecuador por sus programas de alfabetización," (Quito: September 8, 2014).
- 23. Paulo Freire. *Pedagogy of the Oppressed*. 30th anniversary ed. (New York: Continuum, 2000).
- 24. Daphne Spain. *Gendered Spaces*. (Chapel Hill: The University of North Carolina Press, 1992).
- Abhijit V. Banerjee, Esther Duflo. Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty. (United States of America: Public Affairs, 2011), 183-184.
- 26. Participants in the study had tried to obtain loans through the social security system in Ecuador, but the amount of credit that they were offered was so low and not enough to build their house.
- 27. Ecuador has used the US Dollar since the year 2000. With the reduced risk of inflation, by being tied to a more stable and powerful currency in the global market, the access to loans increased though out the country.
- Camila Taborda. "El experimento de las lavadoras contra la desigualdad [The experiment of the washing machines against inequality]." (El Espectador, July 27, 2017), https://www.elespectador.com/noticias/medio-ambiente/ el-experimento-de-las-lavadoras-contra-la-desigualdad-articulo-705002.
- 29. When they speak of professionals their desire if that they complete education through a trade school, university or academy such as the police force.