MODERN NOMADISM
A network of reciprocal moorings

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Makenzie—My mom says that you’re homeless. Is that true?
Fern—No, I’m not homeless. I’m just houseless. Not the same thing, right?
Makenzie—No.
Fern—Don’t worry about me. I’m okay.”

——Movie Nomadland
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The wave of modernization and the impact of globalization have gradually dissolved the traditional nomadic way of life\(^1\). However some people still choose to live a nomadic lifestyle for quality of life or economic reasons, but they are still under huge cultural and political pressure. According to the National Institutes of Health (NIH), there are 164 million migrant workers in the world, which can be thought of as modern day “nomads”.

This paper focuses on seasonally migrating Mexican farm workers without a permanent home, exploring how they can be provided with a “mooring system” and, through different forms of settlement patterns, form a network of sites that can better nourish a shared, integrated economy with local communities.

Nowadays, seasonal farm workers from Mexico who travel to California are relegated to the interstices of mainstream society and navigate marginal contexts. Geographically, many live in houses that require three families to squeeze together, even in their own truck. Socially, many interact with other marginal groups, such as immigrants from Mexico, and some indigenous Mexicans have a really tough life due to the language barriers. In addition to poor working and living conditions, unequal systemic inputs, outputs and unhealthy cycles between migrant workers and local farms further exacerbate their division from the urban space. By diminishing their ability to support each other and the potential contribution they can make to the culture and functioning of the local community in California.

To improve this situation above, this thesis suggests a different approach to nomadic “mooring” in their places of employment can better support the lives and economic needs of this population, and a closed loop economy system within this new model of “mooring” can be beneficial and essential to both the migrant “nomads” and their host communities.

### Abstract

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INTRODUCTION

Nomadism, a way of life deeply rooted in human history, has undergone significant transformations in response to the forces of modernization, urbanization, and globalization. The starting point of Modern Nomadism can be traced back to the wisdom and poetic sentiments of traditional nomadic cultures, where the love and reverence for nature, the environment, and life itself are ingrained in their very being. Traditional nomadic cultures possess a wealth of wisdom that has been passed down through generations. This wisdom encompasses a deep understanding of the environment, skills to adapt to it, a sense of valuing natural resources, and a strong connection to family and community. The way of life of these cultures is built on an interdependent and symbiotic relationship with the environment. This deep connection and respect for nature is reflected in the poetry of traditional nomads, which is an integral part of their cultural heritage. Their romantic language celebrates the beauty and wonder of the natural world, showcasing their love and respect for the environment in which they live. Through their poetry, traditional nomads offer a unique perspective on life and nature, and provide a glimpse into the richness and complexity of their cultural traditions.

However, the wave of modernization and urbanization and the impact of globalization have gradually dissolved the traditional nomadic way of life. These changes have resulted in nomads losing the land and resources they depended on, as well as facing economic, cultural and political pressures. At the same time, modern values and lifestyles have made the younger generation less willing to inherit the traditional nomadic way of life.

For various reasons, certain contemporary versions of the nomadic lifestyle have gained popularity, while still being rooted in traditional nomadism. Modern nomads often embrace a more adaptable and mobile lifestyle, as a response to evolving circumstances and the pursuit of fresh prospects.

One prominent manifestation is the lifestyle of digital nomads, who leverage technology to work remotely and traverse the globe. Digital nomads embrace a mobile and adaptable existence, residing in various locations for extended periods or embarking on frequent journeys driven by personal interests or work requirements. Their nomadic endeavors, rooted in the traditional values of mobility and adaptability, represent a response to evolving circumstances and a quest for new opportunities.

Furthermore, another group deserving attention within the modern nomadic landscape comprises migrant farmworkers. These individuals embark on journeys in search of employment opportunities, often migrating seasonally or year-round, following crops or seeking work across different regions or even countries. Their nomadic existence reflects the ongoing interplay between economic factors and personal aspirations, highlighting the resilience and resourcefulness intrinsic to the nomadic spirit.

In summary, modern nomadism and traditional nomadism share a common heritage, but they also represent distinct ways of life that have evolved over time in response to changing social, economic, and environmental conditions. While modern nomads have adapted to new technologies and globalized economic systems, they often continue to embody the core values and principles of traditional nomads, including mobility, adaptability, and a deep connection to the natural world.

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Main issues and challenges facing farm workers

Shortage of Housing

Farmworkers throughout California’s agricultural regions face an extraordinary housing shortage. The governor committed $100 million for the construction and rehabilitation of permanent farmworker housing. But so far there has been no significant progress, at the same time the farmworkers also struggle to find affordable housing.

Living & Working Conditions

According to the Investigating the Midwest review, although farm owners are required to provide accommodation for farm workers, there is no robust monitoring system for their living standard\(^1\). In some cases, farmworkers have been forced to live with shattered windows, leaky doorways and broken fridges. Some are crammed into trailers.

In addition to the threat of pesticides, insecticides, and other toxic agents, farm workers also have to fight against poor air quality, smoke, COVID-19, etc.

Low Wages

The most reliable data on farmworker earnings comes from the U.S. Department of Agriculture’s (USDA) National Agricultural Statistics Service (NASS). Despite some documented real increases in wages the past few years, the latest data show the wages of farmworkers are extremely low by any measure\(^2\).

Mental Health & Structural Racism & Lack Access to Health Care

In the United States, psychosocial stressors such as rigid work demands, poor housing conditions, social isolation, hazardous, and stressful working conditions have been significantly associated with anxiety and depression for Mexican migrant farmworkers\(^3\). Only 56% of farmworkers report having health insurance. Over half of the farmworkers surveyed in the National Agricultural Workers Survey cited cost as the major difficulty to accessing health care.

Language Barrier

In California, the most common indigenous languages in the United States – Mixteco, Triqui, and Zapotec - are from communities in southern Mexico. Most migrant health centers, the primary source of healthcare for many migrant and seasonal farmworkers, have staff that speaks Spanish. Few, however, have staff that speaks indigenous languages. The diversity of languages makes it difficult to accommodate many indigenous farmworkers.

Structural Racism

In 2019, some Mexican farm workers interviewed said they are being the targets of increasingly hostile behavior, including hate crimes, that they attributed to anti-immigration rhetoric. Therefore, they also reported an increasing sense of fear and psychological distress that led them to avoid community participation.

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THIS IS A NATIONAL PROBLEM, NOT ONLY IN CALIFORNIA, BUT ALSO IN OTHER STATES SUCH AS WASHINGTON STATE, SO IT WOULD MAKE SENSE TO HELP MEXICAN FARM WORKERS IN THE U.S. WITH FOOD, HOUSING, AND TRANSPORTATION TO FIX THE DIFFICULT AND EXPENSIVE PROBLEM OF HOUSING.

**MODERN NOMADISM**—A network of reciprocal moorings

**THESIS GOAL**
- Explore and propose an alternative approach to nomadic “mooring” for seasonally migrating Mexican farm workers in California.
- Develop a framework that can provide a stable and supportive environment for their lives and economic needs.
- Establish a network of sites that foster a shared and integrated economy between migrant workers and local communities, while also promoting a closed-loop economic system.
- Seek to contribute to the improvement of the quality of life, cultural integration, and economic sustainability for these marginalized populations.

**THESIS NECESSITY**
This is a national problem, not only in California, but also in other states such as Washington State, so it would make sense to help Mexican farm workers in the U.S. with food, housing, and transportation to fix the difficult and expensive problem of housing.

**THESIS QUESTION**
“How can a network of reciprocal closed-loop moorings be developed as “generative infrastructure” that can sustain and nourish the ongoing flow of temporary occupation and exchange within the larger community and regional system?”
LEXICON/VOCABULARY

**Mooring Network**
A vast network of places to facilitate nomadic practice. After the farm workers plug in, decentralize and reorganize the original urban functional clusters to form multiple farm worker-centered node to better serve their stop, move and integration. And this is a two-way transmission.

**Territoriality**, —“sedentary road”
The pattern of behaviour in animals that defines and defends a territory. A pattern of human behaviour characterised by defence of a particular territory or area of interest.

**Marginalization/Plug-in**
Fragmented parcels can be used to reorganize and give new land use patterns, like fallow, abandoned, and post-harvest plots within the city.

**Reciprocity/Complementary**
A System of Reciprocity is a way of thinking and working within an existing system to generate resources or services that one does not have, in return for giving resources or services that one does have. Then become a complementary system through this.

**Self—Organization**
Refers to the process by which individuals organize their communal behavior to create global order by interactions amongst themselves rather than through external intervention or instruction.

**Modern Nomad**
A combined group of those who chose nomadism and those who may have had it forced upon them by circumstance. These various groups already intermingle, but through how to see them fitting into the city, and their interconnectedness within the city, we can intermingle them more intentionally.

**Rootedness**
The state or quality of being rooted or well-grounded. In this context, it refers to how the flow and exchange of resources in an unfamiliar environment can make connections between people and nomads, also strengthen the identity of nomads.

**Defensive**
The dictionary explanation refers to devote to resisting or preventing aggression or attack, Here is more a bias toward long-term residents or government policies that treat the majority of “nomads” in a defensive posture, a lack of communication and exchange, and a lack of independence.
GLOSSARY

MODERN NOMADISM—A network of reciprocal moorings

Digital Nomads
Van lifers
Share economy
decentralize
reciprocal
“Mooring system”
flexible
Infrastructure

Modern nomad
interweave

“Loop-system”

Segregation

Indigenous
Mexico
Food Bank
Local Industry
Farm land
Industrial Factory
Seasonality Crop
Camp Site
Affordable housing

Waste

cultural
integratespatial
Settlement pattern

flexible
adaptive

California
Node
Santa Maria Valley

Farm workers

Spatial

CONCEPT MODEL

The relationships between different territories, the movement of people, who may be connected by relationships and gradually become a larger territory.

MOORING SYSTEM
HOME & ROOTEDNESS
- Link to the territory
- Link of relationships

The relationships between different territories, the movement of people, who may be connected by relationships and gradually become a larger territory.

“RESOURCE FLOW CYCLE” MATERIALITY

How can we enhance the flow between different resources? What is the form of its flow?
CHAPTER 01.
MODERN NOMADISM
TRADITIONAL NOMADS

Transhumance

Transhumance is a type of pastoralism or nomadism, a seasonal movement of livestock between fixed summer and winter pastures[1].

The cowgirl Carmelina Colantuono and her family go through this transhumance once a year, they will follow the bell, carefully through the highway, the village, but the crisis of resources is also with them at all times.

FINISH THE TRANSHUMANCE!

HOME TO THE HILLS OF MOLISE

We stopped at a town, called Torrile del Sannio, the ancient seat of the Samnites. The local community welcomes home the cow, sheep and the travelers who did the transumanza.

MEALS ON THE JOURNEY & ON-ROAD ACTIVITIES

At night, we sat around a campfire, the music started up. On the fire the chef began grilling torcinelli—lamb intestines stuffed with sweetbreads, I could barely remember a meal that tasted as good!

Shepherd
Carmelina Colantuono  
“The last Italian cowgirl”

PRE-DEPARTURE

Three priests in brown robes entered the pen to lead a blessing, three amateur musicians play on guitar, traditional horns and tambourine, and they will also perform on the road.

FOLLOWING THE SOUND OF THE COWBELLS

Most of the tratturi in this section are now state highways, and the cows took over roads blocked to traffic. At each intersection police officers staffed barricades, and people lined the roads to get a look.

Follow the cowbell and you will not easily lose your way
TRADITIONAL NOMADS

Hunter-gatherer nomads

When the Bushmen were relocated they were given cattle or goats to encourage them to become herder. They believe they were relocated to make way for a multimillion dollar mining project.

The San People of South Africa

Goisoteone Lobelo
“A new generation of Bushman
Forced to move to a new home”

“Modern life is destroying us”

MODERN NOMADS

Digital nomad

“Lack of a sense of belonging, always changing hotels at the beginning, and not fully grasping the Spanish language.” were her main concern about the life.

The San People of South Africa

Tamara Altman
“The second year of being a Digital Nomad, leaving behind the uk for a life in spain”

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LITERATURE REVIEW
Local Landscapes of Pastoral Nomads in Southeastern Turkey
2012 – Emily Louise Hammer

Nomads and mobile places: disentangling place, space and mobility
2012 – Peter Kabachnik

Introduction
In this paper, the author examines empirical evidence for pastoral nomadic modes of inhabiting and transforming the landscape over the last 500 years in the upland fringes of the Upper Tigris River Valley in southeastern Turkey. Four seasons of archaeological survey mapped diachronic patterns in pastoral nomadic winter land-use, including patterns of camp sites and spatially associated landscape features such as cisterns, corrals, caves, cairns, and check dams. Ethnographic and historical data as well as satellite imagery aided in archaeological interpretation.

Conclusions
1) Pastoral nomads modified their immediate environments to provide shelter for humans and animals, secure water sources, and enhance the quality of grazing lands. The areas surrounding their camp sites exhibited clear signs of landscape management and significant investments aimed at improving the herding capabilities of the region.

2) These investments were durable and could be repeatedly utilized, which encouraged the nomads to return to specific areas during certain seasons. As time passed, these elements became “landscape anchors,” serving as focal points that influenced the spatial arrangement of the local landscapes.

3) Due to the specific placement of domestic and herding structures in relation to the terrain, both humans and animals likely followed vertical daily movement patterns.

Concept
“landscape anchors” — fixed features that improve the pastoral potential of a particular area—become geographical foci for seasonal re-inhabitation. They play a significant role in the long-term spatial structure of local landscapes.

Broader aims of this research
The author want to examine the ways in which mobile pastoral societies transformed the landscape, and in doing so, reconstruct history from the viewpoint of mobile pastoralists themselves.

Sedentary & nomadic ways of life
The mobility of sedentary people also needs to be highlighted. For centuries, the British state has regulated nomadism (Mayall 1988). The state’s spatial management of Gypsy and Traveller mobilities is intended to preserve the spatial order (Bancroft 2005) and was designed to sedentarize and assimilate Gypsies and Travellers (Mayall 1988, Home 2002, Greenfields and Smith 2010). Consequently, there are increases in both forced mobility and forced sedentarization.

Introduction
In this paper, the author examines nomadic Gypsies and Travelers in Britain, who are often constructed as placeless. He demonstrates that the meaning ascribed to nomads is dependent upon a spatialized definition of place which is underpinned by the space-place binary.

Conclusions
Limited understandings of place result in oversimplification when attempting to define and depict contemporary nomads. By prioritizing spatial aspects over the significance of specific places, we fail to recognize the deep connections nomads have with their environments. However, human movement is not merely confined to a two-dimensional grid with designated points as places; instead, it involves navigating three-dimensional spaces.

Disregarding the notion of place when discussing nomads not only represents a factual misinterpretation, but also contributes to the perpetuation of discrimination and restricts their opportunities in life. The idea of nomads being placeless goes beyond a mere definitional mistake; it reinforces biases and hampers their ability to thrive.

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CHAPTER 02.

FARMWORKERS FROM MEXICO TO CALIFORNIA
**MIGRATION JOURNEY**

Mexico-Border-California

Mexican farmworkers come from:
- Oaxaca
- Guanajuato
- Jalisco
- Colima
- Michoacan

Most of the Mexican or Central South American migrant workers choose trucks as their basic vehicle, because it is the lowest cost option for them, but this is often dangerous. Some of them will get injured because they can’t hold on to the moving trucks... and they have to deal with various challenges during the migration process: high heat and dehydration, difficulty in finding food, etc. Some of them even have to wait for 10-30 days in temporary tents at the border area because of visa problems. This trip of hundreds of miles in a truck or train sometimes also requires hiking through inhospitable desert areas, so unknown dangers are always with them, such as suffering theft and attack.

Even if they reach United State smoothly, they will still face a lot of challenges, like poor living and working conditions, segregated with local community, language barrier, racism... Even many Mexican workers do not have legal identification documents, so they are forced to work illegally, which puts them at risk of exploitation and deception. Some employers may hire them for less than the minimum wage and not provide them with any benefits or insurance, which can lead to a very low quality of life. Through my fieldtrip to Santa Maria, legal migrant workers are also not provided with good accommodations and the most basic health protections.
TIMELINE OF MEXICO LABOR

### Delimitations
- **1848, Feb. 2**: The Treaty of Guadalupe Hidalgo officially ended the Mexican-American War. The Rio Grande is established as the permanent border between the U.S. and Mexico.
- **1853, Dec. 30**: Mexico signs treaty to sell approximately 50,000 square miles of territory, including Arizona and New Mexico, to the U.S. for $10 million.
- **1854, Apr. 25**: Mexico gains independence from Spain.

### Mexican-American War
- **1821**: Mexico gains independence from Spain.
- **1846—early 1900s**: The border remained fluid. In 1846, Mexico prohibited immigration to Texas from the United States in an effort to drive the influx of English-speaking settlers.
- **1851**: The Treaty of Guadalupe Hidalgo officially ends the Mexican-American War. The Rio Grande is established as the permanent border between the U.S. and Mexico.

### Bracero Program
- **First Bracero Program**: The Bracero program allowed farmers in the western U.S. to recruit and employ “otherwise inadmissible aliens” to work on farms.
- **1930s The Great Depression**: The 1930s were unique in California farm labor history because the majority of seasonal farm workers were white U.S. citizens.
- **1942**: The United States and Mexico agree to the Mexican Farm Labor Program (Bracero Program) to bring Mexican agricultural workers to the U.S. to fill seasonal farm workers' job.
- **1964**: The Bracero Program ends with a total of 4.5 million admissions since the program originated 22 years earlier. By the end, 2 million Mexicans have participated in the program.

### Before Delimitations
- **1801**: What conflicts established that as the border and what opened the conflict?
- **1851**: What conflicts established that as the border and what opened the conflict?

### Fluid Change Border
- **1846—early 1900s**: The border remained fluid. In 1846, Mexico prohibited immigration to Texas from the United States in an effort to drive the influx of English-speaking settlers.
- **1854, Apr. 25**: Mexico gains independence from Spain.
- **1851**: The Treaty of Guadalupe Hidalgo officially ends the Mexican-American War. The Rio Grande is established as the permanent border between the U.S. and Mexico.

### After Delimitations
- **November 1986**: Immigration Reform and Control Act (IRCA) divides the H-2 program into the H-2A agricultural program and the H-2B non-agricultural program, with the vast majority of farm workers recruited from Mexico.

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**San Diego**: Agriculture plays an important role in the city's economy.

**The oil industry** has long had a large presence in the area.

**Santa Maria Valley**: Agriculture plays an important role in the city's economy.

The **oil industry** has long had a large presence in the area.

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27. [Great Depression.](https://www.britannica.com/event/Great-Depression)
CHAPTER 03.

AGRICULTURE INDUSTRY OF SANTA MARIA
SANTA MARIA

Santa Maria is a city in the Central Coast of California in northern Santa Barbara County. Its population was 109,000 at the 2020 census, and agriculture is a key component of the economy for the city and the entire region.
The majority race in Santa Maria overall is hispanic, making up 77% of residents.

Regions with multi-ethnic concentrations are considered to be more diverse, therefore, downtown Santa Maria is an area of low diversity.
SANTA MARIA — LAND USE

Oil Field vs Agriculture
Santa María and Guadalupe are all surrounded by the farmland, there are also some well-developed rural clusters near the Santa María city, but they are also very close to the oil fields.

Fig 7. PCEC Company

Fig 8. Orcutt Hill

Legend
- Agricultural Field
- Urbanized Areas
- Developed Rural Neighborhood
- Oil Exploration
- Former oil production (Under restoration)
SANTA MARIA
—ENVIRONMENTAL ISSUES

—Wildfire
The County have the perfect setting for fires: thousands of acres of wilderness with rugged terrain and few roads; rainy winter weather that allows grass and brush to grow, followed by months of hot, dry weather; prevailing winds as well as sundowner winds; and people, who are the cause of most fires.

—Flooding
Santa Maria has a minor risk of flooding over the next 30 years, which means flooding is likely to impact day-to-day life within the community.
Santa Maria
—Site Opportunity

Tourism Resources:
- Museum
- Wineries
- Golf Course
- Restaurants: Santa Maria-style barbecue
- Hiking trails

Santa Maria has a great deal of tourism resources (listed above), and the value and benefits it brings to the community as a result of tourism cannot be underestimated.

Fig 10. Oso Flaco Lake in Santa Maria
Almost all the farmworkers concentrated next to the farm or in the motel. Farm owners will not provide housing for them. They need to find their own accommodation, and at the same time, their salary is not high, so the living environment is always a problem.

Some farm owners will rent some motel rooms for farm workers during peak season.
GUADALUPE
—TEMPORARY LIVING CONDITIONS

This is a community designed specifically for Mexicans who have immigrated here, in some very marginal areas next to farmland.

Fig 13. For immigrant Mexican farmworkers

They have dedicated community centers, educational facilities and regular free food, and this relatively segregated housing model is one of the more common ones nowadays. Why is this model so widespread?

Fig 14. Community center & good supporting facilities
SEASONALITY WITH CROP

10%—year-round employment
20%—intermittent employment (8-10 months)
45%—continuous employment (4-6 months)
25%—employed only during a short work season of two months or less

Santa Maria valley has a diverse agricultural industry with a variety of crops grown throughout the year.

Basically grapes, broccoli and cauliflower are all year-round products, they all have relatively regular year-round employees, but of which broccoli is heavily dependent on a stable local workforce. Strawberries, lettuce and celery have their own regular peak seasons, but strawberries rely heavily on seasonal farm workers, while lettuce and celery have regular trained harvest crews to a large extent because of the need to operate some large machines in the process, and lettuce in particular needs strong male workers. Farm workers involved in short-cycle work will move between two crops (like strawberries and wine grapes) to lengthen their work cycle in US.

Based on the seasonality of this phenomenon, I will focus on testing some temporary settlement modes later, to see if farmworkers can take advantage of this “temporary pattern” to engage with the local communities in a unique way.
ORGANIZATION NETWORKS IN SANTA BARBARA

The state agency mainly provides comprehensive information on employment, training, housing, etc.

The fund is mainly provided by the national program. Local NGO’s help to implement policies according to local conditions and organize meaningful activities to help foreigners integrate into the local community.
CHAPTER 04.

MOORING & CLOSED-LOOP SYSTEM
A flexible, adaptable “mooring system” can support farmworkers’ mobility and flow.

“Mooring System”—After the farm workers plug in, decentralize and reorganize the original urban functional clusters to form multiple new share economy nodes to better serve their stop, move and integration.
MODERN NOMADISM—A network of reciprocal moorings

CLOSED-LOOP SYSTEM
-Self-value Enhancement

During the migratory process we can also achieve a reciprocal and healthier loop system with the input of the farmworkers themselves and the local resources: farmland, waste, etc. The mobility of resources is also a very important part, and different settlement patterns play different roles, for example: a relatively independent settlement pattern: the “migration center” becomes a transit point for the flow of resources, connecting to other mooring nodes.

The increased self-enhancement of Mexican workers will also bring steady growth and development to the local economy, as well as create cultural exchange and promotion.

This process is slowly achieved mainly in the mooring system, where Mexican farm workers gradually explore different ways of self-improvement in different settlement patterns: low-tech industries, flower industries, artisanal workshops, etc.
CASE STUDY
—BURNING MAN

The Burning Man festival, organized by the nonprofit Burning Man Project, has garnered worldwide recognition as a distinctive cultural experience and a hub for creative expression\[1\]. Since its start in 1986, when a group of friends gathered on San Francisco’s Baker Beach to burn a 9-foot (2.7-meter) wooden man in celebration of the summer solstice, Burning Man has grown into a multi-week mega-event in Nevada’s Black Rock Desert. Each year, more than 70,000 attendees come together to create a temporary metropolis with its own rules and culture\[2\]. The civilization, which is built up and torn down in the space of several months, comprises a community, founded on principles like “radical self-expression,” “civic responsibility,” and “communal effort” that fosters an array of impressive, large-scale contemporary art installations which contrast the desolate desert setting\[3\]. With this context in mind, a team of students in the Class of 2020 collaborated with the Burning Man Project to identify a use for a warehouse it owned located in San Francisco’s Mission District\[1\]. The goal was to use the space as a bridge between two often disparate sectors: art and technology.
Unique Settle Pattern
In Sacromonte Spain, as recently as the 1950s, this complex was still a bustling community of Roma cave-dwellers.1
—Most houses are burrowed into the wall of a cliff.
—Affordable, practical cave dwellings: warm in the winter and cool in the summer
—Summertime flamenco and/or classical guitar concerts.

The Gypsies are very prominent through their cultural fusion, which was a thorny path until their songs and dances reached the public eye.

In the Kolkata region, much of the waste is composted through “garbage farming” and the resources are eventually recycled through fisheries to provide protein for the majority of the population.

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CHAPTER 05.
DESIGN STRATEGY
Design Strategy Overall
2 Systems
2 Settlement Patterns

- Mooring system & Closed-loop system
- Independent & Embedded
The “mooring network” consists mainly of spaces with different types of settlement patterns, forming functional shared radial hinges that together form a network structure to support the mobility and livelihood of Mexican farmworkers as well as other modern nomads.

**DESIGN PRINCIPLE**

**Village pattern with different layers**

**New flexible module**

**INDEPENDENT**

The village settlement pattern is structured along the main traffic routes and becomes a woven fabric in the farmland, to gradually form a multiple layer village structure: public, semi-public and private while also interconnecting with the surrounding infrastructure.

**IMBEDDED-1**

More flexible modular settlement patterns can be placed in urban or rural areas, adjacent to the local community, with sustainable and affordable as its core. Use this kind of tight-knit community to explore more fulfilling ways of living together.

**IMBEDDED-2**

The temporary settlement pattern is to be integrated while maintaining separate and adaptable, finding new entry points to nourish both the unique industries and culture of local communities and the Mexican farm workers.
MODERN NOMADISM—A network of reciprocal moorings

DESIGN TYPOLOGY

SETTLEMENT PATTERN

Flexible Module Settlement
Tight-knit community

Village Settlement
Space transition

Enclosure Cluster Settlement
Corresponding to the existing pattern

Dispersed Settlement
Shared economy

SUPPORTING STRATEGY

Rainwater Harvesting
Help capture and store rainwater for later use

Handcraft & Workshop Moving Structure
Self-value enhancement

Handcraft Exhibition
Cultural integration

Child Education & Recreation
Child Care & Education Center
SITE SELECTION

INDEPENDENT

More Autonomy
Maintain relative independence
Have more potential to develop their own business
Can serve as a migrant center for the farmworkers in both Santa Maria and Guadalupe.

SITE 1

The location is very favorable for exploring the independent model: on the main road between the two cities, in the middle of farmland, next to the elementary school and also close to the infrastructure around Santa Maria City (Wal-Mart, etc.)

EMBEDDED

There are more possibilities to explore different ways of integration
Integrated yet separate
More opportunities to connect with local residents through the sharing economy
Cultural Sharing—different activities

SITE 2

Located within a well-developed village to the east of Santa Maria City, the village is more affluent and the parcels are in close proximity to marginal farms, actively exploring the spark between the local fenced clusters and the new embedded settlement patterns

SITE 3

Explore opportunities for vacant land within the city, bring new patterns of integration to existing medium density neighborhoods, in locations that are also very close to existing infrastructure
TEST SITE 01

INDEPENDENT SETTLEMENT & MIGRANT RESOURCE CENTER

In the middle of the important traffic roads of Santa Maria and Guadalupe. It is located within a 10-minute drive from the surrounding facilities and is essentially in the middle of major traffic arteries in the two city, which can play a very crucial role in the “mooring system”.

Existing Facilities

MODERN NUMADISM—A network of reciprocal moorings
INDEPENDENT SETTLEMENT & MIGRANT RESOURCE CENTER

Area: 89 Acres
maintaining the looseness
High potential to contain more people

New house:
4 bedrooms 8 people/house
The capacity of the village: 400-500 people

SELF-VALUE ENHANCEMENT
- Flower cultivation
- Local food growing
- Livestock breeding
MODERN NOMADISM—A network of reciprocal moorings

TEST SITE 01

Elementary School
Child Education & Care
Adult Education
Public Interface (market & craft)
Greenhouse
Village
The market, which is open regularly, sells handicrafts of Mexican farm workers, some other products developed by themselves: flowers, crops, and gourmet food, etc., in a flexible and movable structure.
The village hosts a cultural exhibition: a movie show where Mexican farm workers will make paths with fallen leaves to guide people into the site, and they can invite other locals to come and enjoy an open-air movie together.
Site 2 is located in a well-developed village to the east of Santa Maria City, within easy reach of the farmland on the edge of the city. Also the same pattern can be applied between the other well developed villages.
**TEST SITE 02**

Within this village, the locals have relatively large private spaces, private areas are fenced, and the sense of domain is the inspiration for this attempt at a settlement pattern where they don’t need to interact much, but still influence each other in a subtle way.

Wealthy Community
Single family home: 5 bedrooms and 4.5 bathrooms

Main house is 2 bedroom, 2 baths
11 Acre horse facility, 18 stall barn
TEST SITE 02

Area: 13 Acres
Maintaining the looseness of the rural pattern
One cluster capacity:
25 rooms, 50 people/cluster
12 rooms, 24 people/cluster
Total increase: 150 people
At sunset the local village people always greet the Mexican farm workers at the end of their work, and in the evening in the square of the new motel, the Mexican farm workers have a unique activity.
TEST SITE 03

A vacant lot in a moderately wealthy neighborhood in the south part of Santa Maria

Next to a football field and a 2 different community area (1124 ft² single family home has 2 bedrooms and 2.5 bathrooms, $2299/month)
MODERN NOMADISM—A network of reciprocal moorings

TEST SITE 03

The new community mix consists of private individual modules and shared modules that together with the adjacent football field form a new type of landscape space, while connecting to the adjacent community through the new composed landscape space.
TEST SITE 03

COMMUNITY SCALE
Area: 40,000ft²
2 storeys
Module size:
20 ft x 20 ft x 25ft, 400ft²
The capacity of one module:
4 people
In total:
100 people

Connecting to the surrounding community

Connecting to the surrounding community
In the initial stages of my thesis, a significant amount of time was dedicated to refining the research scope and identifying the specific demographic that I aimed to assist. This introspective process involved careful consideration, as the nomadic population encompasses a vast array of individuals. Through meticulous examination of extensive data, rigorous model analysis, and iterative methodologies, I ultimately concluded that the focus of my study would be the farmworkers migrating from Mexico to California. While they may not conform to the conventional notion of a “nomadic” group, but they do live a passive, drifting life due to their livelihood, and they are a vulnerable, nomadic group in need of help.

Consequently, the research paper introduces the concept of a “mooring system” designed for seasonal farmworkers, proposing the establishment of a network comprising various settlement patterns. This network seeks to foster a more interconnected economy between the nomadic farmworkers and the local communities. By addressing the economic needs of the migrants and promoting a sense of community integration between them and the host population, this approach endeavors to enhance the quality of life for the migrant workers and facilitate harmonious coexistence with their local counterparts.

Due to time constraints, my primary research focus centered on examining the settlement patterns of the farmworkers. However, it is crucial to note that the scope of the “mooring system” extends far beyond housing alone, encompassing the surrounding landscape system as a vital component. Particularly in the exploration of diverse settlement patterns, I have envisioned that by introducing greater flexibility in landscape elements, it becomes possible to establish a wider range of integration possibilities within the constraints of limited land resources.

If I had more time and effort, I would further enhance the “mooring system” by endeavoring to establish connections between diverse migrant centers through the implementation of landscape corridors, thereby fostering an independent pattern. Subsequently, I would employ an embedded pattern to extend and reinforce this network.
MODERN NOMADISM—A network of reciprocal moorings

IMAGE CITATIONS

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Fig 12. Most people are placed in motels by their employers, Author's own photography
Fig 13. For immigrant Mexican farmworkers, Author's own photography
Fig 14. Community center & good supporting facilities, Author's own photography
Fig 15. Products in santa maria, Author's own photography
Fig 19. Inside the cave house, https://www.oldtowntravels.com/sacromonte-caves-granada/
Fig 20. Kolkata’s Urban Waste Cycle, Elizabeth Dean Hermann

I don’t ever say a final goodbye. I always just say, “I see you down the road.” And I do.’

——Movie Nomadland
MODERN NOMADISM—A network of reciprocal moorings

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