The Value of Relationality

Esparto's Stories of Craft, Kin and Knowledge

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Vienna, 26 May 2025

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Abstract

An exploration into the value of relationality through the lens of Esparto grass, a tenacious, hardy perennial plant who predominantly grows over the southern iberian peninsula and the North of Africa. Understanding the interconnectedness between non-human and human beings, particularly through Traditional Knowledge Systems (TKS) surrounding Esparto collection and crafting, is crucial for achieving the sustainability that centres relationality and consideration of future generations of all kin in its practices. This study is a qualitative, ethnography involving observations and interviews with artisans to highlight the historical and socio-ecological relationships associated with Esparto, contrasting these with dominant Western Knowledge Systems (WKS) and the impacts of industrialisation. This thesis is a proposal for the integration of relational perspectives and TKS to foster a more ethical and sustainable relationship with the environment and each other predominantly through the medium of storytelling.

Key Words: Traditional Knowledge Systems, Relationality, Kin, Posthumanism, Alternative Economies, Sustainability

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List of Abbreviations

TKS - Traditional Knowledge Systems

WKS - Western Knowledge Systems

1. Introduction



Figure 1: Matas of Esparto / Stipa Tenacissima (Almeria). Photographer: Author

Wandering through the South Iberian drylands in the transitory space between spring and summer, I found myself barefoot and curious. Many a month was spent moving through Espartales¹ to forage medicinal herbs and flowers that often grew where the Esparto grew. Esparto being a tenacious hermaphrodite and hardy perennial plant that is predominantly found in the South Iberian Peninsula and the North of Africa².

¹ Regions where the Esparto is plentiful and growing wild in abundance.

² Maestre, Cortina, and Ramirez 2007, 114.

Esparto has been worked for centuries as the main source material for local living, known for the creation of baskets, ropes, hats and many more useful things³. I often stepped on Esparto matas⁴ to steady my step as I climbed the dusty gypsum mountains, where Esparto does a brilliant job of keeping all the soft and sandy earth together, strongly rooted to the mountain's side. My feet would instinctively reach for them to avoid stepping on their spiky kin, like the wild asparagus or the gypsum crystals, or when the earth of the mountain side was hotter than molten silver so as to keep my feet from burning. Esparto would reach out to me on cliff edges and from the far side of gaps in the rocks, offering me their strong and stable hand to aid my passage. Then when I would reach the summit of these dusty gypsum mountains, the oldest of the bunch, thick and short with age, would offer themselves as a safe sitting place to rest my legs. It is no wonder that they are referred to as the grandfather of the drylands, a story that I would become familiar with later on in the journey of reciprocity that Esparto and I embarked on together. Time and time again have I heard that they are as ancient as the mountains themselves, and a being of such ancient origins has many-a-story to tell.

In this piece I will introduce you to Esparto, scientifically known as Stipa Tenacissima. From what I have discerned, there is plenty of literature from the field of Environmental Sciences, History and Archaeology on Stipa Tenacissima but there is a lack of literature from the field of Social Sciences. This study will explore Esparto by looking at the relationships between Esparto and their feathered, many-legged, leafy, fungal and two-legged kin; guided by relational, feminist and decolonial epistemologies. This study will enrich the pre-existent scholarship on Esparto because of the relational framework that weaves the connection between science, craft and sustainability, honourably guided by Traditional Knowledge Systems (TKS). These traditional knowledge systems are reciprocal in nature; they will teach us about Esparto through storytelling

³ Fajardo et al. 2015.

⁴ Mounds/tussocks

and generational wisdom and allow Esparto to teach us in return if we choose to listen. Historically, TKS have been systematically repressed in WKS and academia under claims that they lack the necessary proof, rationality and data that is generally related to knowledge production⁵. However, it's value is inherent, and this is a known fact amongst everyday people who *know* through their experiences and the experiences of others, from now and from generations past, because trust flows within and around this form of knowledge production. Meanwhile, the importance of relationality lies in its potential to catalyse change in our growingly destructive world. Without relationality sustainability is a fallible concept, but to be reminded of the relational web that ties all of life together is to remember what it means to live sustainably.

The old ways are rapidly aging, traditional weaving practices are not commonplace anymore, but tales of ages past, ages being lived can revive the sustainable, relational frameworks that once rooted humankind to their kin.

Research Question

The research question that guides this thesis asks: How do the Traditional Knowledge Systems of Esparto collecting and crafting demonstrate relationality, sustainability and connectivity between the human--human, the human--nonhuman and the non-human--non-human? The research also speaks to how we can relate relational frameworks to WKS and academia and how relational sustainability can be practiced.

⁵ Santos 2014; Held 2023.

1.2 Important Definitions

Relationality

Relationality meaning being *in* relationship *with*. This encompasses nonhuman-nonhuman relationships, nonhuman-human relationships and human-human relationships⁶. "Relationality is not about comparison; it is about unity and kinship." - Tynan (2021), page 600.

Kinship / Kin

The word which is used in this thesis to describe the bond of relationality between: nonhuman-nonhuman, nonhuman-human, human-human⁷.

Think of *next of kin*, a well-known term used to describe your "successor", this is an example of human-human relationality, of kinship. In this body of work the flora and the fauna are ascribed this same bond, both with each other and with human beings.

Knowledge Systems (TKS/WKS)

Traditional Knowledge Systems (TKS) are holistic bodies of knowledge developed by peoples through generations of ecological, environmental and cultural interactions with place. These knowledge systems are not often brought into conversation when in a European context, because the concept of Indigeneity that we are familiar with is quite detached from the colonial context of Europe. However, the generational wisdoms and place-based knowledge that was shared with me in my fieldwork, reflected Indigeneity through the sincere kinship I observed between people and place that goes back longer than they can remember. Nevertheless, they are not Indigenous, they are instead Traditional. So we will be working with the framework of Traditional Knowledge Systems as the accurate definition of the inter-relationality between people and place and the knowledge that has emerged from this. Making sure to not take space from scholars working

⁶ Haraway 2016, 13, 40; Barad 2007, 93; Tynan 2021, 600.

⁷ Haraway 2016; Kimmerer 2013; Kimmerer 2024; Tynan 2021; Graham 2014.

from the marginalised space of Indigenous research and knowledge systems, whose voices I choose to uplift in this thesis as valuable contributors to the body of research related to decolonising hierarchical approaches to knowledge systems⁸.

Sustainability

The definition of sustainability used in this thesis is: practices that demonstrate equitable uses of human and non-human resources that ensure the longevity, prosperity and health of those resources for the next generations to come. The reason we will be working with this definition rather than the dictionary definition⁹, is because this definition lacks an ethic of care and relational responsibility to living beings, both human and non-human¹⁰. It is important that these distinctions be made clear because without the relational factor, the term sustainability can be used to defend unsustainable models such as infinite growth and greenwashing. However, when spoken through relational dialogue, sustainability speaks to the living.

Plant Blindness

Plant blindness is "broadly" defined as "the inability to see or notice the plants in one's own environment, leading to the inability to recognise the importance of plants in the biosphere and in human affairs." Plant blindness also comprises an "inability to appreciate the aesthetic and unique biological features" of plants and "the misguided, anthropocentric ranking of plants as inferior to animals, leading to the erroneous conclusion that they are unworthy of human consideration." - Wandersee and Schussler's 1998 definition of Plant Blindness as quoted in William Allen's 2003 piece on plant blindness¹¹.

⁸ Kovach 2009, 7, 13, 14.

⁹ "...involving the use of natural products and energy in a way that does not harm the environment.../...that can continue or be continued for a long time" ("Sustainable; Definition", n.d.).

¹⁰ Vásquez-Fernández and Ahenakew pii tai poo taa 2020, 65; Moriggi et al. 2020, 281, 282.

¹¹ Allen 2003, 926.

1.3 Theoretical Framework, Literature Review

The theoretical framework that runs like rivers through this thesis is one of relationality. Relationality is the great fallen tree trunk from which myriad flora and fungi grow and thrive. The flora and fungi are metaphors here for the reasoning and realisation of my arguments, aided by scholarly literature (WKS) and storytelling (TKS). Through existence we are living relationality, from the microcosms to the macrocosms we live relationally, and it is important to this body of work that relationality be understood as an unmistakable reality of living. A simple example of such lives is the act of breathing: we breathe in the oxygen that is gifted to us by the trees and breathe out the carbon dioxide which is a gift to them in return. It's through the relational framework that I develop the notion that relationality can be a catalyst for change in this age of great ecological troubles. Esparto acts as the case study, and by seeing Esparto's relationships (kinship) with the world in which it inhabits as Relationships, this can positively influence how sustainability is defined and practiced, how we talk about the relationality between plants-plants, plants-people, people-people in academia and how we commune with nature via traditional crafting practices.

A growing body of literature highlights the significance of relationality, a concept central to Indigenous and decolonial methodologies, that explores understanding research as a living practice bound with responsibilities with kin and, in Tynan's case, Country¹²¹³. Relationality is understood academically via relational ontology, which is described as understanding our part on this planet as inherently interconnected to others, relationality as a reality that sees relationships

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¹² Country is defined by Tynan as agentic Aboriginal land that encompasses all entities and processes, serving as the non-human-centric web of relationships, Lore/Law, and knowledge, demanding relational practices of care (Tynan 2021, 587, 598, 602, 603).

¹³ Kimmerer 2024, 41, 43; Kimmerer 2013, 393; Kovach 2009, 9, 117; Tynan 2021, 597, 598, 600.

as the point of origin¹⁴. This resonates with posthumanist perspectives that challenge anthropocentrism by acknowledging the interconnectedness and agency of non-human beings¹⁵.

Moreover, research from craft journals explore embodied knowledge¹⁶, adaptation linked to tradition¹⁷, place-making¹⁸, and connections to sustainability¹⁹; noting the inherent link between craft and traditional knowledge systems²⁰.

Concurrently, scientific journals detail plant relations and ecological interactions of Esparto in their dryland habitats and gypsiferous ecosystems, discussing methods of conservation and the ecological relationships between cohabiting kin, but not using this language to describe it has such²¹.

Tuhiwai Smith talks about how imperial science once defined "what counts as human" to subjugate others ²², and the same is being done to our non-human kin if we do not incorporate the language of kinship and the framework of relationality. Kovach reminds us here that researchers "answer to all [their] relations" ²³ which has taught me that it is our responsibility to be accountable for the way we research and write, particularly when working with TKS. Although greatly knowledgeable, the perspectives from craft and science journals often remain siloed; a key research gap is the absence of studies that explicitly apply a comprehensive relational framework, integrating insights from Indigenous methodologies, posthumanism, and ecological science,

¹⁴ Datta 2013, 103; Tynan 2021, 600.

¹⁵ Braidotti 2013, 60; Haraway 2016, 49, 103; Kimmerer 2013, 337.

¹⁶ Martinez Pinheiro 2019, 1-11.

¹⁷ Jones, Van Assche, and Parkins 2021, 918; Martinez Pinheiro 2019, 1-11.

¹⁸ Jones, Van Assche, and Parkins 2021, 909.

¹⁹ Masoga and Shokane 2019, 8.

²⁰ Iones, Van Assche, and Parkins 2021, 914, 915; Masoga and Shokane 2019, 8.

²¹ Navarro et al. 2007, 63; Maestre, Cortina, and Ramirez 2007, 119, 122, 123; Azcón-Aguilar et al. 2003, Rillig et al. 2003, Roldán-Fajardo 1994, Cited in, Maestre, Cortina, and Ramirez 2007, 123; García-Fayos and Gasque 2006, 279.

²² Tuhiwai Smith 1999, 25.

²³ Kovach 2009, 177.

directly to traditional collecting and craft practices, particularly those involving Esparto grass.

While craft literature values traditional knowledge and scientific literature details ecological relations, neither utilises a relational lens to explore the embedded socio-ecological relationships and their ethical implications for specific traditional knowledges and practices linked to Esparto.

1.4 Methodology

This chapter outlines the methodological approach woven throughout this thesis. Drawing on qualitative, ethnographic research and a case study design, these methods were chosen to reflect respectful relationality in research within the context of western system of academia. The research process was not linear, but layered and looping, formed through long-standing relationships of trust and kinship with both people and place. I approached my fieldwork not as an outsider extracting data, but as a listener and learner within a living ecology of memory, grass and story of which I am generationally familiar with. The data was gathered through preestablished trust-based relationships and analysed in ways that honour the knower and the knowledge, co-constituted between researcher, participant and place. These methods reflect a commitment to reciprocity, to honouring decolonial methodologies, and to imagining research as a practice of care.

Research Design

The research design is qualitative and ethnographic, grounded in a case study of Esparto's relationality with people and place. Ethnography allowed me to dwell in the nooks and crannies and hustle and bustle, of kinship, cohabitation and community. Ethnography in this study can be defined as an in-person research method where the knowledge shared in this thesis are coproduced knowledges from interactions, conversations and storytelling. Each chapter contains a few ethnographic vignettes; these are stories of real moments that occurred during the fieldwork that place the reader in the environment of the knowledge with the knowledge tellers. The fieldwork itself consisted of 2 weeks between the provinces of Málaga and Almería, revisiting people and places where I lived in 2024. Ethnography here created space for in-depth understandings of local knowledge systems via active relational engagement, immersion and observation.

The case study method enabled me to intertwine feminist and posthuman epistemologies by spending time with the grass, getting to know its layers of autonomy and agency within its nature-based and human ecosystems, throughout the thesis the plants are referred to with the language of animacy to further emphasise the relationality between us all.

Interlocutors

For two weeks during the month of April 2025 I hitchhiked between Málaga and Almería to revisit some friends and acquaintances who I met last year during the start of my Esparto journey. Over the course of these 2 weeks, I conducted two formal, sit-down interviews recorded on my phone, one with Lur and one with Manolo and Paco²⁴. Each interview lasted approximately one hour where we were able to focus directly on my research questions and other information relevant to their positionality in relation to Esparto and thus to the thesis.

First, I met with Lur in the province of Málaga; Lur is an experimental archaeologist and researcher, Esparto collector, braider and seamster and teacher of Esparto crafts at a local artisan school. They first encountered Esparto as a child in the sweltering summers spent in Almería, where her grandfather is from. Lur reconnected with Esparto during their bachelor's degree in archaeology and from then on out, they have been honouring Esparto, learning from them, working with them and passing on their wisdoms to the next generations.

A few weeks later I travelled onwards to Almería to meet with Manolo and Paco, two Roma men who were in agreement when Manolo said, "I like nature, I was raised by nature, and this is pure nature,". Both Manolo and Paco were raised in rural dictatorial Spain, and began working with Esparto from around 10-12 years of age. They learnt to work it not by being taught but by

²⁴ The names Lur, Manolo and Paco are pseudonyms to grant anonymity to the interlocutors.

watching their fathers and uncles work with Esparto, who observed their fathers and uncles, and so on and so forth. Their wisdoms were generational gifts that go back for as long as they can imagine. It was from Paco that I learnt the best way to find, distinguish and collect Esparto, and from Manolo I was taught to braid, weave and sew Esparto.

Reflections On Positionality

Back in April 2024 I was interning in ecosystem restoration at an eco-project in Almería. My internship supervisor recommended that in my spare time I could explore the neighbouring villages to learn and observe the traditional crafts and practices of local people. This became the seed that led to my meeting Manolo and Paco, which later bloomed into the vibrant flower of belonging when I was trained in the art of basket weaving with Esparto.

In my first month I struggled to find anyone who still practiced traditional crafts, as many locals said that knowledge had disappeared with the older generations. One afternoon at a village café, a conversation about the drought led to a tip about a Roma family nearby, and the next day I went to the neighbourhood and met Manolo, seated in an alley, weaving a long Esparto Pleita with practiced ease. He invited me to sit with him, after ascertaining that I wasn't a social worker, and allowed me to watch and ask questions for maybe half an hour before saying "ya está bien! Ahora tú," (that's enough! Now you). With haste he placed the manojo²⁵ of Esparto beneath my arm and over the course of the next 8 hours taught me, between heart laughs and scolding, how to weave.

All along there had been a family who understood the traditional crafting ways of the land and yet I had travelled to this village almost every week and their existence had never been

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²⁵ Bundle.

mentioned. I realised later that there had been prejudice at play. Many villagers who later saw me wandering with my Pleita would seem enthusiastic until they found out who had been teaching me, from that moment the responses I would often receive were disgruntled ones. What was important to me was the friendship that I was cultivating with Manolo and his friends and family, who welcomed me with open arms and much kindness.

Manolo later introduced me to Paco when it was collecting season, and we would often go in groups of 3 or 4 to the wild, open countryside to forage Esparto for weaving.

Our relationship is one of friends, rather than a researcher/researched dichotomy, and the experiences we share together in 2024 have influenced how I have decided to conduct this research in 2025, taking care to not approach the research extractively but to approach the research relationally.

Lur and I were introduced to one another by my stepmother at an artisan market in winter, and bonded over our shared tenderness and passion for Esparto. She offered me a chance to be their apprentice, and so we maintained contact to prepare for that eventuality after I finished my studies. It was in this middle time that I began to organise my thesis, and while talking with Lur one afternoon I asked if she would be willing to be interviewed for it, to which she agreed. Since then, we have discovered how incredibly similar minded we are, guided by gratitude. A beautiful relationship of sharing and connection is in store for us as the years continue to flow and move toward our interwoven future.

Our relationship is a complex woven web of friendship/co-researchers/craft comrades. Their word is taken as truth in the elaboration of this thesis; our encounters and friendship have not influenced the data collection but rather they have enhanced it.

Data Co-Production

The data/knowledge was accumulated through two primary methods: field observation and semistructured interviews.

<u>Observations</u> were carried out over multiple interactions in community spaces during weaving hours, community events and informal gatherings where I was invited into the community, previously as a member and now as a researcher. These sessions allowed for the sharing of embodied practices, environmental interaction, and intergenerational knowledge transmission.

<u>Semi-structured interviews</u> were conducted with individuals who have been working with Esparto and maintain a direct relationship with the central case study figure. Participants were selected based on standing relationships of trust that allowed for a more embodied relational research practice, and their relevance to the research focus.

Interviews were audio recorded on my mobile phone, receiving oral consent²⁶, a decision made to accommodate two participants with limited reading and writing literacy. The oral nature of consent reflects both ethical mindfulness and an effort to reduce extractive formality in favour of accessible, respectful dialogue. The consent subsection of all interviews included a clear explanation of the purpose of the study, the voluntary nature of participation, anonymity, and participants' rights to withdraw at any time.

A tertiary method utilised to accumulate data/knowledge was spending time with Esparto, observing them and their kin in their natural habitat.

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²⁶ Oral consent was also recorded during the interviews.

Data Analysis

Interview recordings were first transcribed by hand and then digitised to properly embody the conversations. The digitised interviews were then coded using a thematic analysis approach where a colour coding system was utilised to visibly distinguish between themes. This visual method allowed the themes to emerge organically, guided by the conceptual frameworks outlined in the very questions posed during the interviews that align with the contents of my literature review.

Ethical Considerations

The ethical considerations in this research were guided by institutional standards of informed consent and by principles of relational accountability. All participants gave informed, oral consent to be interviewed, to have their voices recorded, and to have non-private elements of their stories shared in this thesis, done so out of respect for the participants' comfort and literacy limitations. It is being treated as an ongoing conversation rather than a one-time agreement, so they have the power to relinquish their consent at any given time, centring their control over their narratives.

This research was designed not to extract value from the community, but to amplify, respect, and where possible, give back to those who carry and sustain this tradition. Here I wish to acknowledge the long history of extractive research in rural and Indigenous communities, and I actively seek to depart from colonial models of research by centring ethical and grounded relational approaches. In this case, relationships of trust with Manolo and Paco developed over the course of more than a year of contact and care and in alignment with their preferences, privacy, and to reduce any potential harm or future exploitative research, confidentiality via pseudonyms and protection of location were ensured and are in place.

In keeping with a relational, reciprocal and decolonial research ethic, the knowledge shared by all participants was treated not as data to be extracted but as a gift, deserving of respectful engagement and reciprocal return. Their gifts of time and knowledge were honoured in return with gifts of sharing food, homemade jams, balms and tinctures; translating for multilingual Esparto weaving workshops; aiding the Esparto weaving workshops as a trained weaver myself and informal time spent with family and friends.

Limitations

The limitations of this study are acknowledged to contextualise the findings and to highlight the value of triangulating oral histories with material observations and situated knowledge. Much like with any study rooted in oral history, memory and imaginations of a future, this research carries limitations. The generation most directly impacted by the shift from Esparto to plastic are no longer living; thus, the richest first-hand accounts are absent. Moreover, some participants, though deeply embedded in the Esparto culture, landscape and economy, were children during the most significant periods of change and so their perspectives are shared from a place of fragmented memory. Memory reliability and retrospective accounts present inherent risks of inaccuracy or idealisation, these inaccuracies are inevitable in oral transmissions of knowledge, but it is important to highlight nonetheless. The third participant of my interviews brought valuable academic insights to the table as well as practical knowledge. Additionally, linguistic and cultural translations – between accents, vocabulary, knowledge systems, Esparto's language and my own – presented challenges.

Another important limitation was that of time. Time is a concept that flows differently in different spaces, and the way I mention it here is the rigid calendar-clock time that many of us have grown accustomed to out of convenience. My fieldwork was restricted to two weeks, calendar-time, which is a relatively short amount of time to co-accumulate knowledge for a well-

rounded body of work. This means that I am extrapolating a lot of information from a small amount of data, which is a limitation to my research. If I was gifted more time for my fieldwork I would meet with more artisans, locals, scientists and other people in order to co-create a more diverse body of research with layered perspectives from which to base my research.

2. Esparto's Strands of Relationality

Historical Relationality: Tracing Esparto Relations of The Past

Esparto has a long and rich history, there are remnants of Esparto crafts from archaeological excavation sites dating back to the neolithic age²⁷, the Romans collected Esparto for tools and crafts nearly to overexploitation during their Empire²⁸ and in the 19th and 20th centuries Esparto made its name in England as a typical paper fibre²⁹. So, what happened to this household name and why is it that so few people know of them anymore? The simple answer is because of the invention of synthetic fibres, e.g. plastic. During my interviews with Lur, Manolo and Paco they all echoed the same tale that I will share with you here, a tale of war and memory that will provide ample context on the changing relationship between people and Esparto in Spain over the last century.

Spain suffered a gruelling civil war³⁰ which catapulted the population into an age of poverty, repression and fear, so people did what they had to do to get by. In regions where Esparto was prolific, growing wild on the mountains, this fibre became a physical incarnation of salvation. Manolo recounted that there was once a time when the countryside was always busy, filled with people collecting Esparto. People who had come from far and wide, some even staying after the season because love's call had taken root³¹³².

In rural regions people traded their wares, working hard and eating well, as Paco recounted to me³³. Paco said that he would go from cortijo to cortijo (farmhouse to farmhouse) with Esparto

²⁷ Fajardo et al. 370.

²⁸ Hernández 1997; Díaz-Ordoñez, 2006 as Cited in Maestre, Cortina, and Ramirez 2007, 115.

²⁹ Rejos 2000, as Cited in Maestre, Cortina, and Ramirez 2007, 115.

³⁰ Dates of the Spanish Civil War: July 1936 – April 1939.

³¹ Interviews with Manolo and Paco, conducted on 16th April 2025, Almería.

³² Interviews with Lur, conducted on 11th April 2025, Málaga.

³³ Interview with Paco, conducted on 16th April 2025, Almería.

crafts and trade them for olive oil, cured meats, honey, grain... Meanwhile Manolo and his father would be commissioned to make useful items for farmers and working folk, like panniers for working Donkeys to wear, or large flat baskets for collecting and drying almonds³⁴... Lur told me³⁵ how in the cities the Esparto was passed from hand to hand, sold raw to one, processed to another, plaited to another and so on, and so forth. A large web of grass-to-hand-to-grass-to-hand relationality.

Then came the mid 20th century and synthetic fibres were brought into Spain in the form of plastic. With new industry, new machinery and new labour openings. Esparto was once everywhere; but when plastic came in, Esparto went out³⁶³⁷³⁸.

The year is 1975 and democracy is being sworn in bringing with it the feeling of a new era of hope and prosperity. The Esparto trade is dying, society is changing, and all the while a new generation is being born: Generation X. This generation came to be the first generation in a tradition of thousands of years who did not work Esparto anymore³⁹⁴⁰. They had university educations and began to find other ways to provide, because Esparto had lost the value it once had in the family economy; one borne of necessity and a reciprocal relationship with nature, that had become ancient and unworthy in the span of a single generation.

Socio-Ecological Relationality: Learning About the Local Landscape

Across the fertile coastal plain of Almería, a few kilometres from where I conducted part of my fieldwork, an era of biodiverse agro-pastoral mosaics has been almost wholly supplanted by

³⁷ Interview with Manolo and Paco, conducted on 16th April 2025, Almería.

³⁴ Interview with Manolo, conducted on 16th April 2025, Almería.

³⁵ Interview with Lur, conducted on 11th April 2025, Málaga.

³⁶ Fajardo et al. 2015, 371.

³⁸ Interview with Lur, conducted on 11th April 2025, Málaga.

³⁹ Interview with Lur, conducted on 11th April 2025, Málaga.

⁴⁰ Interview with Manolo and Paco, conducted on 16th April 2025, Almería.

plastic-covered greenhouse monocultures⁴¹. The landscape is now described as a "mar de plastico"⁴²⁴³, a sea of polythene tunnels that literally surrounds and isolates fragile protected wild land, rendering their connectivity to other habitats nearly impossible⁴⁴.

Over the same period, traditional human-plant relationships have unravelled. Today most Esparto wares are seen as decorative crafts rather than everyday tools⁴⁵; there are few elder artisans in rural regions, like Paco and Manolo, who still collect and weave Esparto in their everyday life, but its former role in the everyday is now non-existent⁴⁶. In short, the intricate cultural reciprocity between people and the land has been shattered. Where generations once tended Esparto grasslands and shared collective ecological knowledge, the new model has severed those kinship ties.

These environmental changes have been accompanied by stark socio-political shifts. As Díaz-Diego et al. (2023) documented, Andalucía's incomplete agrarian reform⁴⁷ was ultimately abandoned, resulting in the stubborn position that the agricultural sector has taken, where alternative, sustainable agricultural models are no longer being taken into account⁴⁸. In practice, this meant that most land fell permanently under large private operators, foreclosing communal or smallholder stewardship and effectively enshrining an exclusionary land regime. It is similarly emphasised in this journal article about ecological sustainability with Almería's intensive horticulture as the case study, that this form of cultivation exploits both land and people,

⁴¹ Navas González, Hewitt, and Martínez-Vega 2024, 10.

⁴² Translated from Spanish: "plastic sea".

⁴³ Serrano 2022, Cited in Navas González, Hewitt, and Martínez-Vega, 2024, 15.

⁴⁴ Navas González, Hewitt, and Martínez-Vega 2024, 15.

⁴⁵ Interview with Lur, conducted on 11th April 2025, Málaga.

⁴⁶ Fajardo et al. 2015, 371.

⁴⁷ This took place from 1984-2011.

⁴⁸ Díaz-Diego, Jurado-Almonte, and Márquez-Domínguez 2023, 1.

examples of such include: groundwater depletion and salinization; plastic and agrochemical waste overloads; and severe labour inequalities⁴⁹.

These studies demonstrate that the region's reciprocal relationships between human and nonhuman are continually being eroded. Soils no longer gift to local hands without heavy external inputs, habitats no longer give way to wildlife moving freely, and plants like Esparto have lost their place in popular culture. The result is a dystopian inversion of ecological relationality. An agro-industrial landscape that calls for renewed attention to care, reciprocity and justice to free the wild from the iron clutch of greed.

⁴⁹ Castro et al. 2024, 5.

2.1 Relational Ecology

Esparto as a Keystone of Arid Ecology

Esparto does not grow alone, there are many leafy, petaled and fungal kin that share space with Esparto and whose relationships benefit each other in myriad marvellous ways. Today (16/04/25) I went in and amongst the oldest of the Esparto mata's in this large space of new growth; the foragers visit this area annually so there's quite an array of abundance and found much vibrant life growing beneath and around Esparto like Wild Asparagus (Asparagus Horridus), Matamarilla (Helianthemum Alypoides) and Campanillas (Santolina Viscosa)⁵⁰.



From left to right: Figure 2-4

Figure 2: Asparagus Horridus (Almería). Photographer: Author

Figure 3: Helianthemum Alypoides (Almería). Photographer: Author

Figure 4: Santolina Viscosa (Almería). Photographer: Author

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 $^{^{50}}$ Notes from fieldwork.

Whenever I've wandered the Espartales of the Yesares lands, I tend come across Bufalaga (Thymelaea Hirsuta) and Jarilla (Helianthemum Almeriense)⁵¹.

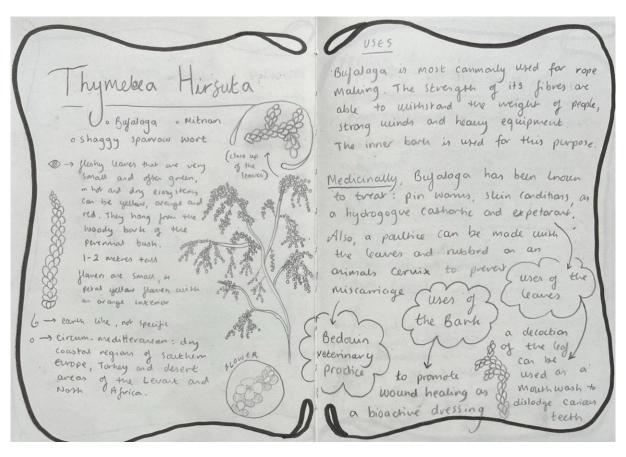


Figure 5: Thymelaea Hirsuta notes from Wilderness Journal (Almería). Author & Photographer: Author



Figure 6: Helianthemum Almeriense (Almería). Photographer: Author

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 $^{^{51}}$ Notes from fieldwork.

In rarer cases you may find Haplophyllum Bastetanum, who is locally known as La Rudilla Verde de Baza, beneath the shelter of an Esparto tussock. This plant is a critically endangered (CR) endemic species local to the semi-arid steppes of the Guadix-Baza basin⁵² just a few kilometres from where I did my fieldwork. What's so special about La Rudilla Verde's relationship with Esparto, as Navarro et al. discovered in their study, is that Esparto is a nurse plant who could salvage CR species from extinction, aiding conservationists with their struggle to keep biodiversity alive in the Semi-Arid steppes of Southern Spain⁵³.

As a nurse plant, Esparto sheltered La Rudilla Verde and gave them the adequate conditions to procreate, flower, fruit⁵⁴ and thrive, which they were not doing in the vast open landscapes without the kinship of Esparto. Much like the relationship Esparto has with La Rudilla Verde, it also has with a number of the leafy kin I talked about coming across in the Espartales of the Yesares, many of these species like to dwell beneath the vast expanses of the mata's shade, sharing nutrients, water and aiding the compositions of the soils⁵⁵.

Esparto's fungal kin can also attest to their budding relationship, as it has been proven scientifically that the Esparto's rhizosphere hosts homes to mycorrhizal fungi like Glomus Aggregatum and G. Mosseae, who together enhance nutrient uptake and carbon storage in the soils⁵⁶. Additionally, the shade provided by Esparto mata's are known amongst scientists as "resource islands" because of their fabulous ability to reduce radiation and lower temperatures

⁵² Navarro et al. 2007, 63.

⁵³ Navarro et al. 2007, 63.

⁵⁴ Navarro et al. 2007, 63.

⁵⁵ Maestre, Cortina, and Ramirez 2007, 119, 122, 123.

⁵⁶ Azcón-Aguilar et al. 2003, Rillig et al. 2003, Roldán-Fajardo 1994, Cited in, Maestre, Cortina, and Ramirez 2007, 123.

beneath their vast expanse which undoubtedly improve the conditions of life for those little patches of land and the leafy, petaled and fungal kin that shares life there with Esparto⁵⁷. What has been studied and demonstrated here is proof of the value of relational ecology. The relational lens is not vocalised due to the reductionist nature of the scientific discipline, but the relationship between Esparto and their kin is depicted and confirmed. What would further enhance these studies about plant relations would be to create space for TKS, because providing room for this alternative knowledge system within these discussions would open the doors to other solutions of conservation, protection and care emerging from local knowledge, uses and stories of the kin in question. Such doors remain closed and inaccessible to the many and the local if WKS, in isolation, is given the responsibility of protection. Thus, it erases the ethic of care from the conversation.

Tales of Kinship

Esparto also has numerous bodied kin whose relationships in their ecosystem have helped each other thrive. The tale of how Esparto and the Granivorous Messor Ants came to have a relationship is one rooted in interdependence, reciprocity and gratitude. I wrote it to illustrate the relationship through the medium of storytelling.

The story begins with a hungry ant colony by the name of Messor who emerged one day from the barren soils of winter to wander the fruitful lands of spring in search of nutrients. After days of roaming the unforgiving drylands for hints of spring they come to a great golden tussock laden with shining golden flowers guarded by long spiky henchmen, the ants gathered in awe under the shade of the great golden tussock and their faces soon turned forlorn at the impossibility of reaching the shining golden flowers without getting hurt, for they had heard the ancient stories of the great golden tussock

⁵⁷ Sánchez 1995, Maestre et al. 2001, Reynolds et al. 1999, Cited in, Maestre, Cortina, and Ramirez 2007, 121.

and feared very much the long spiky henchmen. At this moment the elder ants stepped forward and offered to sacrifice their comfort to retrieve the seeds of the great golden tussock, thinking only of the survival of their colony, and so they embarked on the treacherous journey. It was steep, it was windy, and the old Messor ants swished and swayed and when they came to the henchmen the henchmen greeted them with sad green faces, saying "wise elder Messor ants will you help us, we are alone in this land and we wish to pass on the knowledge of the great golden tussock to our future kin, but we have none! O please young ants, take of our seeds and spread them throughout the lands, and we will grant you whatever you wish for in return". The elders looked at one another, at first saddened by the words of the sombre green strand, who no longer resembled the long spiky henchmen of their imaginations, then amazed at their luck as an idea came to their minds almost all at once! The bravest of the elder Messor stepped forward, and replied to the sombre green strand, "Mighty friend, it would be our honour to lend our helping hands to your purpose, our kin will collect and disperse your seeds throughout the lands, and in return we ask that half be gifted to our colony so that we may eat and be filled with the nutrients, strength and resilience of your great golden tussock". The strand waved about in pensive thought and with a gust of wind gave a solemn nod. From this day forth, the ants of Messor and the great golden tussocks, now known as Esparto, became tied to one another with the invisible cord of trust for ever more.

This story is based on a true relationship that thrives in the drylands of the South/South-Eastern Iberian Peninsula⁵⁸⁵⁹, that challenges our assumption that beings like the grasses and the bugs exist in the background to human activity, when they are actually co-constitutive agents of knowledge and sustainable practices. The sustainable practice being that of sharing and

⁵⁸ García-Fayos and Gasque 2006, 279.

⁵⁹ Interview with Lur, conducted on 11th April 2025, Málaga.

distributing and ultimately planting seeds, the fruits of which the planters do not benefit from in their lifespan, but the next generations will. This is sustainable because it is not extractivist or exploitative and caters for future kin.

The story also tells us that landscapes are relational. Plants pop up here and there because of the intricate web of relationality between the plants, the insects, the mammals, the wind, the water and the fire that make the world move in small and large ways. Interdependent on each other to live and to thrive, much like with La Rudilla Verde de Baza.

These layers of understanding help to demonstrate that Anthropocentrism is not an accurate way to see the world. We do not dictate the comings and goings of life on Earth, but rather, we are a part of the web of belonging⁶⁰. Systems of TKS understand that life is far more complex than a vertical hierarchy and this perspective is important in determining the value of the small acts that may determine the course of entire ecosystems, such as the act of the Messor Ants distributing the seed of Esparto which became large expanses of Espartales.

Coming Back

Ultimately, both knowledge systems, (TKS, WKS) pointed toward the necessity of co-creation to ensure the sustainability of life for our leaved, fungal and two-legged kin, so there's really no need for opposition. In fact, by coming together under the roof of relationality this fictitious opposition can be dissolved to make room for future collaborations, starting with the use of language (incorporating relationality into academic discourse).

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⁶⁰ Braidotti 2013, 60.

2.2 Non-Human Relationality

The Grasses Are Autonomous Agents

The first time I saw Esparto for who they are, I was out with Paco at sunrise in early June 2024 foraging Esparto for the weaving sessions Manolo and I had planned for later that afternoon. We drove up to a plateau west of the village where there had been a wildfire a few years back. Between the carbon carcasses of olive trees, Paco bent down to be at eye level with Esparto, extending a hand to the long green strands rising from the top of the mata, beckoning me over to feel how sturdy and tough the strands are, how long and thin some had grown. To understand, through looking and feeling, which were ripe for weaving, and which were not yet ready. This moment, seemingly simple, revealed the depth of a relationship cultivated not through instruction manuals but through generational attention to the subtlety of change.

Local foragers of Esparto speak of knowing through looking and feeling, the Esparto tells them when it is ready: through colour, season, length and width. When it has rained the Esparto splits and is avoided, when the Esparto is green it is avoided, when it is short and thick from age it is similarly avoided; but when it is finally summer, and the strands from the centre of the mata become yellowish, are long and fine and unsplit, then they are ready to be foraged. Esparto speaks to the forager, communicating to them through the subtlety of change and over generations people have learnt to interpret these signals and, in turn, demonstrate a reciprocal agreement between human and non-human beings⁶¹.

This knowledge of the generational body, and not of the knowledge-seeking body of the libraries or archives, grants the non-human beings' autonomy. Esparto has autonomy here as they are

⁶¹ For further reading, see: Eduard Kohn's, How Forests Think, Chapter 2 (2013).

given the space to live, grow and change with the seasons. Such intimate, traditional knowledge exists in reciprocity with place, as the practices of land-based learning lean into the formation of genuine relationships with what lives locally. Lur shared a curious point with me in our discussions⁶², saying "when you live off of something, the last thing you'd want to do is harm it.", here she was referencing the relationships of care that Esparto collecting communities have cultivated with Esparto because their relationship is mutually reliant.

Honourable Harvest

This brings us to the Honourable Harvest, a term coined by Kimmerer⁶³ to describe the mutually reliant, reciprocal and gratitude centred way of foraging/collecting/harvesting in the wild that is typically performed by indigenous communities. To harvest honourably means to only take what is needed, to share what is taken and to give thanks when receiving⁶⁴. Manolo and Paco demonstrated the Honourable Harvest without thinking twice, for they know that Esparto is a member of the community (relationality) and that to harvest them honourably would ensure a plentiful harvest the next year, and the next, and the next. While these principles have positive repercussions for the collector, wherein most plants grow back more plentiful the next year after being "pruned" by foragers which leave room for new growth, as Kimmerer proved in *The Teachings of Grass*⁶⁵, there are positive repercussions for the plant and the wider ecosystem too. When collecting Esparto we only take the longest strands that come from the centre of the mata, stretching high and tall, which accounts for less than half of the plant itself, the remainder of the plant that bows its strands to the ground are left. These strands shield the soil and the smaller species growing with the Esparto, creating the perfect temperate bubble. By taking these central

⁶² Interview with Lur, conducted on 11th April 2025, Málaga.

⁶³ Kimmerer 2013.

⁶⁴ Kimmerer 2013, 32, 33.

⁶⁵ Kimmerer 2013, 164-175.

strands, the Esparto has more room to grow, and the goats are less likely to get their eyes poked out!

Importantly, the principal significance of the Honourable Harvest lies in the Relational basis that is established between human and non-human. By seeing the non-human as living beings, granting them respect by only taking what is needed and giving thanks when receiving, they become valued and autonomous members of the web of belonging rather than just a resource.

Relational Meteorology

The goat herders of a secluded region of Jaén, Lur recounted⁶⁶, have learnt to read for tumultuous weather from the behaviour of their goats. It is said that when the goats graze on Esparto, a plant that they regularly avoid because of its unwelcoming spiky nature and little nutrition, that the weather will soon change for the worse. Relational meteorology is embedded in this little region of Jaén where all the goat herders are in quite the unanimous agreement that this local wisdom has served them well. Like the Esparto, the Goats are an active participant in the production and transmission of knowledge.

Coming Back

The enlightenment obligation to prioritise logic and rationality (WKS) does not have to exist separately from the human ability to discern knowledge through experience (TKS), in fact they complement each other when each is given the room to exist. Coming back to Kimmerer's chapter *Mishkos Kenomagwen: The Teachings of Grass*⁶⁷ Kimmerer demonstrated that where the teachers are the grasses *and* the peoples who have lived and worked with the grasses for many ageneration, valuable knowledge can be discerned. The chapter interweaves WKS and TKS

⁶⁶ Interview with Lur, conducted on 11th April 2025, Málaga.

⁶⁷ Kimmerer 2013, 164-175.

through a scientific study on the benefits of foraging written as a story with an academic framework. Here Kimmerer gives value to both sides of the coin, demonstrating that knowledge is relational and rational, not either or.

2.3 Human Relationality

This chapter turns toward the relational spaces between humans. Between generations, between teacher and apprentice and between market and memory. Esparto is not only a material that sustains ecosystems or a companion in non-human knowing, but also a social thread, binding people through shared practices, livelihoods, and values. As Esparto weaving becomes increasingly rare, what remains are not just the objects it produces, but the relationships it has cultivated: between family members passing down a technique, between artisans and their neighbours, between craft and identity. So, this chapter opens dialogue to: what forms of human relationality are held within the practice of Esparto weaving? How do those relationships shape economy, value, and sustainability practices? And what does it mean to continue weaving when the world seems to be unravelling?

Crafting Relationality

To weave Esparto into a Pleita every part of your hand has a job to do, working together to bob and weave the strands of Esparto while keeping it tightly woven and not losing the strands as you go. Each finger has a purpose, intricately separating the fibres of the braid. Even your palms assist the process, keeping the width of the braid consistent by occasionally pushing your palms to the braid with a light squeeze. Manolo taught me these techniques back in Summer 2024. After a month my hands started to peel and dry, it is a satisfying feeling that made me feel stronger and more resilient, like the Esparto themselves. Manolo's hands are coarse and ragged from over 50 years of practice, making 3 metres by the hour, tens of metres by the day, twisting the fibres between each other with an ease that comes from ages of experience.

Manolo, Paco and Lur's relationships with Esparto are as tenacious as the Esparto. They've cultivated relationships of care that began as relationships of necessity, resourcefulness, (in Manolo and Paco's cases), curiosity and a reconnect to cultural heritage (in Lur's case),

demonstrating to me their firm hold on the craft and their tender relationship with the plant. While the artisanry of Esparto is a dying trade, they demonstrate a long-standing response-ability⁶⁸ in this current age of cultural-amnesia to Esparto crafts and their history, and a worrisome plant-blindness⁶⁹. Their craft, however, is not isolated to the individual, it's a naturally social craft that historically saw its artisans sat on doorsteps to their homes talking to their neighbours, friends and passers-by as they wove. When it was rampant there was lots of this behaviour, as my grandmother often shared with me. Weaving became a community activity, even though just one pair of hands did the act of weaving. Even in the ways it reached the weaver, and the places it went after the weaver, demonstrate the multitude of human-human interactions and relationships that began at the collection and ended with the distribution. As Esparto weaving was never industrialised it means that every part of the process remains an embodied practice, passing from hands to hands to hands, in a beautiful relational web (Braidotti 2013, 60). These are the roots of relational exchange.

Rooted Economies

Esparto weaving is also situated in the broader conversations around alternative and non-extractive economies. Paco talked about ⁷⁰ how trading between village folk kept the hunger at bay during the posguerra, because in his village trading was more valuable than economic exchange due to the severity of the hunger that made buying things far harder. He and his family would "eat well" when they traded with local farmers for grain, cured meats and olive oil. Talking with Paco reminded me of the fact that capitalism is not the only economic model that exists, how there are other models that have been proven to be more sustainable than capitalism and it's these models that can teach us a thing or two about sustainability as well. It's by no coincidence that the alternative economy Paco talks about, one that served him and his family well, was a

⁶⁸ Haraway 2016, 116.

⁶⁹ Wandersee and Schussler 1998 as Cited in Allen 2003, 926.

⁷⁰ Interview with Paco, conducted on 16th April 2025, Almería.

model that relies on cultivated relationships of exchange and care amongst local populations. Where relationality is present, our neighbour does not go to bed hungry.

There are many alternative economies that centre relationality rather than individualism, many of which Kimmerer talks about in *The Serviceberry* (2024). Economies that favour regenerative practices rather than practices of depletion, favour the positionality of TKS as transformative for a society that values the sustainability of its kin. While I am not a knowledged economist, I do live in a late-capitalist society that is perseveringly unsustainable; prioritising consumerism over the circular approach that fosters reuse and recycling of materials⁷¹. Economies that are alternatives to capitalism, that are nourished by the relationships we build with our neighbours and wider communities⁷² have always existed. Through regenerative, reciprocal, relationality, we have the freedom to share our gifts and be gifted in return, as the Esparto does with Messor Ants, as Paco does with the Esparto and countless people have done for others since memory began.

Practicing Sustainability: A Woven Road

The relationships described in this chapter, particularly between the artisans and the Esparto, speak to the ethics of care, time and attention that resonate with stewardship. Esparto artisans, like Manolo, Paco and Lur, are stewards of the land, harvesting honourably and caring for the fibre that sustains them. The sustainability practiced here is interdependent, human labour is a form of ecological participation, sharing traditional knowledges of craft are localised forms of sustainable action; nothing exists in isolation. Esparto collection practices show that through cultural continuity and with an ecological economic ethic that integrates care and interdependence, TKS can positively inform sustainability.

⁷¹ Stahel 2016, 435.

⁷² Kimmerer 2024, 18.

Coming Back

Manolo's hands weave steadily, moving with memory and without instruction. In the folds of fibre and rhythm of repetition, Esparto weaving offers more than a craft; it becomes a way of remembering how to live with others. Its teachings are not locked in the past but woven into the present; representing sustainability not as a metric but as a relationship. It is carried in shared labour, inherited stories and the care that binds people to each other and to place. In this Esparto reminds us that to endure, when the world seems to be unravelling, we must keep weaving as a persistent act of patient resistance.

3. Closing The Circle

Esparto is a plant, a nurse, a protector of species, a vessel of water and food, a quiet architect of soil enrichment... In the harsh drylands of Southern Spain, such roles are vital. Without the relationality between feathered, many-legged, leafy, fungal and rooted kin; many species, including Esparto itself, would not survive. Through reciprocity and interdependence, they have shown us how to act sustainably. Through storytelling and the sharing of local wisdoms, we have come to know why and how these kin interact with one another. All these woven paths reflect how *relational* ecology truly *is*.

When WKS are separated from TKS, their insights, while valuable, risk becoming extractive or disconnected from the lived relationships they aim to describe. By incorporating relational frameworks into academia and recognising that place-based knowledge, storytelling, and co-creation helps dissolve the false divide between science and tradition, we can craft a reliable future. For if we were to lose the language of Traditional Knowledge Systems, we would lose something fundamental: the relational compass that guides us in how to forage, interact, and tend with care. Without this compass, sustainability runs the risk of becoming mechanical and blind.

Esparto's world teaches us that TKS are not cultural remnants, they are relational blueprints. When placed in dialogue with scientific approaches, they reveal how to live and learn in ways that honour life. From the artisans who braid memory into fibre, to the Messor Ants who plant for generations unseen, Esparto's kinship reveals the vitality of non-human—non-human, human—nonhuman, and human—human relationships in sustaining place and practice alike. So to protect our ecosystems and to regenerate what has been lost, we must re-enter relationship with our kin. We must speak of plants as companions, not commodities; view harvesting as a conversation, not an extraction; and make space in our science for stories. In doing so, we begin to weave a more just, reciprocal, and enduring world.

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