

Thesis

Rhizome

Connecting Territories through Textile Practices at GreenFabric, Brussels

Annabel Fournier

GreenFabric, Brussels

Table of Contents

1. Ideation: Exploring Territories and Textile Narratives

- Introduction to the Research Focus
- References and Inspirations
- Mapping the Territory: GreenFabric and Its Surroundings
- Methodological Approach: Three Experimental Processes

2. Intermediate: Rhizome as a Conceptual Framework

- The Quest for Identity through Territories
- GreenFabric as a Living Laboratory
- Experimentation: Knitting, Biomaterials, and Embroidery
- Towards a Collaborative Installation

3. Final: Rhizome in Action – A Textile Mapping of Brussels

- Video Presentation and Storytelling
 - Technical Process: Kniterate and Natural Dyeing
 - Collective Fresco and Participatory Workshops
 - Conclusion and Future Perspectives
-

1. Ideation: Exploring Territories and Textile Narratives

Introduction to the Research Focus

For two months of personal research, I focused on the concept of "territories" surrounding the GreenFabric FabLab in Brussels. This exploration revealed a rich and multifaceted environment, prompting me to delve into notions of "rhizome" and collective sharing. My goal is to understand how a territory's identity can be revealed through its resources, inhabitants, and history, and how these elements can be woven together—literally and metaphorically—into a cohesive narrative.

References and Inspirations

My research draws inspiration from artists who use maps and territories as creative mediums:

- **Annelys de Vet** (Belgium/Netherlands): A designer and researcher who creates participatory projects that engage with social and political struggles. Her "Subjective Editions" workshops invite communities to map their regions from within, blending geography with personal narratives.



- **Joost Grootens**: His studio, SJG, designs books, maps, and spatial installations that redefine how we visualize and interact with data. His work on "Bioregional Design Practices" for Atelier LUMA exemplifies how design can bridge geography and human experience.



- **Valérie Provost**: Her "Embroidered Quarters" project combines scientific geography with poetic mapping, using textile as a medium for collective storytelling.



Mapping the Territory: GreenFabric and Its Surroundings

Using open-source tools like [QGIS](#) and [OpenStreetMap](#), as well as data from [data.brussels](#), I collected and visualized various layers of the territory:

- Soil pollution
- Land use
- Ecological networks
- Urban heat islands
- Vegetation cover
- Road and rail noise
- Flooding (2019)
- Public green spaces

These maps served as a foundation for my artistic exploration, allowing me to identify patterns, contrasts, and hidden narratives within the urban fabric.



Methodological Approach: Three Experimental Processes

I proposed three interconnected processes to translate territorial data into textile art:

1. Digital Knitting with Kniterate:

- Using geographic and photographic data to create jacquard knits that reflect the territory's diversity.
- Experimenting with reliefs and textures to embody the complexity of the environment.

2. Biomaterials and Recycled Resources:

- Sourcing materials from local zones, collaborating with inhabitants, merchants, and professionals.
- Developing biomaterials specific to each area, with a concentric approach: 100% textile at the center (GreenFabric), gradually incorporating recycled materials.

3. Embroidered Cartographies:

- Translating neighborhood maps into embroidered patterns, using graphic specificities to create visual metaphors for human and territorial connections.

2. Intermediate: Rhizome as a Conceptual Framework

The Quest for Identity through Territories

Inspired by Gilles Deleuze and Félix Guattari's concept of the "rhizome" (*A Thousand Plateaus*, 1980), I explored how identity emerges from the interconnection of resources, people, and landscapes. My research questions:

- How can a territory, like a person, reconnect with its roots to assert its existence?
- In an era of urban standardization, how can forgotten materials reveal a place's unique identity?

GreenFabric as a Living Laboratory

GreenFabric, located in Forest, Brussels, is a "third place" where technology, craftsmanship, and community intersect. The surrounding district is marked by contrasts: industrial wastelands, artisan workshops, and natural parks. This diversity mirrors the interconnectedness of a rhizome, where every element—material, human, or geographic—contributes to a larger, creative whole.

Experimentation: Knitting, Biomaterials, and Embroidery

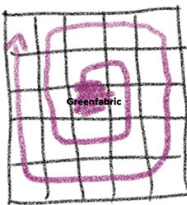
I focused on three areas of experimentation:

1. Semi-Industrial Knitting (Kniterate):



- Mixing yarns, colors, and textures to reflect the territory's diversity.
- Using geographic data as a source code for knitted patterns.

2. Biomaterials and Natural Dyes:



- Testing associations of local materials (e.g., natural dyes, recycled textiles) to recreate sustainable, place-specific materials.



3. Embroidery on Collected Materials:

- Translating neighborhood maps into embroidered patterns, using collected fabrics as a canvas for human stories.

Towards a Collaborative Installation

This project is designed for public space managers and local communities who wish to rethink their relationship with their territory. My research notebook and large-scale prototypes will be exhibited to demonstrate how a place can reinvent itself through its own

resources. Ultimately, this process aims to evolve into participatory workshops, where everyone can contribute to a living, collective mapping.

3. Final: Rhizome in Action – A Textile Mapping of Brussels

Video Presentation and Storytelling

I created a video to document the process, structured into five chapters:

1. **Incarnation:** Introducing the concept of Rhizome and my personal connection to territory.
2. **Technical:** Explaining the tools and methods used (Kniterate, natural dyeing, embroidery).
3. **Chapter 1: Maps:** Transforming urban data into knitted textiles.
4. **Chapter 2: Natural Dye:** Revealing local colors through natural dyeing.
5. **Chapter 3: Collective Fresco:** Inviting the community to contribute to a shared textile narrative.

Technical Process: Kniterate and Natural Dyeing

- **Kniterate:** A digital knitting machine used to create jacquard patterns from geographic data.
- **Natural Dyeing:** Experimenting with local plants (e.g., onions, indigo) to dye knitted yarns, linking color to place.
- **Collective Participation:** Inviting inhabitants to draw their vision of the territory, which I then translated into knitted artworks.

Collective Fresco and Participatory Workshops

The final installation includes:

- Knitted maps of the neighborhood.
- Naturally dyed textiles.
- A collective fresco created with input from local participants.
-

Conclusion and Future Perspectives

Rhizome is more than a concept—it is a call to action. By weaving together resources, stories, and skills, we can create a living tapestry that reflects the identity of a place. My

work at GreenFabric is just the beginning; I envision expanding this approach to other territories, inviting more communities to explore their own rhizomatic connections.

Appendices

- **Bill of Materials (BoM):** List of yarns and materials used, with suppliers (e.g., [Bart & Francis](#)).
- **Technical Tutorials:** Step-by-step guides for Kniterate programming, dithering images, and natural dyeing.
- **References and Links:** Full bibliography and online resources.

Acknowledgments

I extend my deepest gratitude to the GreenFabric community, my collaborators, and all those who shared their stories and resources to make this project possible.