

## Research Article

# Trementinaires: Gender, Collecting, and Subsistence in the Pyrenees

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This paper presents a case study on the links between natural history, female agency and self-care strategies in relation to the legacy of a female collective known as the *trementinaires*. The *trementinaires* were a group of female workers who traveled around the High Pyrenees, collecting plants and selling herbal medicines they made themselves. Their name derived from the word *trementina* (turpentine) since they were particularly recognized for their work as makers of turpentine. They were popularly known from the nineteenth century onward for their trustworthy knowledge of local medicinal herbs and their properties, as well as where to find them and when to collect them. Their story is linked to the valley in which they lived and the different gender roles developed through a social situation in which women led the economic support of the family. To subsist, these women developed their knowledge of herbs, local plants and products, improving the tools through which they gained a specialized collection of conservation techniques and recipes that they could use and transmit from grandmothers to mothers and daughters. This paper reflects on their relevance today and demonstrates how they challenged the traditional family roles based on a gendered knowledge of the environment and its resources.

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Central to the concept of situated knowledge is the idea that there is no one truth and, as a result, all knowledge is partial.<sup>1</sup> This approach can add valuable dimensions to academic research, offering an opportunity to challenge the hegemony of "scientific knowledge" within mainstream academic and policy circles. This paper aims to provide a reflection on the *trementinaires* as a case study to understand the role of these rural women and underrepresented voices in the construction of crucial knowledge about local nature and its resources. A *trementinaire* was a woman who left her family to go on months-long journeys in order to survive and help sustain her household. They originated from the Vall de la Vansa i Tuixent, a large valley in Spain that boasts a huge variety of medicinal and aromatic plants. Their name derived from the word *trementina* (turpentine), since one of their most requested products was the turpentine oil recipe, extracted from red pine resin; but their knowledge of natural resources and their properties extended far beyond that. With the help of their knowledge of herbs and plants, as well as their artifacts and family recipes, they were healers and the custodians of very specific and locally situated expertise (see Figure 1).

Sofia Montaner i Arnau (1908–1996) died on December 14<sup>th</sup>, 1996. She was not only the last woman working as a *trementinaire*, but also one of the most representative figures of their activities. Born in the village of Ossera in 1908, she started to work with her grandmother and her mother at the age of ten, practicing this occupation until she was seventy-four years old. Over the years, her legacy as "the last *trementinaire*"

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<sup>1</sup> Haraway, "Situated Knowledges."



**Figure 1:** Trementinaires from the valley of La Vansa and Tuixent, photography © Museu de les Trementinaires, Tuixent, Lleida, Spain.

has been commemorated by local newspapers.<sup>2</sup> Emília Llorens, the descendent of a trementinaire, lived in close proximity to the profession, as she explained in a short documentary produced in 2012 by the Spanish national television corporation Radiotelevisión Española (RTVE), *Memoria de Trementina* (Turpentine memoirs).<sup>3</sup> When Emília was seven years old, she accompanied her grandmother Maria Majoral (1887–1973) on one of her trips to the Maresme region, along the Catalan coast. Maria Majoral's personal story has been popularized through the protagonist of the children's book *La trementinaire de les nenes rosses* (The trementinaire of the blonde girls), an account of her life and travels in the company of her daughters, and later her granddaughters.<sup>4</sup> Majoral's legacy has become the epitome of how a romanticized version of traditional rural society is turning the trementinaires into a heroic myth of the valley.<sup>5</sup> Today, the history of these trementinaires remains largely unexplored and most of what we know about them and their work has reached us by oral transmission, as well as documentary video interviews and local publications, in addition to the archive of their local museum in Tuixent (Lleida), a rural area in the Catalan Pyrenees surrounded by the mountains that guided their paths. Tuixent's main cultural attraction is the Museu de les Trementinaires, created in 1998, which is dedicated to the material and immaterial heritage of the trementinaires and their lives, practices and knowledge. The museum actively collected both objects and oral testimonies of this obsolete activity and its ethnographic display depicts a domestic interior with a kitchen, containing examples of the original tools, cans, receptacles, and ingredients they used. Today, the museum plays an important role in the area. In and around Tuixent, activities currently on offer, according to the museum's website, include visits to their botanical garden, as well as varied walking routes and courses on the identification of wildflowers or medicinal plants, or the production of natural cosmetics.<sup>6</sup>

<sup>2</sup> Pons, "Mor Sofia Montaner"; Matas, "La última trementinaire."

<sup>3</sup> "Memoria de Trementina," RTVE media archives.

<sup>4</sup> Domenjó et al., *La Trementinaire*.

<sup>5</sup> Mármol, "Cultivating Disconnection."

<sup>6</sup> More on the museum's aims and activities can be found here: <http://www.trementinaires.org/> (accessed 30 Jul 2022).

Since the creation of the museum, the compelling story of the trementinaires has attracted increasing attention. In 2005, the cultural anthropologist Joan Frigolé published the book *Dones que anaven pel món. Estudi etnogràfic de les trementinaires de la Vall de la Vansa i Tuixent* (Women who travelled the world. Ethnographic study of the trementinaires of the Vall de la Vansa and Tuixent) in Catalan. The study portrays their evolution from the nineteenth century to the decline of their activity throughout the twentieth century, when the trementinaires reappeared as a heritage asset in the valley, becoming a symbol of local identity with the foundation of the museum in 1998. Frigolé's publication centered around the results of fieldwork conducted between 2002 and 2004, which included sixteen interviews with living former trementinaires, establishing genealogical lineages back to the late nineteenth century. Frigolé traced the process of how the figure of the trementinaire changed within the economic and social context of the valley, highlighting the trementinaires' value in the local culture and the economic development of the area. However, the inclusion of a gender perspective is still needed as a key to understanding their stories and experiences that can provide researchers with important information about situated knowledge, and can be used to develop new approaches to the history of science based on questions of gender and rurality. For centuries, women were associated with being inspiring muses, objects of desire or figures of motherhood and care in the domestic space. As such images were overwhelmingly projected by male actors, it is still difficult to find women represented in public spaces, acting in positions of authority, demonstrating expertise, or as savants, which contributes to reinforcing the image of a traditionally male history of science.<sup>7</sup> The agency deployed by rural women provides an interesting case study through which to explore the development of science in many ways and to different degrees, constrained as they were in their roles as healers, workers, caregivers, and producers.

As Londa Schiebinger has claimed, "understanding gender and other social aspects of science, requires research, development, and training, as in any other field of intellectual endeavor."<sup>8</sup> While the feminist history of science has added much to our understanding of gender in Western science, little is known about science and gender in rural and peasant contexts, where the natural resources played an important role in self-governance. Ogawa proposes that every culture has its own science and refers to that of a given society as its "indigenous science."<sup>9</sup> In the case of the trementinaires, independent of their lack of formal education or their social class, they maintained a close relationship with local nature, developing their own methods of collecting, preserving, and using plants for healing practices. This knowledge was orally transmitted between the generations in a context of spatial and temporal mobility. As Leong has argued, the majority of early modern recipe collections were created by family collectives whose members worked in collaboration across geographical and temporal boundaries.<sup>10</sup> She has also stressed the complicated nature of authorship and ownership of household recipes, as their ownership was mainly collaborative, focusing on the utilitarian nature of manuscript recipe books. The study of medical recipe books can thus perform multiple functions, but the traditional reliance of historical studies on written documents as a primary source of information makes the location and contextualization of the trementinaires within the narrative of knowledge transfer even more difficult in this case study. As pointed out by Hatfield, the history of domestic plant medicine was built up over many centuries, but it was mainly orally preserved.<sup>11</sup> While the educated elite left such reminders of their lives, knowledge from the margins, such as the female herbal expertise in rural areas, requires us to consider alternative sources of information, such as oral memory and the material culture of their mobile practices. Joan Frigolé utilizes the local expression "dones que anaven pel món" (women who went around the world), to highlight the interconnection between their knowledge and mobility, and the geography of the valley.<sup>12</sup> In my analysis, I place Frigolé's local work in conversation with a wider international research corpus about the history of science, trying to examine new questions about the role of these rural women in knowledge-making. To do this, I review the existing literature on domestic medicine and analyze the contributions of the trementinaires in this context through two primary sources: the information about their local knowledge of nature collected in Frigolé's interviews, and their objects exhibited in the museum of the trementinaires. Most research on the history of gendered and domestic medicine has focused on recipe books. Leigh Whaley's study on domestic medicine examined dozens of

<sup>7</sup> See Keller, *Reflections on Gender*; Keller et al., *Feminism & Science*; Haraway, *Primate Visions*; Harding, *Whose Science?*

<sup>8</sup> Schiebinger, "Feminist History."

<sup>9</sup> Ogawa, "Science Education."

<sup>10</sup> Leong, "Collecting Knowledge."

<sup>11</sup> Hatfield, *Memory, Wisdom and Healing*.

<sup>12</sup> Frigolé, *Dones que anaven*, 12.

manuscript recipe books from the Wellcome Library,<sup>13</sup> and Bruna Gushurst-Moore's thesis on domestic healthcare included more than a hundred recipe books from the late sixteenth to the early nineteenth centuries.<sup>14</sup> For the trementinaires, their oral legacy played a crucial role in the formation of their specific knowledge of nature, as new generations received and kept instructions on collecting from their mothers and grandmothers. I therefore turn to alternative sources for information. As their recipe books have not been preserved, I posit that the artifacts employed and produced by trementinaires hold the most potential for telling their story. Finally, I discuss the role of the witchcraft narrative in the creation of the image of the trementinaires and their legacy, drawing attention to their construction of a social and cultural reality through their production of knowledge.

## Material Culture, Local Knowledge, and Family Roles

From the mid-nineteenth century, progressive industrialization resulted in deep economic and social changes in Spain. The working-class population that remained in the valley was forced to adapt to new conditions of subsistence. In the case of the trementinaires, the valley and the local knowledge of its plants provided them with resources, which in turn allowed them to establish a method of seasonal mobile collecting work. The lack of roads in the region, which explain its delayed entry into the modern market system, was a challenge overcome by the trementinaires' *modus operandi*. Later, the recession caused by the Spanish Civil War paused the expansion of industrialization, leading to a massive exodus of labor from the countryside to the cities. The depopulation of many towns in the interior of Spain, combined with the lack of work and development prospects, forced many people to emigrate from the valley. The region experienced drastic changes throughout the twentieth century, which were accentuated by a persistent economic crisis.<sup>15</sup> Gradually, the trementinaires disappeared. The last known journey was made by Sofia Montaner in 1982.<sup>16</sup>

The trementinaires collected resources during the summer, and walked trading routes during the winter to sell their products and their medical services, leaving their husbands taking care of the children at home. The longest journeys took place during the winter, but the itinerancy was spread throughout the year.<sup>17</sup> This craft was passed on through a matriarchal lineage from one generation to the next and the work followed the natural cycle of the seasons, arranged into four distinct types of labor and know-how. Starting in May, and working throughout the summer, the trementinaires harvested herbs and natural products. In August they prepared and manufactured their goods, namely turpentine. Between November and the winter solstice they left their homes again to sell and apply turpentine bandages. Between January and Easter, they carried their bales of dried herbs and went on their regular trading routes.

Being a trementinaire was an activity particularly confined to the valley of La Vansa and Tuixent, in the mountainous regions of Alt Urgell (Catalonia). These Pyrenean regions are characterized by small rural communities nestled in valleys. The Vansa and Segre rivers surround the area. Until recently, access to the valley territory was only possible via trails, on foot or by horse or donkey. In this area, the trementinaires were for decades the main providers of turpentine, medical herbs, and other traditional cures and recipes. Turpentine oil was their most requested remedy, for which they were especially recognized. The composition was kept secret by each trementinaire because every mixture was created through the addition of other materials, sometimes even ones purchased from a pharmacy. Each trementinaire thus manufactured their own brand of turpentine oil, and these different formulas resulted in various textures, colors, and concentrations. The essence of turpentine was mostly employed to prepare an ointment and the most frequent use was in the form of a compress to apply on an affected area of skin. These turpentine dressings were widely used against a range of different ailments, such as muscle pains, bruises or sprains, and were also said to be effective in curing spider or insect bites, ulcers, and infections. This was a very successful product, as it was relatively cheap and easy to use. The wide range of uses for a turpentine compress made it a household staple and an everyday necessity.

The medical aspects of women in healthcare and how some domestic remedies achieved significant commercial success have received increasing academic attention. One crucial factor in these market relationships was the degree of trust placed in the supplier of a remedy and the personalized medical

<sup>13</sup> Whaley, *Women and the Practice of Medical Care*.

<sup>14</sup> Gushurst-Moore, *A Garden in Her Cups*.

<sup>15</sup> Arqué et al., "La penetració del capitalisme."

<sup>16</sup> Museu de les Trementinaires exhibition.

<sup>17</sup> Frigolé, *Dones que anaven*, 93.

advice.<sup>18</sup> Although there were also cases of trementinaires who sold their products in markets in Barcelona, as we will see, their best clients were in the nearby villages and country houses, based on close links maintained over the seasons. They also tried to establish relationships of reciprocity with people in order to obtain food and accommodation during their journeys.<sup>19</sup> Gaining the trust of their clientele was a basic prerequisite for the continuation of the activity.

Although recent historical scholarship has worked toward making the manifold contributions of women in medicinal knowledge visible,<sup>20</sup> what is missing from previous research is a comprehensive focus outside of paper sources in the form of recipe books. Writing and reading properly in the nineteenth century in Spain was a privilege associated with urban and elite women. Trementinaires usually came from the poorest and most disadvantaged families and their knowledge of herbs was a way to survive in a region that, due to its isolation, resisted industrialization. The vast majority were illiterate and the few recipes that are known today are preserved in the small museum of the trementinaires thanks to the oral transmission of their descendants. Social class and hierarchy played a crucial role in how healthcare and mobility was managed. The poorest families sent a larger number of women outside of the valley to collect resources, while the more powerful families were able to sustain more women closer to home. The long-lasting trips of the trementinaires provided the poorest families in the valley with a welcome complement to the family's household income, where it was critical to pay family debts, loans, or dowries. This complex involvement of women from humble families and rural communities in knowledge production cannot be portrayed accurately in traditional sources of information derived from large archives. Besides the oral records, artifacts and tools offer perhaps the most important sources for exploring their legacy. The trementinaires' activity was not only directly dependent on the soil. It was an embodied practice, which meant using their bodies as tools, and their clothes as protection. The materials and instruments employed were as crucial as their secret recipes. Their bodies formed a compound, as a complex carrier of knowledge, recipes, and actual products. They were often the vehicles enduring rain and snow, as well as rough paths, in addition to the distance from home. Collecting resources and preparing their products were very specialized tasks that involved hard work because of the travel around the foothills, carrying the herbs and cans. But the activity did not end with the collecting. The herbs had to be dried by hanging them upside down before they were cut and placed in bags. As essential components, the cloth bags, called *coixineres* (pillowcases), were made from bed linen, reusing old sheets or pillow covers (see Figure 2). The bags were sewn in various sizes so that, when empty, they could all fit into the larger one. Inside the bag, or the handmade adapted pillowcase, they classified the herbs by separating them into different sacks, including, among others, tea, cumin, oregano, chicory, valerian, mint, lavender, and chamomile.<sup>21</sup> Other natural resources were also collected, such as wild mushrooms. The trementinaires picked and dried mushrooms to sell, and they fashioned a unique transportation method for them. Turning the mushrooms into commodities was the result of a series of operations that added value to this resource: peeling, cutting into pieces, drying, and finally, threading them to wear as necklaces. The result was a new low-weight, low-volume product adapted for long distance travel, with added value.

The *llauna* (can), metal containers used for oils, glues, and resins like turpentine, that were also worn close to the body, will remind historians of botany of the "vasculum," a tin box employed by field collectors to temporarily store samples of moss, flowering plants or leaves, as an interim step before the preservation of specimens with a botanical press.<sup>22</sup> Unlike the botanist's vasculum, the *llauna* and the cloth bags needed to be sturdy and robust in order to store materials during travel for long periods, perhaps months (see Figure 3).

In order to sell them, the trementinaires portioned the products into dividable items, and carried a portable *romana* scale to be able to measure and control the quantities sold. As merchants, they had to be able to count and make quick assessments of stock (see Figure 4).

Female family members and other women collaborated in the collection of the herbs, for example, by walking in pairs to more distant locations in order to obtain plants that could not be found around the valley. Although the collection of herbs was a female endeavor, all the members of the family usually

<sup>18</sup> Leong and Pennell, "Recipe Collections."

<sup>19</sup> Frigolé, *Dones que anaven*, 115.

<sup>20</sup> A number of projects have focused on the medicinal content of recipe collections. In addition to Leong's works, see Pennell, *Women and Medicine*, and the research networks *The Recipes Project: Food, Magic, Art, Science, and Medicine* and *The Notebooks Network*.

<sup>21</sup> Costa, *Viatges amb els pastors*, 120.

<sup>22</sup> On the equipment for the naturalist's field work, see Larsen, "Equipment for the Field."



**Figure 2:** *Coixineres*. Bags made from old bed linen © Museu de les Trementinaires, Tuixent, Lleida, Spain.



**Figure 3:** *Llaunes* (*llauna*, sing.) Containers for transporting the remedies © Museu de les Trementinaires, Tuixent, Lleida, Spain.



**Figure 4:** Portable *romana* © Museu de les Trementinaires, Tuixent, Lleida, Spain.

worked in collaboration to produce and preserve this knowledge. As Leong pointed out, the needs of the family conditioned their participation.<sup>23</sup> The role of the trementinaires involved maintaining the household economy and the care of family relatives. During their long journeys, family organization had to be adapted to the absence of women, forging a restructuring of time and role distribution based on their collecting and selling practices. Husbands had to remain at home while their wives went out. However, although the trementinaire occupation was a female one, some husbands and sons accompanied women in specific cases. After the last trementinaire, Sofia Montaner, married, she was sometimes accompanied by her husband, Miquel Borrell. He was one of the few male trementinaires; he had been initiated by his mother into the job only due to the lack of girls in the family home.<sup>24</sup> In any case, men could also contribute to the work of collecting and to the family economy by supporting women or taking care of the children remaining at home while the women were “around the world.” Although there was a gender role difference in terms of domestic or non-domestic work, the traditional imposed model of differentiated labor was disrupted by the environmental and social situation of the valley, and the versatility of roles and tasks in supporting their households and communities represented a remarkable case in the context of the trementinaires.

The local environment provided a wide variety of herbs with medicinal applications, and their use involved knowledge related, firstly, to the identification and location as well as the timing and form of collection of the plants or some of their parts, and secondly, to the drying, cutting and arranging of packaged herbs. The preparation of the herbal products was conducted in two stages. First, the trementinaires would leave their houses for collecting trips during the summer to harvest and gather the herbs. Other tasks came afterward, such as drying the plants, cutting, crushing, and sorting them so that they could finally be packaged for transportation, or preparing the recipes of specific products, such as turpentine. In August, they extracted the turpentine from pine trees and stored it in metal canisters, a task that needed to be performed as quickly as possible to prevent the resin from losing any of its properties. They carried turpentine and oils in metal receptacles that could hold a few gallons. As Frigolé pointed out, the name by which they were known (trementinaires, as turpentine makers) evokes its place in the healing market and the specialized position they held there.<sup>25</sup> But besides the popular turpentine oil, their remedies were made with other medicinal plants endemic to the area, such as *Ramonda myconi* (Pyrenean violet), used as a cure for hemorrhoids, coughs, and colds, *Jasonia glutinosa* (rock tea), traditionally employed as a digestive aid or for the treatment of different gastrointestinal pathologies, and *Saxifraga longifolia* (Pyrenean saxifrage), utilized as an abortive

<sup>23</sup> Leong, “Collecting Knowledge.”

<sup>24</sup> Frigolé, *Dones que anaven*, 76.

<sup>25</sup> *Ibid.*, 90.

medicine for people and animals. Other formulas included *Hyssopus officinalis* (hyssop), *Amelanchier ovalis* (snowy mespilus), *Carum carvi* (Persian cumin), *Achillea millefolium* (common yarrow), *Potentilla reptans* (creeping cinquefoil), and *Artemisia absinthium* (wormwood).<sup>26</sup> Succeeding generations helped develop a reliable and dependable knowledge of the local medicinal herbs and their properties, as well as where to find them and when to collect them.

## Trading and Subsistence

In order to make a profit from the summer collecting period, trementinaires went on long winter journeys to sell their products, becoming with time a recognizable element of that season. During those trips and with the profits from their activity, they acquired products outside the valley that were not easily accessible in the rural areas, so that, on many occasions, they were the only ones that connected their isolated home environment with the rest of the world. The longest journeys could last weeks or months. They adopted different strategies from regular merchants in terms of accommodation and subsistence, as they were welcomed in private houses, relying on reciprocity. Nevertheless, although the trementinaires were allowed into customers' homes, they would occasionally also spend the night in the henhouse, or with the animals, or simply outside.<sup>27</sup>

They usually traveled in twos, with an older experienced woman who already knew the trade and normally a younger woman who assisted or was the apprentice. This pair was often composed of members of the same family: mothers and daughters, aunts and nieces, or grandmothers and granddaughters. Traveling as a couple had its advantages: the transmission of the trade, which is why the companion was described as an apprentice, self-protection, which involved both the preservation of safety and of reputation, the shared distribution of the carried load, and, according to rank, the division of the numerous tasks. Daughters were not paid, but hired non-relative apprentices were usually remunerated. Older women passed on their knowledge to their young apprentices, even if they were not from the same family.<sup>28</sup> This did not mean that it was an occupation only single women could adopt; in fact, most of the known trementinaires were married and lived in family settings.

Rural communities or towns were regular spots for trading herbs, almost all of them previously arranged and forming part of a regular and fixed clientele each year. Accordingly, most of the trementinaires kept to the same winter route, serving their regular customers. Despite the fact that the territory covered by the paths of the trementinaires was mostly rural, they would occasionally also reach some of the industrial enclaves, such as large urban cities, where they adapted to other forms of sale. One of the main market points was the annual fair of Saint Ponç in Barcelona, a traditional forum for herbalists and a very popular trading fair for medicinal herbs (see Figure 5).

In early November, they usually undertook the first journey to sell their finished products and, perhaps because it was also the beginning of the common cold season, they were also asked to apply their own ointments. In this new round of travels, husbands or grandmothers were left as heads of the households and to take care of children at home, since the trementinaires only returned before Christmas or the winter solstice. A second trading route began in mid-January and lasted until Easter. Depending on the season of the year in which they left home and the route or destination, the trementinaires carried products varying in type or proportion. The herbs were usually packed and carried in a bale, which they gathered in a large bag that hung from the back in the manner of a backpack, while the resins and turpentine oil were packaged in cans and tied to their waists. In addition to selling their natural remedies to personal clients, sometimes they tried other businesses as well. Before Christmas, the dried mushrooms were also sold to lodgings or restaurants in the more urban areas, and the women who took the route to sell to the markets carried herb bales and ointment canisters, as well as the mushroom necklaces.<sup>29</sup> Their routes involved following itineraries that interconnected people, places and resources. The cycle always finished with a return to the valley, from where another restarted. Their knowledge is still a part of the heritage today in the houses in the valley. The value added to their knowledge was based on their difference; they were women from the mountains selling to the countryside; their local knowledge of herbs, as well as how to trade and use them, were vital to their success.

<sup>26</sup> Ibid., 233.

<sup>27</sup> Ibid., 116.

<sup>28</sup> Ibid., 111.

<sup>29</sup> Ibid., 134.





**Figure 5:** Blessing of the aromatic and medicinal herbs on the occasion of the Fira de Sant Ponç, Hospital Street, Barcelona, ca. 1915, photography © Generalitat de Catalunya. National Archive of Catalonia.

## Witchcraft and Knowledge in the Margins

In the foundational text *The Death of Nature*, Carolyn Merchant<sup>30</sup> initiated a feminist review of the history of science, analyzing structural barriers to women's participation in the public spaces of science. Throughout the centuries we have seen how the achievements of women and other underrepresented collectives have been attributed to white male colleagues, fathers or husbands, and remained invisible in the official scientific discourse. This phenomenon was first described by Margaret W. Rossiter, who defined it as the “Matilda effect.”<sup>31</sup> As a response to the well-known text on the Matthew effect in scientific authority mechanisms, the “Matilda effect” honors abolitionist Matilda Joslyn Gage, author of *Woman as an Inventor*, which was published in 1883 as an open protest at the widespread belief that the shortage of female inventors was due to lack of genius. In her work, Rossiter explained the reasons for female invisibility in science by applying the theory of the “Matthew effect,” which refers to a principle of compounding authority, that is, an author with a higher status of authority easily becomes the recipient of greater and increasing recognition. Rossiter, and others such as Watts or Schiebinger, continued to enrich critical theory about the historical invisibility of women in the production of science, focusing on questions about the social and cultural reasons that situated women practitioners outside the borders of scientific discourse.<sup>32</sup>

The history of herbalism and healthcare remains closely tied with that of science. This approach opens up a different historiographical perspective, related to the popular knowledge in rural areas, outside official institutions, which deserves critical revision. In recent decades, a feminist approach to the history of science has flourished in relation to the association between women and nature.<sup>33</sup> The premise is that the ideology that tends toward oppression based on questions of race, class, gender or sexuality, is similar to that which harms nature itself. Its theoretical basis starts from a sense of individual liberation from the dominant structures. Individuality, intimacy, and biography are some of the ways to recover the contributions of women to the history of science and their absences. Following Haraway's approach, the individual experiences of those outside the power structures (not male, white, heterosexual, or human) can enrich science research.<sup>34</sup> Taking the concept of situated knowledge seriously will generate new possibilities of refiguring and reconfiguring what counts as knowledge. In this way, the link between women and nature, the use of natural resources and the knowledge transmitted through oral tradition and its alternative

<sup>30</sup> Merchant, *The Death of Nature*.

<sup>31</sup> Rossiter, “The Matthew Matilda Effect.”

<sup>32</sup> See Watts, *Women in Science*; Schiebinger, *The Mind Has No Sex?*

<sup>33</sup> Gaard, *Ecofeminism*.

<sup>34</sup> Haraway, “Situated Knowledges.”

networks, can be accepted as an epistemological field worth exploring. This is even more pressing for case studies in the rural context, where the skills and abilities of engaging with nature are a matter of subsistence. Using oral testimonies can provide a better approach to the study of utensils and artifacts, combined in an effort to arrive at the most complete understanding of the production of gendered knowledge and rurality, as objects are products not only of the elite, but made by people of all regions and in all conditions.

In rural Spain, in the Pyrenees, by the end of the nineteenth century, the economic conditions and demographics led many women to create a profession based on the knowledge inherited from previous generations. As argued by Perdiguero, it is difficult to define folk healers and their relation to magic, but the most common term for non-professional healers in Spain was *curandero*, a definition which has a spiritual and magical meaning, but some illnesses could also be treated by people with specialized knowledge, like herbalists.<sup>35</sup> We cannot view the trementinaires as *curanderas* in that sense, as we consider them more as healers instructed in botanical empirical procedures than as magical practitioners. In addition, in Catalan, the mother tongue of the trementinaires, we use another word, *metziner* or *metzinera*, to describe a person who knows the secrets of medical science: *metzina* (medicine, from *medicīna*, “*ciència mèdica*”). The Catalan word *metzina* was in fact associated with medical science, but also with poisoning substances that could produce malefic effects or even death. Catalonia, and specifically the region of the Pyrenees, where the trementinaires originated, is a special area for the study of witchcraft, as historical research has highlighted in recent years.<sup>36</sup> This is a territory with particular conditions for exploring situated knowledges (isolated nature, rural communities, local self-management) but also for preserving the traditional ideas and influences of the near past. According to the archives in the Museu de les Trementinaires, the first documented trementinaire journey occurred in the nineteenth century, as the collective memory has no written record of the existence of this occupation before 1875. However, the phenomenon of the trementinaires is linked to the environmental and ecological conditions of the area that includes one of the largest varieties of medicinal plants in the Mediterranean region. The rural territories with widely dispersed populations made it difficult to provide medical services that were accessible to all and so healers and midwives were commonly women from inside the communities, and the knowledge of plants and their uses by women in the area seems to have come from much earlier times. In 1623, Magdalena Barber, a resident of the valley of La Vansa, declared in an inquisitorial process that some women from the area knew how to make *metzines* (drugs or poisons).<sup>37</sup> Based on a local study by Corominas, in the nearby regions that were frequented by the trementinaires, a number of cases of witchcraft based on popular accusations have been documented as related to the trementinaires, in particular in the Solsonés area, which was very often visited by them.<sup>38</sup> According to Frigolé, the lower-class origins of the trementinaires would often lead to them being negatively stereotyped.<sup>39</sup> Their appearance would not have helped either; after traveling for weeks and even sleeping outdoors, their clothes must have been dirty, and their appearance disheveled. The image of these women, walking in solitude around nature, crossing the mountains on foot to collect and sell herbs, encouraged the imagination of those who were waiting for their visits once or twice a year to their houses, and people observed from their homes the wandering of those strange women who “were like witches,” as a neighbor of the area stated in an oral testimony.<sup>40</sup>

Although the phenomenon of the trementinaires is situated in a period and area in which there were few trials for witchcraft, the popular belief in witches still survived among the people from the valley and surroundings, in addition to the processes of stigmatization in many communities, especially those in rural areas. They could be viewed as strange by those outside the valley, where these women were also seen as foreigners, dressed in an old-fashioned manner, coming from rural regions, and making use of healing practices outside those of the medical establishment. However, their social assessment was negative because of their poor origins rather than their practices or their itinerant way of life.<sup>41</sup> According to Hatfield, the “rationalization” of medicine discarded many traditional herbal recipes with real therapeutic value.<sup>42</sup> After the economy of the valley changed at the end of the nineteenth century, the trips were no longer profitable, and the knowledge of herbs and the healthcare the trementinaires had spread fell into

<sup>35</sup> Perdiguero, “Magical Healing.”

<sup>36</sup> Alcobarro and Roma, *Per bruixa i metzinera*; Castell, *Orígens i evolució*.

<sup>37</sup> Corominas, *Esvaïdes en el record*, 174.

<sup>38</sup> *Ibid.*, 172.

<sup>39</sup> Frigolé, *Dones que anaven*, 213.

<sup>40</sup> Corominas, *Esvaïdes en el record*, 177.

<sup>41</sup> Frigolé, *Dones que anaven*, 213.

<sup>42</sup> Hatfield, *Memory, Wisdom and Healing*.

disuse, finally being displaced by a primarily male orthodox medicine. While historically women have been linked to healing and caregiving activities, medical knowledge and access to a medical physician was still a matter of status. Modern medical science struggled to institutionalize by limiting and circumscribing the activities of healers and these processes of medical institutionalization and specialization turned out to be a process of exclusion and subordination for female healers.<sup>43</sup> Despite that, some women continued to practice healing in private spaces and, as we know, healthcare remained a fundamental part of women's household management.<sup>44</sup> But the trementinaires were not individuals caring for other women, men or children, but popular healers and counsellors who established their own clientele, in addition to collecting methods and commercial networks.

Catalonia was, between the fifteenth and seventeenth centuries, an important focus of the witch hunt, and historical reinterpretations and multiple stories have circulated for centuries.<sup>45</sup> Even though the evolution of the phenomenon of witchcraft in the valley does not present a large number of documented facts to link the practice of trementinaires to accusations of witchcraft, their historical recovery effort coincides with the interest in revaluing the valley as a tourist destination in the 1990s, coinciding with the opening of the Museu de les Trementinaires. The museum of the trementinaires offers different activities that include some courses about the history of witchcraft as the witch legends are a part of Catalan Pyrenean culture.<sup>46</sup> While it is true that sometimes the trementinaires would have received the epithet of "witch" by the people of the plain, the same term was also used at that time to stigmatize other women (the marginalized and poor, as well as outsiders to the neighborhood community). Today, the economic system of the valley, oriented towards tourism, promotes a rural world which is principally regarded as a recreational environment, and the trementinaires are a part of the promotion of a romanticized version of these women—brave, wise and heroic—but who were actually part of a history of poverty and need.<sup>47</sup> The matter is complex, as when these figures become the object of legend, entertainment, and folklore, they perpetuate stereotypes that could distort their story and eclipse the importance and functionality of the trementinaires and their utensils, as well as their commercial and mobility practices, in addition to their contributions to the knowledge of herbs and nature.

## Conclusions

In the local Museu de les Trementinaires, their accounts, oral testimonies, recipes and utensils are displayed to preserve the memory of their efforts and accomplishments. The study of these women collectors in the context of a rural and agrarian society expands the understanding of natural history knowledge as a matter of subsistence. The main contribution of the generations of trementinaires was to preserve local knowledge and carry it beyond the limits of the valley, expanding a generational transfer of knowledge into a new spatial and geographical transmission. By applying their expertise in local herbs and natural resources to products that could be sold, their knowledge transfer broke through the boundaries of the domestic sphere, and engaged with the challenges of an economic activity in the public one. Being a trementinaire was much more than following a trade craft. It involved participating in the transmission of knowledge about natural remedies and drugs. The itinerant essence of this occupation meant freedom of movement, and the development and maintenance of specific skills, such as where and how to collect herbs, but also where and how to cross the Pyrenean topography. The knowledge and application of local remedies originated from a popular and oral tradition linked to the improved use of available raw materials. Above everything else, the trementinaires established a deep connection between local people and nature.

Knowledge of the properties of plants and their therapeutic applications was not exclusive to the trementinaires, but it was not available to everyone. Only a few people in the valley were familiar with it, most of whom were women. This was a form of lay expert knowledge, transmitted over the generations. The recipes, collection methods, and notes that composed this knowledge did not contribute to extending the boundaries of scientific knowledge, but it was also not limited by it. Scientific knowledge includes other learned expert practices, such as the ability to make good observations, as well as to measure, classify, communicate, and predict. The story of the trementinaires brings to the fore a different version of what

<sup>43</sup> Cabré and Ortiz, *Sanadoras, matronas y médicas*.

<sup>44</sup> Leong, *Recipes and Everyday Knowledge*; Pennell, *Women and Medicine*.

<sup>45</sup> Alcoberro and Roma, *Per bruixa i metzinera*; Castell, *Orígens i evolució*.

<sup>46</sup> At the end of May, they also run the local Trementinaires Fair. This is a moment when "witches" become the object of legend, entertainment, and folklore, as a part of the imaginary. See <http://www.trementinaires.org/> (accessed 30 Jul 2022).

<sup>47</sup> Mármol, "Cultivating Disconnection."

knowledge can be, and what counts as learning and reproducing. The skills of the trementinaires were sophisticated in terms of methods of collection, conservation, communication, management, networking and self-government. If we view practices of field collecting as embedded in a multitude of sociopolitical contexts, there is an urgent need to reshape the history of botany for it to become more inclusive of alternative epistemologies.

Looking at situated natures has generated important developments in the field of the history of knowledge that parallel the development of feminist critiques of science, that began to point to women's perspectives in scientific and academic work. But today the demand is not only for the recognition of women in the academic discourse but also the inclusion of other perspectives and lives outside the urban and the elite, in order to highlight the complex involvement of women in knowledge production. The trementinaires were not only the custodians of healing expertise through the herbs they collected from the mountains, but also a source of economic power for their families. Their influence is still alive in the memory of the Pyrenean population. However, they also suffered the discrimination and the invisibility of alterity caused by their nomadic way of life and their socio-economic conditions. This story of the connection between women and natural resources is more than a discussion about how scientific knowledge is not separate from the social and cultural contexts in which it is produced. It is also the story of necessity, management and the use of available ingredients together with female agency and subsistence.

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