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Naturally Connected Neurodiversity - A Sense of Perspective

*Late- identification autistic female sensory interactions with natural environments
as refuge from societal expectations*

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Dissertation Submitted in Partial Fulfilment of Requirement for the Degree of Master of Arts
in Environmental Anthropology

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Preface

Until the age of 42, I never considered myself autistic. Autism wasn't on the radar for me as a possibility while growing up or in my life generally, despite indications such as powerful need for solitude, social impairments, a requirement for control which was masking internal anxiety and an urgent need for the peace of natural environments.

On a frosty January morning during the second Covid lockdown in 2021, I listened to a neurodiversity podcast during a dog walk. My aim was to deepen my understanding of my children's Attention Deficit Hyperactivity Disorder (ADHD). The presenters discussed various forms of neurodivergence and particularly how autism can manifest itself in women. I stopped abruptly as I recognised the person reflected back at me, illuminating my life story through a lens that made sense. I made sense. I burst into tears, and an immediate and passionate desire to explore neurodiversity and its implications blossomed in me on that frozen path.

The very early stage of realisation and identification saw a profound shift in personal narrative. I spent an extraordinary amount of time revisiting past memories, experiencing fluctuating periods of relief and anger that no one ever questioned my differences. It has been a relief to suddenly understand and accept that my lifelong feeling of alienation has a name, a community, a way to understand and accept mine and other autistic people's challenges as well as strengths. To find a pride in who we are and a growing acceptance of our own needs.

However, this was also framed by a growing awareness of the limited academic research on the autistic narrative. Through immersing myself in the conversations and in-depth virtual social environment of the autistic community, I came to understand that several aspects of my experience were common. I realised the restrictions of the autism diagnostic structure and common cultural perceptions, the stigma, female autistic experience, impact of masking to be accepted within neuro-normative culture, a need for nature as a refuge, and the fact that late identification can be both traumatic and liberating. This fuelled my ambition to add my own research to this area. I threw myself into 'Naturally Connected Neurodiversity' - a ethnographic analysis of the late-identifying or diagnosed female autistic experience and understanding how natural environmental interactions can be a core part of the re-aligned narratives and lived experiences. I'm hoping to be part of a new wave of qualitative neurodiversity research, aiming to re-frame the experience of autistic people with an understanding and acceptance of their narrative.

Abstract

This dissertation explores how late-identifying autistic women experience connections and sensory interactions with natural environments as a refuge from navigating the expectations of contrasting majority culture. Autistic identification in adulthood can have significant repercussions on individual reclaiming of personal agency. The qualitative research examines the lived encounters and potential benefits of interactions with natural environments through a framework of neurodivergent participants' re-aligned perspective in relation to surrounding culture.

The research considers environmental anthropological perspectives on human/natural environment engagement within the subjective autistic experience across cultural, societal and individual scales. This contrasts external cultural conflicts with internal identity negotiation processes. The dissertation first utilises cross-cultural relativity to contextualise the lived autistic experience as a marginalised culture within the expectations of majority culture, resulting in negatively impacting social overwhelm and masking behaviours (a term encapsulating behaviours to disguise autistic traits).

This subsequently illustrates the potential of natural environmental interactions as refuges with benefits for mental health and alleviating these impacts. This is supported through eco-psychological analysis of physical and emotional significance of natural interactions such as solitary pursuits, other-the-human attachments and the contrasting significance of intense sensory processing. I argue that only by qualitatively exploring the voices of autistic individuals is it possible to understand the nuances of these synergies. The implications of these findings are improved understanding of majority culture impact on autistic people and potential benefit from increased utilisation of engagement with natural environments in the search for self-acceptance of their autistic identity and re-aligned life stories.

Quote:

“Grant me the dignity of meeting me on my own terms – recognise that we are equally alien to each other and that my ways of being are not merely damaged versions of yours.”

(Jim Sinclair, 2012:5)

Introduction

Autism is acknowledged as a spectrum, both diagnostically and in common social perception. According to the bio-medical Diagnostic and Statistical Manual of Mental Disorders (DSM-V), the diagnostic manual of the American Psychiatric Association used to diagnose mental disorders, people with autism have difficulty with communication and interaction with other people, restricted interests and repetitive behaviours (National Institute of Mental Health, online, 2021). By contrast, the definition of Neurodiversity is ‘Individual differences in brain functioning regarded as normal variations within the human population’ (Merriam-Webster, online, 2021). This terminology was embraced by social activists and developed into what has come to be known as the ‘Neurodiversity Movement’. Autistic researcher Chloe Farahar explains how the movement seeks “civil rights, equality and full societal inclusion for the neurodivergent”, including autism and conditions such as ADHD, dyslexia, dyspraxia etc. (2019:3). Acknowledgement of the neurodiversity paradigm and acceptance of the concept of cognitive variations, rather than pathological disorders, underpins this dissertation.

Much like biodiversity, the neurodiverse community recognises that there is no ‘correct’ way to experience the world. The spectrum concept is frequently depicted as a sliding scale of intensity of symptoms and traits though notions of high/low functioning can be seen as dichotomising and restrictive. This aligns with the anthropological move beyond binaries. Recent decades have seen anthropology increasingly explore the multi-faceted dimensions of presentation and orientation in areas such as gender, race and nature/culture debates.

Early anthropological narratives often included the construction of meanings created or explained by external forces. This dichotomy is still frequently the case when considering the lack of neurodivergent narratives in autism research. Similar to a multi-dimensional colour-wheel, the levels of social interaction challenges, intense interests and sensory processing vary greatly between autistic individuals and may differ over time and circumstances. This dissertation aims to understand late-identification autistic women’s experiences of natural environments through a framework of their re-aligned perspective in relation to surrounding

culture, interactions with physical surroundings and individual subjectivity. I argue that only by exploring the voices of autistic individuals is it possible to note the nuances of this synergy.

Autistic connections with natural environments can also be explored through the concept of an intricate colour-wheel spectrum. This would enable a detailed and multi-faceted understanding of the underlying need for natural spaces as refuges from societal expectations, the multitude of potential attachments with natural environments and the ways these manifests themselves subjectively. Potentially, it is not a sliding scale of interactions, but complex connections varying in intensity and impact depending on the individual, surrounding circumstances and scales of understanding. This dissertation explores this sense of perspective through narratives that frequently haven't been allowed a voice.

As a child, without knowing I was autistic, natural environments were my safe spaces. The landscapes of the surrounding natural world existed as non-judgemental sanctuaries away from challenging and confusing social interactions. They were also places to indulge my intense sensory perceptions, to disappear into the wonder of my place *as part of* and connection *within* the environments around me. The inception of this dissertation lay in identification of my autistic identity. This grew into a desire to explore whether similar experiences may be present across broader autistic narratives. I wanted to consider the autistic connections with natural environments across scales - on a cultural, community and individual level. Do they exist, how are they linked, and what evidence would participants share to support my analysis?

This dissertation frames subjective autistic experiences of adult identification within environmental anthropological approaches on human connectivity with the natural settings. In my references to natural environmental connections, I indicate human experiences of interaction with non-built, non-synthetic environments including but not solely referring to sensory experiences of water, vegetation, geographic locations and animals in as near a form as possible to that from which we have evolved. The research provides examples of natural environmental connections for autistic people such as a solitary pursuits, beyond-the-human attachments and sensory exploration. It aims to explore how natural environments, in whatever form they may be beneficial to the individual, may have a role within autistic mental health and the lived experience of autistic women in relation to social overwhelm, sensory processing and the effects of societal camouflaging.

My research indicates that this focal point is surrounded by a framework of both external and internal processes - cultural conflicts and stigma, identity negotiation, connections with other-than-human entities, subjective experience and sensory processing. At the heart of my interviews was the individual and their understanding of a place in natural landscapes as part of their re-aligned narrative when they have so often felt displaced or alienated throughout their lives.

In Chapter 1, I explore why autistic women may need an escape or refuge within natural environments. It considers how the internal cognitive lived autistic experience can be seen as a culturally separate minority from the societal majority culture, resulting in negatively impacting camouflaging behaviours. As such, the narratives can be viewed as theoretically coherent with the approaches utilised by anthropologists to analyse differing forms of reasoning and lived experience in cross-cultural rationality and relativism.

Chapter 2 reviews how natural environmental connections can function as societal refuges with potential benefits in relation to coping strategies to alleviate these impacts. Through inclusion of environmental anthropology theories and eco-psychology research, the chapter considers how human/natural environment relationships as a refuge from majority culture potentially makes these even more significant for people within the autistic community.

Chapter 3 considers how the individual experiences of these engagements with natural environments can be seen through neuroscientific perspectives and focus of subjective sensory processing. It considers how the distinctive autistic sensory tolerances and sensitivities related to natural interactions become elements of identification and self-acceptance of their autistic re-aligned life stories.

My research revolves around the following research question: How can natural environmental connections assist in alleviating impacts of navigating contrasting majority culture for late-identifying autistic women when viewed through the lenses of sensory processing, eco-psychology and cross-cultural relativism?

The rationale for including theoretical perspectives from cross-cultural relativity, environmental anthropology and eco-psychology in the various chapters is to illuminate the research question across cultural, communal and individual scales. Very little anthropological literature currently explores this subject matter, making the inclusion of multiple theoretical directions necessary. These theoretical perspectives serve to explore neurodiversity as a

cultural identity, reclaiming of agency as part of a marginalised community through interactions with surrounding landscapes and sensory differences increasing impact of connections with natural environments. This fulfils the need in contemporary autism research of further articulation of transferable meanings of why and how lived experiences are subjectively different for neurodivergent people. As such, this dissertation is an exploration of autistic perspectives and impacts across scales on connections with surrounding natural environments.

Dissertation methodology and contextualisation

Anthropological reflexivity prior to research

All research makes distinctive reflexive decisions on what to include and leave out (Geertz, 1973). Recent literature notes that it is epistemologically and ethically questionable that neurodivergent personal narratives have not historically been incorporated into social scientific research (Chown et al., 2017; Robertson, 2009). Hence, it was a deliberate decision to approach this research through placing autistic voices at the centre of the project.

The anthropological focus on inter-subjectivity and multi-dimensional perspectives includes a reflection of the researcher and anthropologist (Nazaruk, 2011). This places reflexive anthropological theories in strong positions when attempting to understand the societal contrasts with autistic experience and the imperatives that make connections with natural environments of significant benefit to mental wellbeing.

Though ambiguous and utilised in a variety of different contexts, reflexivity as a concept relates to auto-critical thought and works, including conditions of reciprocity, asymmetry and positionality (Okely and Callaway, 1992). I believe that the particular importance of reflexivity in relation to this project is the impact of adult identification on the autistic narrative. Most of my research participants described times of reviewing life histories and coming to terms with an increased understanding of internal and external choices, behaviours and patterns during the earliest stage of identification. The analysis of these experiences will align with standpoint analysis in the form of developing an account of participants' shared experiences as a marginalised group, neglected by dominant social narratives (Frankenberg, 1993). I argue that there has been a historic tendency to negate the subjective neurodivergent narrative and that there is a requirement for incorporating the complex conceptualisations of the lived experience, through the viewpoint of researcher and subject alike.

As an autistic woman researching the autistic female experience, I feel a significant responsibility to ensure reflexivity in my ethnographic writing. It requires me to consider my potential bias and aid with manoeuvring narratives and contradictions in a project that explores multiple meanings and identities. Reflexive awareness potentially lets me apply myself as an asset to provide in-depth consideration and analysis, which may not be as immediately obvious to neurotypical researchers.

Autism has historically been researched from the perspective of otherness. I propose that this field of research stands at a crossroads comparable to the early stage of the reflexive turn and crisis of representation in anthropology. Reflexivity is an essential inclusion in this project to consider neurodiversity as a concept and the lived descriptions on how and why attachments to natural environments may be of benefit to autistic women. It allows me to consider the topic through a targeted emic focus on subjective eco-psychology, while placing it within an etic framework of cross-cultural relativism on contrasting neurotypical majority.

Ethical considerations and restrictions

I made the decision to focus on the female late identification autistic perspective due to the historical negation of this particular narrative, resulting in later diagnosis for women. This would enable me to explore the potential of natural environments at a time of re-aligned identity. The research involved primarily written extensive questionnaire answers, provided by adult cis women aged 20-75. This issue isn't specific in relation to cis/non-cis gender or other identifications.

One of the primary ethical considerations was whether to include both self-identifying and officially diagnosed autistic women (see Distribution of self-identifying, pursuing and diagnosed participants in Appendix 1). My initial expectation was to contrast the experiences of these two groups, but I came to understand that the lived narratives were only superficially indistinguishable. I decided to include both in the research, as bias in the health system was reported as a frequent occurrence.

Three specific lines of reasoning had significant impact on the decision to either pursue a diagnosis or not. Some respondents noted how they wanted their own understanding validated through official diagnosis. For example, Molly, who was diagnosed at the age of 49, noted how, "I needed to know that it wasn't just something that I managed to convince myself explained my life simply because I was desperate for an explanation" while Caitlyn, diagnosed at 43, wanted to pursue an official diagnosis, as she felt like she could not trust herself.

Others had attempted to obtain diagnosis but had struggled against a diagnostic system and general health system, which they believed invalidated their position and rejected their narratives as not fitting the biomedical diagnostic tools, which are still based on the presentation of white, cis-male children (Farahar, 2019). Examples of these included Rowan who said, "My doctor acknowledged that I have many 'symptoms' of autism but that it is

difficult to diagnose adults and I did not meet the diagnostic criteria. I am now pursuing a second opinion.” Lily also noted how she felt it was difficult to live with the knowledge that many ‘experts’ deny the existence/prevalence of autism in women. She commented, “This is the main factor in my reticence to seek a formal diagnosis –perhaps the same reason why so many women don’t report sexual assault.”

The third rationale related to not requiring support provisions and that an increased internal understanding was sufficient. This was the case for Freya, “I did not pursue a diagnosis, mainly because I am happy in my skin now. I do not have to mask as much as I would have done,” while Charlotte explained, “I decided at the moment I have sufficient understanding of autism to start working on my life myself and don’t really feel the need to be assessed.” After careful consideration I decided to consider all these perspectives on diagnosis as equally valid and include all three in this dissertation.

Participants were presented with full prior information, both in project description and consent forms sent directly to their email addresses with the initial questionnaire. No minors, elderly or people requiring guardianship participated, due to the ethical restrictions of full prior informed consent and vulnerability. Contributors were deliberately chosen to include a multitude of ages and nationalities. However, question did not focus on personal details such as ethnicity, family or socio-economic status. My focus was not what externally sets them apart, but to explore the aspects of what they share – their autistic identity and connections with natural environments.

Autism is a spectrum, rather than linear, condition. Different participants required different accommodations, the primary one being the ability to take part through written communication with flexible deadlines due to social anxiety and overwhelm. This allowed minimising impact of timing anxiety, sensory impact and the trigger warnings (statement made prior to sharing potentially disturbing content) that can be required during direct conversations. My diagnosis as a late-identifying autistic woman allowed me greater awareness of the ethical risks involved, as mentioned above. Hence I ensured that open communication of required accommodation needs was accounted for at every step of the process. All participant names have been replaced with pseudonyms to protect anonymity.

Fieldwork and responses

The fieldwork was initiated through consideration of most suitable ways to approach potential participants. I utilised reflexive methods and exploration of online autistic social

groups, online conversations, live web chats and personal posts to consider what information would be required for potential contributors to discuss intensely personal experiences. The important considerations were detail and context – information not just on the project and researcher but also reasoning for the project, significance to other autistic people, requirements for specific accommodations and scope to include extended personal narratives. The initial research specified a requirement for participants to share their own autistic voice and life stories – an aspect too frequently missing of the autistic voice in autism research.

My website www.naturalneurodiversity.com provided the objectives, existing scholarship, methodology, significance and ethics for the project. Participants were contacted through posting a brief comment and link on member-only online autistic women’s support groups, autistic researchers forums and my personal neurodivergent profile on Twitter and Instagram. The site title also referred to the premise underlying the project that neurodiversity isn’t a ‘pathological disorder’ but a natural variation – certainly with challenges but also with strengths. I received initial interest from 83 potential participants from across the globe. I realised I needed to include a written first stage prior to any in-depth interviews. As people had also contacted me in various ways, I needed a straight-forward approach to consent, full information and the questions. I completed this additional page of the site and sent the description and link to my participants.

37 participants completed the initial written questionnaire (see Questionnaire in Appendix 2), with the replies averaging 3000-5000 words per person. After initial analysis of core themes, (See core theme overview in Appendix 3) subsequent interviews were scheduled to enable further context and verification of research conclusions. These included some video calls, though most participants requested that they continue to participate in writing to alleviate concerns of anxiety (See example of themed compilation of participant comments in Appendix 4).

The direction of my project changed significantly from the initial research proposal. The initial research question focused on the natural environmental connections as a reflection of liminality in late-identification and impacts of the male focus of the diagnostic process. However, other themes were more important to contributors. Three key areas stood out, which resulted in the core chapters of research – the personal impacts of aligning your autistic reality in a culture you don’t consider your own, natural connections as a refuge without societal expectations and the subjective reality of sensory processing on these connections.

Time and temporality in late-identifying autistic identity

Autistic identity over time emerged as contradictory reflexive elements for me as a researcher and the participants when attempting to contextualise the life stories. Understanding of temporalities provided an awareness of how some participants structure their lives into ‘pre-identification’ and ‘post-identification’ phases. This enabled analysis of a layer of agency and perspective on experiences at various points of time and how a different lens has provided a new way for each person to see themselves as well as their place in the surrounding majority culture in both a cyclical and linear fashion.

Time and temporality have long been topics of study in social science. In this research project, participants included considerations both in terms of collective representations of time and how these shaped individual understandings and experiences. These perspectives can be traced back to Durkheim’s (1912) concept of ‘social time’ and claim that time is a fundamental category of human thought. His description of time, and that of Leach’s (1961) focus on time as being both cyclical and irreversible, was relevant to participants’ increased awareness of temporality in terms of shared symbols of commonly shared meaning after autistic identification. With the new appreciation for mutually understood meanings and experiences, interviewees became hypervigilant after identification to the many ways shared meanings with other people had been missing in their lives previously, which was noted as ‘lost time’ with intense impacts.

The temporal understanding increased awareness of selfhood over time, co-occurring conditions and contrast to surrounding majority culture (Runswick-Cole, 2014). The experience of participants raised the question whether the autistic lived experience could be considered under temporal cultural relativism in the form of existing in different temporal dimensions (Gell, 1998). For example, Kira said, “My diagnosis was a huge relief. I have spent my entire life feeling different. It turns out there isn’t anything wrong. I am definitely grieving – because of the damage done in the not knowing, the trauma I have been through, the lack of support, the missed opportunities.” Georgia also explained that it made her think both positively and negatively about her life history. “Negatively because I mourn the woman I might be had it been noticed sooner and I had received the support I needed in order to flourish. But positive as I have berated myself for years.”

These patterns were experienced individually and utilised as forms of bonding when sharing contact with others within the autistic community. Mia expressed her feelings of realising the identification with this community, “I felt like a pariah gypsy that found my way home. Because of the realisation of that there actually existed a place where I belonged. It was like a revelation to realise that there were others like me”. This process is also reminiscent of Munn’s (1986) concept of construction of space and time. In the similar lines to Munn’s descriptions of the people of Gawa, my research participants’ continually changing definition and intersubjective feeling of their position over time were central for their deepening awareness of understanding.

A majority of participants described the relief of no longer framing their life histories as failed members of a majority culture, though this prompted identity negotiation and stigma. However, many also noted late identification as fostering identity conflicts alongside the relief of understanding. For example, Hailey confirmed, “I definitely experienced a transition stage. I felt like I needed to know for definite before I could proceed with the rest of my life. Then after I was diagnosed, it was quite difficult to transition my identity and sense of self from one identity to another, from one explanation or understanding of myself to another. No one could see it happening outwardly”. This internal re-alignment was a common example of increased self-awareness among participants.

The open questions of my research process asked contributors to describe their own journey before, during and after their identification and analysis elicited very extensive life history responses. These included references to childhoods, social struggles over time and a growing analysis of their own life experiences. The contributions showed ambivalence and contradictions in their own revelational narrative in terms of the vision of themselves in conflict with their surrounding culture, in a similar way that Bloch noted the contrast between ideology and cognition and his focus on the presence of the past in the present (Bloch, 1977, 2012). This conflict was illustrated by participants such as Marina, who explained, “Although I’d never felt at home as a neurotypical person, I also fell victim massively to imposter syndrome when classing myself as autistic in those early days. It made me close in on myself and struggle with the new-found sense of identity.” Late-identifying autistic people hence have to go through the process of accommodating both their previous neuro-normative identity and current autistic identity simultaneously, while considering the impacts of both of these narratives in relation to their personal life story over time.

These time distinctions align with Evans-Pritchard's (1939) separation of 'practical' environmental and ecological time from 'social' time in his description of the Nuer, which was also relevant in this dissertation's exploration of environmental connections as a refuge from societal expectations. Some participants described feeling closer connections to cyclical ecological passages of time, as they considered their autistic selves while withdrawing from aspects of social prescribed norms. These experiences of changes over time provided an underlying framework of understanding of changing narratives, which underpin my core research questions on natural environmental connections.

It was important to recognise in my analysis that the autistic adult's personal re-alignment evaluated their experiences of difference in childhood and youth. This temporal perspective was noted in the number of respondents that could be considered 'recently' identifying or official diagnosed. 65% of respondents were still within the first 12 months, with an additional 27% within the first 3 years of identification (see Participant age of identification and current age distribution in Appendix 5). Did this have an impact on their decision to take part and would their answers change over time in line with further understanding and acceptance of their autistic identity? Using a reflexive filter and follow up on responses over an extended timeframe would be beneficial in future research and allow potential conflicting voices to be heard and contextualised.

Chapter 1:

Majority culture expectations contrasting with autistic experience

This initial chapter will aim to illustrate how interactions with natural environments can be seen as an example of epistemological quest for understanding and meaning, which autistic individuals potentially seek separately from the expectations of majority society. To enable understanding of the individual subjective experience, it is beneficial to analyse how neurodivergence can be seen as a contrasting cultural narrative.

Late-stage autistic identification in the context of this dissertation encompasses three emerging perspectives, which provide context for participants' connections with natural physical environments.

1. The realisation of autism as a reason for extensive personal conflict with the surrounding majority culture
2. The understanding of personal camouflaging behaviours utilised to attempt to fit into majority culture
3. Gradual acceptance of new cultural and personal identity

Autism has historically been researched through a predominately pathological structure of various primarily social interaction impairments, with a lack of reflexivity on the internal processes (Rosqvist et al., 2020). One aspect of this has been that the diagnostic structure and common cultural perceptions has historically negated the female autistic experience, resulting in later diagnosis and fewer support structures (Bargiela et al., 2016). This restricted research agenda can be seen as similar to earlier anthropological concepts of 'The Other' – bounded explanations of cultural practices without recognising the intricacy and internal challenges resulting in the outwardly visible behaviours.

I propose that there is correlation between the way neurodiverse communities contrast with surrounding normative culture and the way anthropologists have utilised cross-cultural relativity to ethnographically explain the structures of other minority cultures. However, compared to many other parameters anthropologists use to differentiate cultural aspects – language, dress, gender, race, physical indications of social class or indications of religious beliefs etc. – the cultural norms underpinning the neurodiverse community are often internal

to the individual. Hence, there is a contradiction in being part of a surrounding culture, yet still feel alienated and isolated within it.

Examples of the participants' extensive societal conflicts and challenges reverberated throughout the personal narratives of my ethnographic research. Most participants talked in detail about their challenges with majority cultural expectations. For example, Georgia explained, "Life is difficult to navigate as a result of being an autistic person in a neurotypical world. It can and has presented some real obstacles in terms of executive functioning and communication." Mia also illustrated just to what extent these challenges have traumatic implications for autistic individuals, "We all live with the crippling side effects, as we realise how much time have been spent and wasted, being a voluntary hostage in a world where we didn't belong. We have been seeped in trauma and we are covered with physical and psychological scars. But my scars are invisible, and my autism is invisible." These internal traumas are real and significant to the individuals but may have been masked to the extent that external understanding hasn't been achieved.

To explore these internal perspectives, anthropological theories of cross-cultural relativism and rationality are useful when attempting to contextualise these difficulties of societal expectations and the contrasting lived experience of autistic women. An example can be seen in Tambiah's notion, "Translation of cultures overlaps with the question of the comparability and commensurability between 'their' phenomena, concepts and categories and 'ours'. This raises the related issues of translation, relativism and rationality" (Tambiah, 1990:112). It also agrees with what Rosqvist describes as, "ontological assumption of neurodiversity, which is often contrasted with the ideological position that there is a recurrent 'normal' cognitive, affective and sensory type" (Rosqvist, 2020:7). To understand neurodivergent narratives, it is crucial to move beyond the notion that they are reduced versions of normative cognition and accept the lived experience and rationale in their own right.

To enable my analysis of these viewpoints, I've considered anthropological debates on accuracy of cultural translation, social constructs and equally valid perspectives or experience description. I initially considered positions such as Durkheim's early approaches on positivism and functionalism. These frames the social sciences as rational extensions of the natural sciences, allowing retention of objectivity and rationality (Durkheim, 1972). However, I support the criticisms of this approach that consider the lack of agency. Subsequently, anti-positivism as well as post-modernism have incorporated individual cultural values, norms and

behaviours to a much greater extent, though the tight focus on how individual agents shape culture may dismiss broader perspectives (Bryant, 1985).

It was interesting to note how Geertz (1973) and Sapir (1981), among others, write on the anthropologist as a cultural translator with an ability to consider others' constructed meanings in terms of alternative cultural perceptions. It became part of the move towards reconsidering social construction analysis and the relativity and equal value of differing attitudes and definitions of the world. This aspect is important when we consider if neurodiversity include separate social constructs and the historical negation of the lived experience of the neurodivergent population amounts to ableism.

I found anthropological positions on cultural construction of knowledge, and the interplay between individual subjectivity and collective thought and behaviour, useful for this purpose. Ingham (1996) explored these concepts in relation to how humans, in effect, are psychological individuals, while also living in moral worlds of shared and contested symbols, beliefs and values. My position is that understanding the shift of personal identity upon autism identification in adulthood is a complicated phenomenon. It includes a growing realisation for the individual that some personal challenges and conflicts arise from the requirement to fit within social constructs that does not accept your difference. As such, it is important for this research to consider both personal agency and a socially grounded view of culture to capture the nuances.

Historical research on neurodivergence was positioned almost exclusively within biomedical frameworks in what could be considered an alignment with Durkheim's functionalism. Cognitive variation was analysed and described in terms of functions, similar to Durkheim's notions on society, resulting in exclusion of agency (Leveto, 2018). Autism research can be seen as aligned with the early anthropological symbolist notions on 'primitive mentality', as considered by Levy-Bruhl (1923). His description of his book title relating to "the mental functions of un-civilized peoples," resonates with tendencies to seeing neurological differences as evolutionarily inferior (Levy-Bruhl, 1923:11). Later research within symbolism, for example Tambiah (1990), move beyond this rigid dichotomy to include broader context and varying normalised behaviours. As such, it follows that one definition of cultural relativism as an anthropological concept lies within acceptance that knowledge and meaning are not absolute but exist in relation to surrounding context (Hollis and Lukes, 1982). Reaching a contemporary perspective on neurodiversity as a separate cultural community relies on moving beyond judgement based on the standards of our own cultural norms.

The understanding of neurodivergent cultural practices and behaviours as distinct from the majority culture resonated with respondents when discussing the impact of initial identification. Tara, for example, defined the initial feeling of elation of contextual understanding of her new awareness, followed by a realisation that lack of cultural understanding was still prevalent. “Most of the first year was a high, I found so many resonant experiences. As this settled, I had bouts of desperation at the fact that all this self- knowledge didn’t give me skills that meant I could be accepted, or really understand others more easily. I knew why I was an outsider, but I was still an outsider and still lonely and felt defeated.” The feelings of internal understanding and acceptance didn’t necessarily translate into external understanding and acknowledgment by the surrounding culture, which illustrates how the neurodivergent community can be seen as a minority, marginalised culture with contrasting societal expectations.

Sociohistorical perspectives of neurodiversity

To facilitate this comparison, it is beneficial to consider the sociohistorical perspectives around neurodiversity as a term. In 1998, sociologist Judy Singer introduced the ‘Neurodiversity’ terminology to characterise conditions like autism, Tourette’s, dyslexia, dyspraxia and ADHD among others. The ambition was to consider the discourse surrounding these conditions beyond the medical notions of impairments and disorders (Milton, 2016). The term specifically referred to “variations in cognitive, affectual, and sensory functioning differing from most of the general population or predominant neurotype,” (Rosqvist et al., 2020:17). The predominant neurotype has been referenced in literature as ‘allistic’, ‘neuronormative’ or ‘neurotypical’ to illustrate people whose neurological development is perceived as within an average or ‘normal’ range within a particular society (Grinker, 2015). The terminology was embraced by autism social activists and autistic community.

Proponents argue that these disparate neuro-cognitive conditions derive from biological variations in the human genome as “normal and healthy manifestations of biodiversity,” rather than inherently pathological and caused by disease (Chapman, 2021:35). Whereas the DSM-V (The Diagnostic and Statistical Manual of Mental Disorders) labels neurodivergence as a ‘pathological deviance’ (American Psychiatric Association, 2013), the stance of the movement is that these neuro-cognitive variations should be acknowledged “as a social category on par with gender, ethnicity, sexual orientation, or disability status” (Disabled World, online, 2021). This contrast is an on-going and strongly polarised debate.

Qualitative research in this field has been extremely limited. However, a small increase in recent qualitative research has worked to integrate approaches and perspectives on sociality and cultural context (Orsini, 2012). This has included research on neurodivergent narratives, including subjective rationality as well as relativism in terms of recognition of alternative forms of being and creation of meaning (E.g. Robertson, 2009; Cage et al., 2018; Milson and Sims, 2016; Milton, 2012). It has been encouraging to see an increase in these research agendas, as well as organisations such as the Participatory Autism Research Collective, which promotes autistic involvement in autism research (PARC, 2021).

The urgent need for this recognition was illustrated in my qualitative research when I questioned participants on their prior understanding of neurodiversity and how they found information that resonated with them. Many described not relating to the medical terminology, the DSM-V descriptions and online autism tests. These were described as based on a narrow perspective of external traits. Almost all participants noted stronger alignment with online communities, other autistic people's narratives, and websites dedicated to the female autistic experience. Skye explained, "The more I listened to others experiences and recognising myself, I felt like I was reading my own story, written by others." This was also the case for Jessica, who noted that she started looking for autistic perspectives, "Over the years, I've read books, biographies, anthologies, academic texts, and I try to keep up with autistic advocates online." It seems that online communities and communications have partly filled the gap of relatable narratives and facilitated a stronger sense of connections and autistic community. For many participants, a crucial step in their identification wasn't the diagnostic criteria or the tests for autism. It was the personal life stories, the connection, the profound belief that the alienation felt for decades is no longer a solitary burden to carry.

Neuroculture – A marginalised minority group with own narrative agency?

One of the primary reasons for exploring neurodivergence a separate cultural phenomenon or indeed a marginalised minority group in this dissertation, is to illustrate the impact of the inequality and requirement for autistic individuals to mask their thought processes, sensory profiles and behavioural patterns to fit within the majority culture. The social sciences have frequently debated opposing concepts of 'nature' and culture', drawing on Levi-Strauss' (1963) binary oppositions. This dichotomy has frequently been aligned with other contrasts, such as male/female and individual/community, and can be considered applicable to the neurotypical/neurodivergent division. This is where anthropology's focus on cultural

differences and dichotomies proves invaluable when considering categories often understood as opposites.

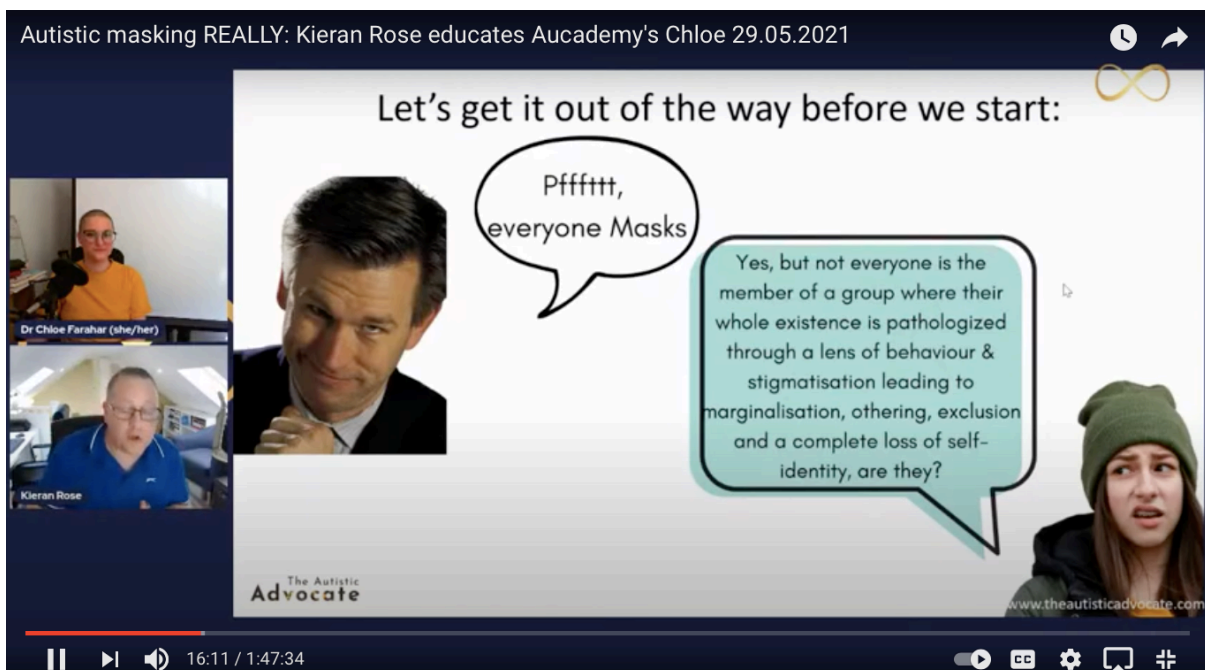
There is a requirement to evaluate whether social constructs are examples of ‘cognitive othering’ and as such, a negation and marginalisation of the neurodivergent narrative, with individuals required to regulate themselves inside the social constructions of surrounding culturally accepted norms. Similar to extensive anthropological debates on decolonisation and indigenous communities, recent neurodiversity research discusses the implications on individuals of moral imperialism and the imposition of moral standards of one culture over another (Spahn, 2009). “The construct of neurotypical as an ideal ethical subject may be added to the list of assumptions about ideal rationality,” (Rosqvist et al., 2020:7). In the paper ‘Brain Equality’, Andrea Lollini (2018) argues that neurodiversity should be considered a cultural minority. She concludes that one of the core missions of modern constitutionalism is to establish a societal ‘sense of we’ balancing uniformity and diversity, as the lack of cultural recognition is detrimental for individuals who experience rejection. “Brain attributes are one of the cornerstones upon which inequality and injustice are built in Western societies” (Lollini, 2018:70). It is possible to consider that one of the primary aims of cross-cultural relativism and rationality theories is the ability to translate alternative world viewpoints, assisting social coherence and understanding. For the focus of this dissertation, these perspectives have the potential to improve mediation and understanding of cognitive varieties.

Masking/camouflaging as a cultural and social coping strategy

The impact of the cultural divide in the context of this project is specifically dominant when considering masking/camouflaging - the act of learning neurotypical behaviours and mimicking them in social situations - as a cultural and societal coping strategy. These behaviours, utilised within the autistic community under the umbrella term Masking, have also been referred to in literature as camouflaging (Hull et al., 2017), compensation (Livingston and Happe, 2017) as well as adaptive morphing (Lawson, 2020). One core aspect of masking is that you see yourself through the eyes of others. If the masks are utilised to fit in with a prescribed society, as is the case with neurodivergent experiences, understanding the social context is crucial in the exploration of autistic masking and, as I argue, the reasons for spending time in spaces where these societal expectations are reduced.

Part of my ethnographic research included attendance at educational Live streams on the Facebook group site Aucademy. Kieran Rose aka The Autistic Advocate, recorded a live

conversation with Aucademy’s Dr. Chloe Farahar on camouflaging behaviours. The initial slide showed a cartoon of a white, middle-age, CIS male stating, “Pffftt, everyone masks.” A mix-race, teenage girl replied, “Yes, but not everyone is the member of a group where their whole existence is pathologized through a lens of behaviour and stigmatisation leading to marginalisation, othering, exclusion and a complete loss of self-identity, are they?” Kieran Rose explained, “a wider narrative suggest that autistic masking is a trauma response – a psychological safety mechanism made up of complex layers of physical, emotional and social actions, which an autistic person is driven to use to self-protect and present an acceptable version of who they are” (Aucademy, 2021). I found that this illustrated the powerful impact of these behaviours upon autistic people’s lived experience.



(Aucademy, 2021)

This aligns with the paper ‘A Conceptual analysis of Autistic Masking’, which states that this occurs by applying learnt behaviours and self-identity and happens partly consciously with the person learning to dissociate from the act and then subconsciously at a great mental and physical cost. “Camouflaging is a way to reduce external consequences at the expense of internal repercussions,” (Pearson and Rose, 2021:52). My ethnographic participants vividly described the implications of this behaviour over time. For example, Rayna commented, “I am trying to be freer and more authentically me. It is difficult and quite a lot to manage mentally and emotionally. It has made me question my identity and self-perception.” Mia also noted the personal consequences, “Today I know that every time I wear one of my masks, I’m

charged a fee. I blended in, and well indeed, but inside I felt like an alien.” This ongoing process had heavy implications over time for a significant proportion of contributors.

For some, masking led to mental health issues. For instance, Kira explained, “I have a history of mental health challenges and breakdown episodes. I found myself unable to mask and my tolerance for sensory challenges was very low.” This was also the case for Molly who said, “In the past, I have been very high masking and always looked to pass as normal. Quite often this had led me in directions that have been very bad for my mental health, and I have ended up overwhelmed and miserable.” What emerged from the frequent accounts of the burdens of masking was a requirement to withdraw from the expectations of other people into environments without external judgement, which would then also reduce the internal overwhelm.

Ownership of the term ‘I’ in late-stage identification

For the participants, unmasking and taking ownership of personal narrative agency in the form of saying ‘I’ over time and in relation to self and others, became increasingly important during the period of autistic identification. They described becoming increasingly aware of a conflict between their internal re-evaluation of themselves and their imposed practical identity. Stephanie used to consider herself broken, “For a long time I really lacked a sense of self.” She felt that she has hugely benefited from being able to name her difference. Similarly, Caitlyn explained the ambivalence of the transition period, “At first it felt amazing, then it threw me into another identity crisis which I am still struggling with. I can see that it is reframing my whole life, and I know this will take some time to adjust to. It has helped me have more self-compassion and helped me explore my inner self talk.” These experiences can be seen as examples of questioning the nature of our selfhood in relation to our internal concept of our lived experience and our position/role as part of other people’s stories shift as we slowly understand ourselves and the reasons for experiences and changing perceptions.

Anna Stenning, as an autistic author, notes how she uses her autistic gaze as a standpoint to take ownership over her narrative agency and capacity to use the term ‘I’ (Stenning and Rosquist, 2020). This ownership may be a reason that my research questions on removing the mask and embracing a new ‘I’ in relation to self and others elicited some of the deepest and most extensive emotional responses from my participants. For example, Mia expressed how she felt that she had been handed an opportunity of a new life. “One where I don’t have to restrict, violate and torture myself, in the endless self-imposed struggles of trying to fit into

the straitjacket of modern days expectations. A late diagnosis often is followed by a period of sorrow, grief, and maybe mourning. If I had known sooner, how would my life have been?” Though this was described as a turbulent period for most participants, the undulating stages of grief and elation can be considered a natural and healthy part of the process of accepting their re-aligned narrative agency.

This development of a new internal and social self through an extended process of reflection means that autistic women are searching for ways to achieve peace and personal balance away from the pressures of societal expectations. Charlotte concludes, “My approach to masking has been to let go of some of the little things where necessary but understand that the mask also serves a function in negotiating the world. I am also recognising the toll masking can take and allowing myself some recovery from heavy use.”

Throughout this chapter, I have laid the foundation for the argument that trying to fit societal expectations from neurotypical majority culture where your narrative isn't recognised, create significant levels of internal conflict and trauma for autistic women. When seen through the anthropological lens of relativism, autistic culture can be seen as a marginalised cultural phenomenon. It is partly the conflicting contrasts within this oppositional zone that has an impact on requirements for respite. This is where interactions with natural environments become crucial for autistic women. The majority of participants noted that natural interactions provide a refuge without societal expectations, allowing a sense of peace and acceptance that is difficult to find within majority cultural norms.

Chapter 2:

Natural environments as refuge without societal expectations

As human beings, despite frequent contemporary physical and emotional distance from natural environments, we are still connected to our natural physical surroundings on multiple levels. Populations are still bound by natural resources and as individuals we live by biological rules. Across philosophy, anthropology, sociology and psychology, a large but disparate body literature extols the benefits of engagements with natural environments. My research confirms that this natural immersion is particularly beneficial for many individuals on the autistic spectrum, due to the disconnect with majority societal norms discussed in chapter 1. This chapter engages with the forms of these connections when we consider the scale from cultural significance through awareness of other-than-human perspectives, interactions without social actors and how this impact individual types of engagements.

Anthropological perspectives on nature as a cultural signifier of identity

This project's ethnographic fieldwork on the neurodivergent lived experience considers the individual connection with the natural environment, but it also fits firmly within anthropological research into natural relationships as a cultural signifier and indeed, how this moves beyond the nature/culture binary constructs. This nature/culture dualism has been extensively theorised, notably in the conceptualisation of 'The Ontological Turn' of favouring methodological acceptance of variations of all types (Heywood, 2017). The primary rationale for including discussion of ontology in this dissertation is the argument that the autistic individual experience of the world is not simply a distorted version of neuro-normative universality of 'normal', but a distinct experience of the world in itself. As Holbraad (2009) noted, we may need to expand beyond the 'common humanity' that the dualist perspective alleged is the basic human condition. My analysis framed these different worlds through human-environment engagement.

Carrier and West (2009) explored the anthropological development of seeing natural environments like systems of external societal constraints. Instead, their work considered physical surroundings as part of the identification and meaning-making process. These have been illustrated in anthropological history in early research such as Evans-Pritchard's (1940) fieldwork with the Nuer as well as Rappaport (1968) and Steward (1968), though frequently

with a worldview dividing the social and the natural, approaching the environmental surroundings as space that constrained social practices. For these authors, the adaptive responses of societies were more important than the surrounding environments. Later perspectives drew stronger distinctions between people's identities and their natural surroundings – Space and place - specifically the way landscapes of meaningful places impact identity relations and cultural values (e.g. Gupta and Ferguson, 1992; Massey 1996; Hirsch, 1995). Hirsch's definition of landscapes as the ongoing cultural process through which we mentally locate ourselves in the world relates both to special awareness and the placement of ourselves in relation to identification with and relations to others.

The distinction between the internal social realm and external natural one was questioned within anthropology and gave rise to more integrated projects relating people's utilisation of surroundings to specific individual and social requirements. A wide variety of papers note the weaknesses of making distinctions between people and their environment (e.g. Strathern, 1980; Ingold, 1993; Latour, 1993). My project findings supported the notion that natural environmental connections were among strong personal cultural signifiers and that surroundings were meaningful to them. For example, Marina noted, "I think it is fundamentally important to experience life away from the environments we've created as an advanced species, to better connect with our intrinsic nature and all the benefits that brings. The science of why being outdoors makes us feel better is both fascinating and under-emphasised in our societies." This illustrated the relation between the meanings individuals assigned to themselves, surrounding natural environments and the inter-connecting relationship.

This emotional attachment and link to identity was specifically demonstrated by many participants during the time of identification and diagnosis. Several spent time in nature during their initial identification process and noted the benefits. Mia explained the relevance to her experience, "The time it finally occurred to me that I was autistic, I now look back upon as my rebirth. You have to journey through what feels like Dante's 9 circles of hell, as you dissect your entire past and try to rebuild a brand-new life. Getting out in nature during this state is very soothing, calming and healing." However, others felt that natural attachments had always been a core part of their lives. Amelia, for instance, commented, "Nature has always been where I go to have a deep think about things or when trying to make big decisions because it's a neutral territory and clears out distractions." Whether most relevant at liminal stages of life or as a constant, my research confirmed an interplay between the autistic

participants and their surroundings through considerate sensory interaction and creation of meaning through natural environments.

Interactive connections with other-than-human entities

These narratives highlighted the construction of an environmental identity in relation to participants' social identities. It aligned nature and other-than-human natural entities as valued components separate to the pressures and demands of the social and moral community, which aligns with Clayton and Opatow's (2003) construct of how we make sense of who we are through our relationships with nature, as well as Descola's (2006) focus on unsettling the restrictions of the Western historical product of separation between the cultural world of human being and other-than-human things of nature and environments. Descola thought beyond nature and culture as a simple dichotomy and illustrated different ontologies as to how humans relate to nature. In a similar way, my ethnographic research illustrated that an extensive proportion of the study participants experienced emotional entanglements with other living beings/co-inhabitants, in the form of connections with and ascribing identity, agency and/or spirituality to natural forces and objects.

One approach to analysing dynamic relations of the junctions of humans and surrounding environments is Latour's (1996) Actor Network Theory. This considers the agency of the other-than-human and the constantly shifting networks of relationships, based on generalized symmetry of all entities in a network. This consideration of equal value between human and non-human entities was a theme demonstrated in my research. For instance, Molly added, "I empathise with places, forests, animals and even stones and they all feel to me like sentient entities." Though Latour's theories don't attribute intentionality, the alignment between the ethnographic research lies in the heterogeneous connotations between humans and non-humans.

Tendencies such as these have also been documented by authors such as Viveiros de Castro's work on Amerindian perspectivism, where all entities are considered part of a cosmology that "does not discriminate between human beings and non-human beings," (1998:31). For instance, Alice portrayed her experience in this way, "I am usually moved to tears of joy and bliss in nature as I feel the consciousness of everything speaking to me, asking to be loved. I go to my favourite oak tree, she is like a mother and my old friend, I sing to her and cry and sit up in her arms. I feel more friendship with the trees, rocks and rivers than anyone. To me they are people". This also aligns with Kohn's (2013) exploration of anthropology beyond the

human and the inter-connectedness of humanity and natural settings. “Encounters with other kinds of beings force us to recognise the fact that seeing, representing, and perhaps knowing, even thinking, are not exclusively human affairs” (Kohn, 2013:1). This interactive perspective in relation to nature takes place during a time of retraction from a social sphere considered by the individual to be restrictive and inhibiting. This may lay the base for increased levels of intense engagements with other-than-human entities.

In the same work with the Amazonian Runa, Kohn applied connections between people, dogs and forests to illustrate how humans see themselves. He explores this creation of meaning in relation to critique of Western detachment from natural environments. In similar tendencies to those expressed in my ethnographic interviews, he argued for ‘anthropology of life’ - moving beyond anthropocentrism and accepting the meaningful agency of non-human others, that we are not the only kind of ‘we’ and that all life is semiotic. Numerous participants found companionship, connectivity and support through animals and noted a symbiotic relationship between themselves and other living things. For example, Jean explained, “Animals are in their natural environment, and you are in theirs, instead of the other way around, and us all suffering as things become more degraded in the urban world.” Others confirmed feelings of identification, such as Marina confirming, “As an autistic woman, I feel an animalistic aspect of my nature sits closer to the surface in me than others, with much more sensitive hearing and spatial/environmental awareness,” while Molly explained, “natural environments make feel like its guardian, or that I am connected, and it hurts to leave.”

These descriptions of close interactions for autistic women support the environmental anthropological perspectives such as those of Locke (2018). He noted that as humans, we inhabit a universe that includes other forms of life. As such, we should recognise our entanglements with surrounding environments across various scales. In addition, Kirksey and Helmreich’s (2010) exploration of ‘becoming with’ in interactive contact zones between human and our surrounding world as well as Tsing’s (2015) suggestion in her exploration of Matsutake mushrooms that “Human nature is an interspecies relationship” (Tsing, 2015:19). My contributors demonstrated increased awareness of their relationships with surrounding natural environments and the way these benefited their needs as autistic individuals. They recognised and responded to the agency of the other-than-human entities in perspectives that showed more emotional engagement and identification than that of social relationships with many people around them.

Restriction or exclusion of social actors in natural interactions

The relationship with identity deepens if we consider how, in a psychoanalytic sense, identity is formed by separation – distinguishing itself from what it is not (Marcia, 1988) as well as social appraisal (Mead, 1934). Becoming aware of the potential extent of one’s camouflaging behaviours in relation to this societal acceptance was described as a significant identifying trait related to questioning of personal identification. This connected with a need to recover from masking/camouflaging pressures.

As described in chapter 1, this practice of intentionally learning neurotypical behaviours, copying them in social situations in an exhaustive performance can be considered a central component of the autistic experience. For instance, Jean described the requirements for time in nature from this perspective, “I find people draining. There is no pressure to be anything or anyone in nature. You’re just another creature, another living being. As autistic people, being in nature allows us to be unaware of ourselves as we compare to others.” In a similar way, Hannah felt, “Time in nature gives autistic women the opportunity to be themselves completely, to unmask, to free themselves of the expectations and desires of others, to free themselves of the burdens of life and of being a woman, to just experience and to ‘be’.” These examples illustrated the complex relationship involved between natural and social constructs and expectations, with extensive implications on autistic individuals resulting in natural escapism.

In recent years, research has expanded in relation to natural environmental relations and positive influences on various states of mental wellness. Direct experiences of natural environments have been demonstrated to beneficially impact people’s sense of self-meaning (Hinds and Sparks, 2009). For autistic people, there is potential for significant benefits from engagements with natural environments away from other social actors. This was illustrated in the book *The Electricity of Every Living Thing – A Woman’s Walk in the Wild to Find Her Way Home* by Katherine May (2018), described by reviewers as ‘An autism memoir’ about the authors adult autism diagnosis and walks along the UK’s South West Coast Path. She described her desire to walk in solitude eloquently, “I walk, I think to let my mind sear around open spaces while my legs get tired.... [Walking] gives me permission to go a little bit wild at the edges, and to escape into my own thoughts. Here, I am normal in my strangeness. Perhaps walking is the only place where I don’t have to pass...I am wild with wonder” (2018:16,43). The book is written in a relatable and personal way and was mentioned by several participants as an inspiration. It illustrates multiple perspectives of this dissertation – a woman trying to

make sense of her own journey of autistic discovery through immersing herself in natural environments.

What materialised throughout interviews was a distinct need as an autistic woman to spend time in natural environments as a way to decompress from social demands. This frequently included solitary pursuits. Jean noted the relief of being part of nature, “It’s happening without much notice of you,” while Jay explained how she frequently felt observed both other human beings and obliged to comply with rules of society. She said, “In nature, nobody tells me how to behave. The only rule that needs to be obeyed is: Take nothing but pictures, leave nothing but footprints. Which is clear, nice and simple. In other words: Kindness and respect.” These descriptions demonstrated that participants often found solace in natural environments, which they didn’t experience among neuro-normative social settings. This aligned with the previously mentioned awareness of re-aligned personal identity and the interconnection with increased understanding of masking behaviours and social challenges.

When participants did spend time in nature with other people, they often experienced a need for partial restrictions on these interactions. Sandra explained, “Large groups or organised activities place too many demands and spoil the enjoyment,” while Natalia agreed, “I wouldn't tolerate natural activities with others, that is never de-compressing.” These comments illustrated the physiological impact of engagements with people, which was evidenced as a core challenge. Sophie summarised this perception, “Autistic women in particular are constantly dealing with a barrage of input from the outside world. I think it is extremely beneficial to autistic women to ‘unplug’ and immerse themselves into a natural environment that is calming and not as assaulting to the senses.” As this chapter has emphasised, the challenges exist for this group on multiple levels. The reciprocal engagements of natural connections without expectations or external pressures to confirm provided spaces of refuge and recovery for many participants.

Chapter 3:

Subjective creation of meaning through sensory natural interaction

I considered the surrounding framework of cultural contrasts in Chapter 1 and the ways interactive natural environmental connections can be seen as cultural and individual signifiers in Chapter 2. This final chapter will provide a detailed focus on the individual interactions. It will include investigation of the physiological and emotional impacts as well as sensory processing implications. My research illustrated how participants communicate about their experiences and enable me to analyse the ways in which meanings become and are reality to the autistic participants themselves.

It is possible to trace Western acknowledgement of the healing power of nature, noted in Latin as *Vis Medicatrix Naturae*, to Hippocrates and his position that “Nature is the physician of diseases” (Gupta, 2015). Though this has been interpreted in various ways, such as the self-healing properties of our bodies, this dissertation supports the notion that the power of nature also extends to our minds and emotions. This notion has been entrenched throughout history and noted in ancient Sumerian myths as well as Sanskrit literature, to mention just a few (Jones, 2020). Scottish naturalist J. Arthur Thomson described it succinctly as, “the healing power of nature is associated with mindful immersion in and contact with the natural portions of our external world” (1917:5). Today, there is an expanding field of ‘nature therapy’ and mounting qualitative and quantitative evidence of beneficial mental health impacts.

As noted previously, neurodivergent experiences can be explored as contrasting with majority cultural norms, but various research papers have identified that these may be related to alternative sensory processing, instead of irrational notions (Gosling & Moutier, 2018; Marco et al., 2011). I propose that individual experiences of connections with natural environments are significantly impacted by autistic sensory differences with physiological and emotional impact. To enable me to analyse my ethnographic research on the meanings created from these differences, it is beneficial to look to the broader neuroscientific evidence of these connections.

Natural environment relations to stress physiology, emotional cognition and behaviours

As neuroscience continues to develop, researchers are detailing aspects of the human brain and the degree to which environmental factors impact mental and cognitive health (Selhub and Logan, 2012). Some neuroscientific research indicates that the way the human brain is influenced by its physical environment and benefits of meaningful exposure to nature has been underestimated (Harper et al., 2019). Descriptive epidemiological research has noted positive relationships between increased green space in living environments and physical/mental health and longevity (Groenewegen et al., 2006). Among others, these include research showing that exposure to nature-based environments is associated with reduced levels of the hormone cortisol, which impacts stress levels, as well as higher activity in the parasympathetic branch of the nervous system, linked to calming in stressful situations (Alvarsson et al., 2010). This requirement for calming spaces resonated with several participants. For example, Alice explained, “I as an autistic woman feel like an alien in this industrial complex and everything it’s based on. I need to be free and natural and balanced in a simple, nature connected life. No noise from traffic, business, pollution etc. Just a quiet life in nature making my paintings and fabrics and worshiping the divine.” This is an illustration of the way some participants feel alienated from contemporary urbanised living in the same way they feel alienated from neurotypical culture.

It is possible to speculate whether the autistic experience described in my research can be seen as intensified examples of broadly universal connections with natural environments. The biophilia hypothesis as proposed by biologist Edward Wilson proposed an “innately emotional affiliation of human beings to other living organisms” (Wilson and Kellert, 1993:31). Wilson considered biophilia a common notion across cultures and extended to the emotional plane of cognition and behaviours – and that these reactions could be considered self-preservation including safety, nutrition and shelter (Selhub and Logan, 2012). As an illustration of this, Georgia noted how interactions with nature provided increased understanding of both external and internal needs, “Spending time in nature teaches us to slow down and to be present which can help lower anxiety and stress levels, develop better proprioception and interoception, and not to get locked into our safe space at home.” For some interviewees, a profound experience of a place in nature became a comforting part of their re-aligned narrative when they have so often felt displaced or alienated throughout their lives.

Wilson’s biophilia notion of emotional connection can also be explored in relating to affective responses, defined as the emotional response to a specific situation (Zhang, 2013). The extent

to which human beings understand this emotional connection to nature has cognitive, affective as well as behavioural factors (Schultz, 2002). The internal re-evaluation linked to the process of identifying autism in adult life seemed to highlight this understanding. One of these, Jean clarified that time spent in nature, “feel like it empties out my emotional bucket, but simultaneously makes me realize just how ill I have been between visits, which is sad.” Similarly, Sophie mentioned, “When I spend a significant amount of time in nature I am at peace, and I am a lot less emotionally turbulent.” These responses signify an increased awareness among participants of their own affective responses to nature.

Roger Ulrich (1983) studied affective responses in connection with the conscious experience of interaction with natural environments. His hypotheses on Stress Reduction and subsequent follow-up studies concluded that research participants showed significantly reduced physiological markers of stress after exposure to natural environments. These included higher alpha wave amplitudes, increased serotonin production, lowered pulse transition time and impact on skin conductance and muscle tension (Ulrich et al., 1983, 1991, 1993). The studies are just examples of the multitude of quantitative studies that have demonstrated the physiological aspects. Equivalent expressions of impact on stress were also noted throughout my qualitative research.

Stress factors emerged as a core theme of psychological and physiological responses to the autistic masking requirements and challenges related to social interactions. Many explained how natural interactions functioned as an antidote to stress in everyday life. Rayna confirmed, “I have spent more time in nature as a way to manage stress/change and to decompress from everything such as work stress/pandemic related strain and worries,” while Ruby told of seeing nature as a source of relief like she imagines medicines work for some. She was among several who explained that stress could also be caused by the action of not being able to spend time in nature, “The times when I have been in less natural environments were also times of heightened stress and ramping up of some of my autism-related difficulties.” This was also experienced by Sarah who described, “being in nature resets me. Not being able to re-energise this way feels like a build-up of static and causes me serious stress.” My research confirmed stress and emotional overwhelm as regular characteristics of autistic narratives. Though participants predominantly identified affective emotional responses rather than physiological symptoms in their descriptions of environmental connections, the research demonstrated a clear awareness of the ways natural interactions mitigated stress factors for autistic individuals.

Alternative sensory processing as core connective link

Though stress mitigation was a common theme in my ethnographic research, sensory processing differences emerged as one of the primary commonalities between autistic people and a core connective link between natural environmental connections and the impact on the autistic experience. While some participants felt that autistic differences in sensory processing had the potential to be overwhelming and stressful, others reported that it allowed them to make deeper connections and explore aspects more creatively than they perceived may be the case for neurotypical people.

The introduction of the book *'Ecopsychology, Phenomenology, and the Environment'* described the power of the sensory processes on our relationship with our physical environment as, "Bodily perception reveals the things around us not as inert or inanimate chunks of matter but as enigmatic, elemental presences that draw us into relation, coaxing our attention or repulsing our curiosity, dazzling us with their resplendence" (Vakoch and Castrillon, 2014:ix). Research has indicated that autistic people's brains process the five traditional senses (sight, hearing, taste, smell and touch) differently to non-autistic people (e.g. Kern et al., 2006; Crane et al., 2009). This also applies to other senses such as balance, temperature, proprioception (in terms of one's own body location in space) and interception (internal body senses). My ethnographic analysis supported this notion, though participants showed significant variation in the types of sensory input triggering extreme emotions.

The subjective perception of these sensory differences noted both beneficial and challenging connotations. For example, Natalia explained, "I tend to think of my sensory experiences as chaotic because they make me clash with the world around me. But the truth is I'm also very sensitive as to beauty and sensory changes. That's when I think acute sensory experiences can be both positive and negative." In similar fashion, Skye noted, "All my senses are heightened, so the world is incredibly vibrant and beautiful to me," and Rowan explained, "I find it to be true personally that autistic people connect deeply with nature, at least in part because it gives us permission to be ourselves, to exist as we are in this world. The alienation of our sensory processing is less acute when the meanings we create for ourselves don't have to be externally justified." While these experiences may not be unique to autistic individuals, almost all participants described intense sensory perception and processing as a core component of their autistic identification.

Autistic people can be both hypersensitive and hyposensitive, which may vary between senses (Elwin et al., 2012). This also has the potential to vary in intensity depending on mental, physical health or other factors. When describing sensory connectivity with natural landscapes, it is also beneficial to include sources outside academic research. For example, Henry David Thoreau's book *Walden* (1854), as a reflection of simple living in and connecting with natural surroundings, has been contemporarily described by various sources as a likely autistic perspective (Brown, 2009; Savarese, 2019; McIntyre, 2008). *Walden* is a work of detailed biological facts, potentially signifying an intense special interest, as well as an immersive description of the meanings created by Thoreau's connections with the woods, "I went to the woods because I wished to live deliberately, to front only the essential facts of life," (1854:25). He also made detailed contributions on sensory links with personal identity, "When I would recreate myself, I seek the darkest wood," (1854:51). His extensive philosophical writings have been described as the integration of the wilderness of nature and culture (Nash, 2014). Nash considered how Thoreau formulated his conception of the value of the wild from self-examination. In relation to adult autistic identification, parallels can be drawn to the re-evaluative process as described by the research participants.

Multiple interviewees shared extensive, visually and emotionally descriptive accounts of their autistic appreciation and integration of natural environments through sensory perceptions. For example, Rowan mused, "Being in nature restores my soul. I feel refreshed, energised and rebalanced. I feel like I absorb the energy of life from the planet and release the negative energy that builds up in my body." Another contributor, Mia, also vividly expressed her sensory entanglement with nature in a way more commonly experienced in poetry or spiritual writings, "I'm in no way religious. But when I walk in the forest, where the tree trunks stretch in hushed silence like columns toward the sky; canopies entwine above my head and give the illusion of a shielding roof; leaves filter the sunlight as were they made of stained glass and the ambience feels almost alive with a supernatural incandescent, I feel as if I have entered 'The Cathedral of Nature'. It resets and grounds me. The inflexibility of concrete does not positively contribute to the healing process of a broken or bruised mind." There have been examples of autism research based on the assumption that autistic people struggle with the meaning and significance of spirituality. Olga Bogdashina (2013) challenged this notion and argued that spiritual development in individuals on the autism spectrum may actually be ahead of neuro-normative people. She noted sensory perceptual and cognitive differences as the primary reasons for this connection. A significant proportion of participants described deep emotional connections and indicated some level of spiritual engagement with natural environments.

Natural experiences as beneficial to autistic mental health

The benefits of natural connections through intense sensory perception may have physiological benefits, as noted previously, but also potentially within mental health for autistic people. Increased levels of mental health issues, such as anxiety, depression, bipolar disorder and burnout, has been extensively documented within the autistic population (Ghaziuddin, 2005; Cage et al., 2018). For example, one study found that 77% of autistic adults had comorbid mental health conditions (Eaves and Ho, 2008). A significant majority of participants noted the natural environmental impact on these mental health aspects.

Aspects of eco-psychology consider the way our surroundings are sensed by our immediate awareness, though contemporary living often results in a feeling of disembodiment and disconnection between mind and body. “When we conceive of nature merely as an objective set of mechanically determinate processes, we tacitly remove our thinking selves from the world we inhabit,” (Vakoch and Castrillon, 2014:vii). However, studies have also explored the deepening transpersonal relationship between humans and natural environments, including “interaction with nature that helps lead to optimal mental health and psychological development,” (Davis, 2011:115). This deepening relationship was frequently reflected in the ethnographic interviews. While Abbie described nature as her sanity and that she struggled with mental health in winter when she was unable to access landscapes as frequently, Jay explained that natural connections are a source of mental strength and support her mental healing. One participant noted the specifics in terms of energy regulation: “I find natural environments calming, restorative and vitally important in relation to my mental health. Interacting with nature is a great way to regulate and transmute energy, which is beneficial for autistics,” explained Kira. These perspectives demonstrated an increased awareness of individual needs among participants and how to meet them.

Some contributors focused on natural engagements as an internal form of therapy or support system. They explained establishing a profound relationship with nature in a way that resonates with Tucker’s description of natural connections in “an authentic, holistic manner, acknowledging and honouring the value of the human, of the natural world, and of the relationship between them (2014:90). For example, Charlotte pointed out, “I think it benefits all people but for those who have been struggling with mental health, it seems to have a particularly profound impact. For many, meditation and mindfulness are difficult to achieve in their busy lives but the sensory aspect of time in nature, the sensations and patterns around

us, supports being in the moment and gaining a respite from worries, stress and internal monologues. I now ‘treat’ my ‘symptoms’ with time outside and as a result I’m better able to apply perspective to any problem or challenge. It has literally changed my life and gone hand in hand with discovering I am autistic.” This perception of ‘treating’ challenges with calming and restorative environments align with the beforementioned requirements to withdraw from societal expectations and requirements to mask one’s true identity through attentiveness towards an other-than-human world.

One specific example of this targeted attentiveness as a tool for mental wellbeing was the Japanese concept of Shinrin-Yoku - Forest Bathing. Though most participants described resistance to pursuing any specific ‘natural therapies’ due to concerns about social interactions or overwhelm, several mentioned the benefits of engaging in Forest Bathing. The primary aim of the practice to integrate all senses in the experience resonated with my participants as well as the lack of requirement to engage through an organised structure. For example, Simone mentioned how she utilises mindfulness walks using her senses intensely and Stephanie explained how she has utilised Forest Bathing for years, “I have felt a close connection with nature from a very young age. It is non-judgemental. It keeps going about its business despite you. While I’ve never participated in a formal setting, I have always known that for me, spending time in nature is an important part of my mental wellbeing.” The intense immediate focus on the surrounding environment which, as also explored in chapter 2, is seen as non-judgmental and without restrictive societal expectations, appears to have particular benefits on autistic mental health.

This concept of Shinrin-Yoku has been extensively researched, both in Japan and internationally. Yoshifumi Miyazaki, physical anthropologist and vice director of the Center for Environment, Health and Field Sciences at Chiba University, Tokyo, comments how, “throughout our evolution, we’ve spent 99.9% of our time in nature. Our physiology is still adapted to it. During everyday life, a feeling of comfort can be achieved if our rhythms are synchronised with those of the environment,” (Williams, 2017:23). Miyazaki’s experiments have shown that forest bathing recorded a 12% decrease in cortisol levels, 7% decrease in sympathetic nerve activity and a 6% decrease in heart rate (Park et al., 2010). In addition, there have been multiple empirical studies on the physiological and psychological effects of Forest Bathing. One review of research published between 2007 and 2017 referenced papers describing therapeutic effects on immune system function, cardiovascular system, allergies and respiratory disease, depression and anxiety and mental relaxation (Hansen et al., 2017). This paper also engaged with other hypotheses mentioned previously in this dissertation,

such as the Stress Reduction theory by Ulrich as well as Wilson's Biophilia theory to reinforce the tradition of Forest Bathing and various alternative ways to engage with natural environments. In relation to autistic perceptions, the statements of my research participants supported these notions and authenticated the way sensory immersion in the details of an environment without expectations can be beneficial for autistic mental health.

Autistic challenges of sensory aspects related to natural environments

However, contradictions also exist between the perception of natural environments as beneficial for autistic mental health and how the understanding that sensory overload is a very common autistic experience (Jones et al., 2003). This contrast was illustrated by Lily in the following way, "As an autistic person I lack the filter that sifts away unnecessary information. The load of incoming information is proportional to the time requirements for evaluation and data processing." This appears related to challenges in sensory perceptual experiences – for some of the research participants, the filtering of sensory input become flooded, resulting in autistic overwhelm and burnout.

Similarly, the utilisation of natural environments as escape or refuge from societal expectations were not completely uniform across the research group. For example, Ava commented that it depends on the individual autistic. She explained, "I know autistics who love nature and feel at their best when surrounded by it, but I also know autistics who don't enjoy nature as much because they are sensory avoidant. I've heard someone say that 'nature touches you all the time without consent'." This description was an interesting opposition to the majority of participants, who considered social interactions with neuro-normative society as invasive, rather than natural engagements. But the comment illustrates the intensity of the autistic sensory experience.

Coping with these types of powerful hypersensitive sensory processes were frequently described as causing significant discomfort. For some participants, sensory overwhelm from natural environments were initiated in earlier life. For example, Sandra commented, "When I was a child, I often felt overwhelmed by long days out. I had no control, and it was very stressful. I still have a love/hate relationship with nature. I love the idea, and the beauty, but I find that the sensory overload of being outside in the wind or sunshine or on sand is awful and it drains me." There is potentially a link between the participants' current experience of sensory overload and the negative connotations of earlier life causing an increased level of anxiety and tension.

Some autistic women felt that they have become increasingly aware of their tolerances and sensitivities after identification, as they were working to understand and accept their internal perceptions rather than masking them. For instance, Molly said, “I have less tolerance for things now that I am masking less. My sensory sensitivities seem to be getting increasingly noticeable,” while Kira agreed, “I don’t know if my sensory system has become even more sensitive or if I am just no longer able to suppress it to the same extent that I could before.” Though these experiences could be seen to be negative as the women found it harder to mask their sensitivities, I would argue that acknowledgement of an experience that causes discomfort is the first step towards compassion towards your own experience and awareness of personal boundaries.

This increased awareness was also noticeable when participants mentioned incorporating nature when their natural tendency was to retreat. Hailey was one of the women who described the expanding recognition of her own contrasting needs, “The best therapy for me as an autistic woman, when things feel tough, is to shut the world out. However, being outside reminds me that I’m small and that nature is big and constant. The sea helps calm me, the rhythmic back and forth, the vast openness reminds me I’m tiny and makes me remember that things I’ve been worrying about don’t matter in the grand scale.” She was able to take control of the agency of her own experience by utilising natural environments to frame it in larger contexts.

My research highlighted a potential need for support for autistic women in relation to managing significant sensory overload. One participant, Georgia, explained that there were many things she would like to try out in natural settings, but fear of the unknown had prevented her from trying new things. She said, “It would be amazing if there were groups or charities who understood our challenges, helped to build up esteem and reduce the fear of trying new things so that more autistic people could try something that they may never have known that they loved. To be more aware of ourselves in our own bodies, aware of ourselves in relation to nature and to deepen self-awareness and a connectivity with nature would be so exciting, igniting and empowering for autistic women.” Though the majority of the research group preferred to engage with natural environments through solitary pursuits, this demonstrated the lack of provision for supporting autistic individuals in reviewing the impact of their sensory processing challenges and potentially embrace experiences that may be beneficial for their physical and mental health.

Conclusion

In this dissertation I have conveyed ethnographic narratives of autistic women, who may be equally exposed and highly resilient. Through analysis of their detailed and open communication, framed by anthropological and eco-psychological theories, I have provided observations on the qualitative voices of neurodivergent interactions with natural domains. In this respect, it provides insights for both academic anthropology and practical applications to expand support, understanding and acceptance of neurodivergent perspectives.

This project has investigated why autistic women may need an escape or refuge within natural environments. My ethnographic research demonstrated how there is a contradiction in being part of a surrounding culture, yet still feel alienated and isolated within it. In this respect, the internal cognitive lived autistic experience can be seen as a culturally separate minority from the societal majority culture. This allowed me to frame the life stories of individual natural connections as illustrative of anthropological considerations of reasoning and lived experience in cross-cultural relativism.

Participants provided extensive descriptions of personal conflict and challenges with majority cultural expectations leading to significant consequences from masking behaviours. These internal traumas are real and significant to the individuals but may have been masked to the extent that external understanding hasn't been achieved. Contributors described a growing realisation for the individual that some personal challenges and conflicts arise from the requirement to fit within social constructs that does not accept your difference. Hence, the dissertation considered both personal agency and a socially grounded view of culture to capture the nuances of understanding neurodiversity as a separate cultural community by moving beyond judgement based on the standards of majority cultural norms.

This resulted in requirements for coping strategies. Requirements to withdraw from the expectations of other people into natural environments without external judgement emerged from the frequent accounts of the burdens of trying to fit in with a prescribed society. This would also reduce the internal overwhelm. Multiple participants highlighted unmasking and taking ownership of personal narrative agency, in the form of saying 'I' and 'we' over time and in relation to self and others, became increasingly important during the period of late autistic identification and inclusion in the autistic community. This illustrated the relation

between the meanings individuals assigned to themselves, surrounding natural environments and the inter-connecting relationship.

Through my research, I have contextualised the re-alignment of personal identity through framing narratives within environmental anthropological theories. One primary focus was on natural relationships being utilised as cultural signifiers, such as notions of belonging and creation of meaning. This validated how beneficial natural interactions frequently took place during a time of retraction from a social sphere considered by the individual to be restrictive and inhibiting. In a majority of my ethnographic interviews and questionnaires, this provided the base for increased levels of intense natural engagements and emotional entanglements with other-than-human organisms, in the form of connections with and ascribing identity, agency and/or spirituality to natural forces and entities. Testimonials illustrated the complex relationship involved between natural and social constructs and expectations, with extensive implications on autistic individuals resulting in natural escapism. The reciprocal engagements of natural connections without expectations or external pressures to conform, provided spaces of refuge and recovery for many participants.

To enable an analysis across scale, the dissertation narrowed the focus from majority/minority culture and the individual in relation to cultural signifiers, to the subjective experience specific to my research participants. Through consideration of eco-psychology perspectives and neuroscientific studies, the research demonstrated the physiological and emotional impacts of natural interactions for autistic women.

This determined that close natural connections played a significant role in maintaining mental health. The ethnographic descriptions and analysis of literature confirmed stress, emotional overwhelm and comorbid mental health conditions such as anxiety, burnout and depression as frequent characteristics of autistic narratives. This was supported by my research. Participants identified both affective emotional responses and physiological impact in their descriptions of environmental connections. The research demonstrated a growing awareness of the ways natural interactions mitigated stress factors for autistic individuals. The internal re-evaluation linked to the process of identifying autism in adult life seemed to highlight this understanding and increased the awareness among participants of their own physical and affective responses to nature.

My analysis confirmed that individual experiences of natural engagements were significantly impacted by autistic sensory differences. Some participants described complex relationships

with natural environments due to intense sensory perception leading to anxiety, overwhelm, autistic burnout and sensory avoidance. These processing differences could result in stress due to the filtering of sensory input becoming flooded and overwhelmed. However, a majority reported that sensory processing differences often allowed them to make deeper connections with nature and explore aspects more creatively than they perceived may be the case for neurotypical people. One primary example was the utilisation of Forest Bathing as a way to engage intensely with natural environments across all sensory. A significant proportion of participants experienced emotional entanglements with other living entities, in the form of ascribing sentience, identity, agency and spirituality to natural forces and existences, with several noting appreciation of spirituality of inter-connectedness of humanity and natural settings.

This perception of supporting autistic challenges through interactions with calming and restorative natural environments aligned with the requirements for masking relief, increased awareness of sensory processing and a requirement to de-compress from the expectations of the surrounding majority culture. Despite the occasional descriptions of sensory overwhelm, my analysis confirmed that the majority of participants felt natural environments had a positive impact on enhanced construction of meanings and their expansion of self-acceptance of their autistic re-aligned life stories. The majority of the research group preferred to engage with natural environments through solitary pursuits. Current support provisions for late-identifying autistic individuals, or indeed autistic people going through the process of identifying, may benefit from reviewing the impact of their sensory processing challenges and potentially embrace natural environmental interactions, that may be beneficial for their physical and mental health.

This dissertation displayed the lived experiences of autistic women, showing the strength, determinism, self-acceptance and resilience it has taken for them to reach where they are today and where they hope to go. Similar to anthropology prior to the reflexive turn, there has been a lack of reflexivity and personal narratives within neurodiversity research. The core premise of this work was to provide a space for the voices of this marginalised group - to have their experiences, life stories, identification journeys and understanding of natural connections as safe, non-judgemental places heard and recorded.

The innovative perspective that developed during my research was the combination of autistic narratives, an understanding of autistic marginalised culture and how interactions with natural environments support the societal challenges faced by autistic women. Utilising

reflexive ethnography enabled my research to expand beyond the author or the subject to deepen the narrative and utilise reflexivity as a mirror for analysis. Future reflexive work by autistic authors, featuring autistic voices, could increase potential for expanded inclusion and acceptance within neurodiversity research. This would allow for increased cross-cultural considerations positions within comparable efficacy and acceptance of alternative rationality.

For many adults who have come to understand their autistic identities later in life, like myself, available resources after diagnosis are almost non-existent and focus primarily on external requirements for support. There is little to no support in relation to processing the internal re-structuring required to become increasingly self-aware and lead onto self-acceptance. Broader awareness and acceptance of autistic narratives and the potential benefits of natural environmental connections across multiple levels, as explained in this dissertation, may assist late-identified/diagnosed autistic people in their search for self-acceptance of their autistic identity and re-aligned life stories. This is where we as autistics can achieve naturally connected neurodiversity and establish a sense of our own perspectives.

Reflexive Epilogue

I write this reflexive epilogue while surrounded by the white noise roar of ocean waves. The noise is a comfort, a core sensory memory, a connection to the natural coastal world of my early life, when solitary exploration of coastal natural habitats was a sanctuary from a social life where I didn't belong. I mentally review the sensory experiences of the day – my feet touching sand, rocks and grass, the textural feelings of leaves, exhilarating thrill of the cold sea on my skin, noise of the wind, warmth of the sun and smell of sea salt. I also explore the sensations created by the physical tension of expectations from people I had to contact, the navigation of language, justification of personal choices and relief when I could put distance between myself and others.

This is just one day, and yet it succinctly illustrates the narratives that run through this dissertation. I am one of these women, who have entrusted me with their stories. I am a cultural alien in this majority culture where I externally look similar to those around me, but my sensory processing and internal narrative flows along different wavelengths. Many early memories elude me, but when I return to the landscapes of my childhood, my senses become alive with recognition. I greet the oak trees, rosehip bushes and granite rocks like old friends. I find them reliable, calming and connected to me on a core sensory level without external judgement.

I included a considerable number of participants' direct quotes in this work. The primary reason for this was to ensure my analysis was based upon their narratives, not mine. I needed to ensure that my bias of understanding their viewpoint didn't result in foregone standpoints and presumed conclusions.

I argue that, if conducted reflexively, my role as a late diagnosed autistic woman puts me in a position of increased understanding and analytical ability of neurodivergent individuals and culture, an equally the contrast with the surrounding majority culture. I, like a significant proportion of this project participants, had never considered that our differences and challenges were related to autism. Few of us understood and appreciated that there was an explanation for the challenges we had experienced throughout our lives.

The fact that both I and the participants have lived through such a transformative identification event as adults and experienced the creation of subjective reflective meanings,

have enabled me to explore autistic connections with natural environments as more than objective analysis, but provide a deeper review of individuals with agency and the ability to make choices and meaning. It aligns with the ontological turn, how we create subjective meanings and acknowledging equivalent realities. Exploring reflexivity before and after the research project has enabled me to provide increased recognition of neurodivergent narratives and acknowledgement of both cultural and subjective structures of consciousness, where meanings are reality to us as autistic individuals.

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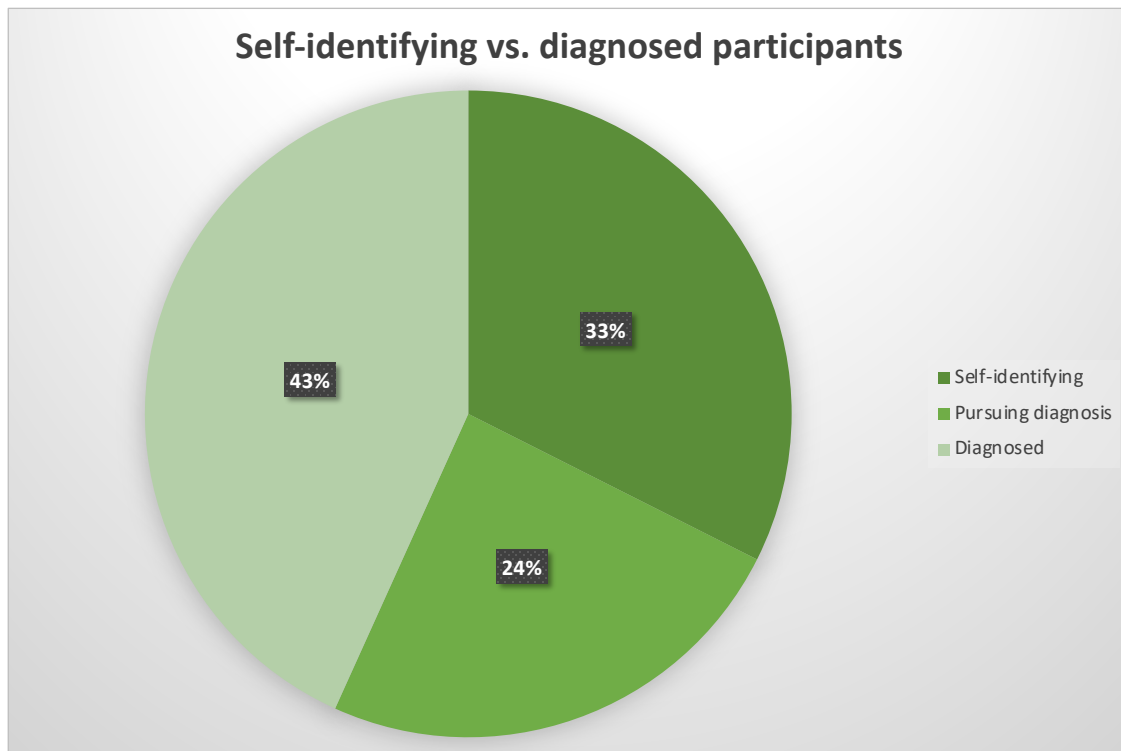
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Appendices

Appendix 1: Distribution of self-identifying, pursuing and diagnosed participants



Appendix 2: Interview questions

**Naturally Connected Neurodiversity
Masters Research Project – Environmental Anthropology
Katrine Callander katrine@naturalneurodiversity.com or kac45@kent.ac.uk
University of Kent, Canterbury UK**

Please confirm that you have received the Research information and Consent form for the project and that you agree to participate in the research. Consent can be provided by signing the consent form, by confirming by email/direct message or verbal confirmation. Consent can be withdrawn at any time. No personal details will be carried forward into analysis or written research project.

Personal information

- Please state your name (can be first name only) and current age
- Could you confirm if you are diagnosed by a medical professional or self-identifying as autistic
- At what age did you identify and potentially receive diagnosis.

Initial identification and change in narrative

- Please tell me about the time in your life when you started to consider you may be on the autistic spectrum?
- What made you consider that you may be autistic?
- How did this make you feel about your life history?
- Was it a positive or negative experience to identify as autistic, or did it fluctuate?
- Did you experience a period of a 'liminal' transition stage when you first identified as autistic and how did this make you feel/how did this have an impact on you?

Research and Diagnosis/identification experience

- How and where did you look into information about autism?
- Please tell me your thoughts about the language used in the information/research/terms you encountered when looking for information?
- Did the material you read/saw/experienced match up to your own personal experience?
 - o If so – in what ways?
 - o If not – how was the information different?
 - o Do you think that your gender affected any aspects of this?
- Did you pursue an official diagnostic assessment?

- Yes
 - Why did you pursue a diagnosis and through what route?
 - Please describe the process in your own words.
 - Did you achieve a diagnosis based on your first contact with a medical provision?
 -
- No
 - Why not?
 - Do you believe your experience may have been different if you had a diagnosis and in what way?

Personal narrative

- Has your diagnosis/self-identification had an impact on your life? If yes, how?
- How has it changed your narrative on your personal history and life narrative?
- How have others reacted to your diagnosis/discovery?
- Are there times when you have chosen not to divulge it? If so, why/why not?
- Can you identify how you may have tried to fit in/mask/camouflage?

Challenges and strengths

- What parts of your life do you feel autism has impacted negatively?
- Can you tell me how you cope with these challenges?
- Do you feel there is more you could do to work on the impact of these challenges?
- What are the main areas where you see autism as a strength/positive influence on your life?
- How have challenges and strengths changed during the course of your life?

Connection with natural environment

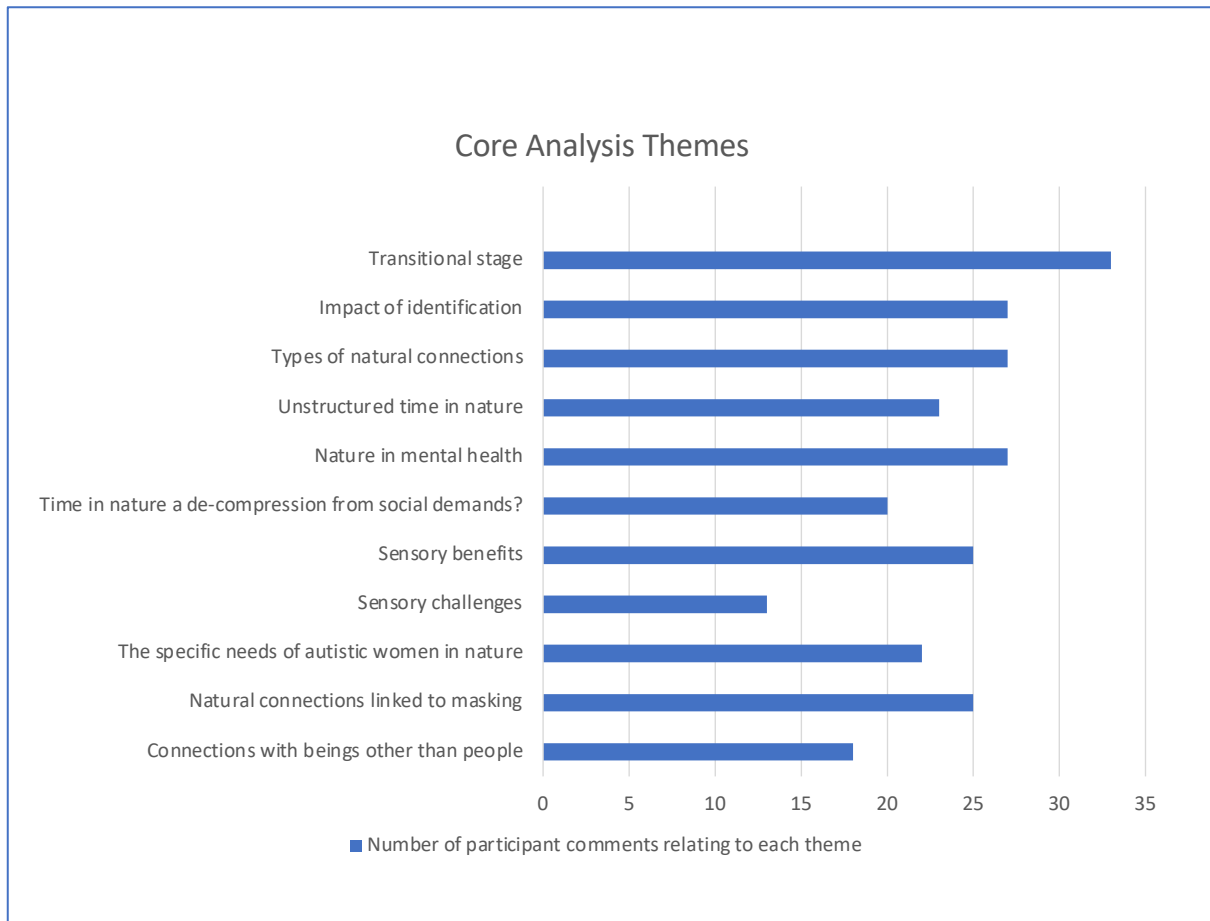
- Do you spend time in nature? If so, in what ways?
- How has natural environmental connections or lack of these been throughout your life?
- Do you feel that this has an impact on your challenges/strengths as an autistic woman? If so – in what ways?

- Have you heard about topics such as walking therapy, wilderness therapy, human rewilding or therapy gardens?
 - o It so, have you experienced any of these and how has your experience been?
 - o If not, would you consider any of these?
 - o Are there other natural therapies/strategies you have explored?
 - o Are there other natural therapies/strategies you have considered exploring but haven't tried yet?
- What are your thoughts on nature and the environment in relation to mental health?
- How do you think this is important in relation to autistic women?
- How would you like to incorporate nature into your life?
- What positive or negative impacts do you believe it could have?
- Is there anything else you would like to tell me about this topic or your personal history that you believe would be relevant and interesting?

Please send your answers back to me on katrine@naturalneurodiversity.com or kac45@kent.ac.uk by 30 April 2021.

Thank you so much, Katrine

Appendix 3: Core analysis theme breakdown



Appendix 4: Example of themed compilation of participant comments

Example of themed compilation of participant comments***Theme 1: Types of natural connections***

1/ You see all kinds that you don't in the city, and they are in their natural environment, and you are in theirs, instead of the other way around. It feels more in balance to see animals in nature thriving as they should, rather than us all suffering as things become more degraded in the urban world.

6/ I remember being in my early teens on a group camp in a beautiful woodland by a lake. I remember taking myself off to the lake one evening to sit, watch the animals and birds come to drink, I drew what I saw and wrote about it, wrote poems. I remember feeling so calm and peaceful, totally on my own and relaxed. That was my highlight of that camp. I would have loved and would love now more opportunities like that. I love reading books by Jonathan Lewis-Stempel- I started off reading *The Runnin Hare*. It was like a substitute for being in nature myself. I have gone on to read many of his other books and I find that they are another way that I can experience nature.

7/ solitary (or with a canine companion) pursuits in these areas are enjoyable and serve to recharge my batteries.

8/ I have a beautiful golden retriever who blesses me with the need for a daily walk through my beautiful surroundings and beaches. If I don't get that I feel quite out of sorts. My dog is one of the best things I could have ever done. She takes me out, gives me a focus and a talking point and gives me the connection to nature I crave.

11/ I come from a very rural place, so I spent a lot of my childhood in nature because that's all that we had. I had lots of cats and I was always incredibly closed to them until I left home at the age of 18.

13/ When I was a child I've had many dogs and cats on the other side of the house and my brother's birds in the kitchen which I loved to set free and then had to put them back in their cages before everybody comes home again. The cats were sleeping on my blanket and the dogs were family I was basically licking my food from the plate occasionally and I was miaowing. I also loved snails. I was finding and raising kittens and puppies others were throwing away.

15/ Even visiting a place for a few days makes feel like its guardian, or that I am connected, and it hurts to leave. I am not sure that it is an autistic thing per se, but I would not be surprised if this is common amongst us. I am not religious at all, but I empathise somehow with places, forests, animals and even stones and they all feel to me like sentient entities.

16. I have experienced lots of different energy frequency healing modalities (sound, colour, reiki etc etc), herbal treatments and teas and plant medicines, I walk barefoot on earth/sand/water regularly, I have a meditation practice, menstrual cycle awareness practice.

17. I walk barefoot a lot of the time on grass and sand

19. I think I would like a therapy garden. I have tried oils, vitamins, meditation, dry brushing, detoxing, counselling, art therapy

20. I make an effort to go for a walk every day. Usually in the forest or/and by the ocean, as I am fortunate to live next to both. walking therapy is liberating. No requirements for eye contact. Peace full surroundings. The walking focuses one's thoughts. Winter bathing: My ADHD brain just loves the increase in noradrenalin and dopamine production this activity gives.

22. I enjoy nature photography quite a bit. I also like spending time in nature to calm my nerves. Time spent in nature has added to my strengths as an autistic woman and has also led to the breaking of my marriage. When I started to incorporate lots of time in nature in my schedule I started to be a lot more internally stable and confident, this led to my ex-husband to be very upset at the amount of time I needed alone in nature and that started a cascade of that breaking apart because I had started creating boundaries and used nature to do that quite often. Honestly though, I would not change a thing, I highly value my sense of self and who I have become and would never sacrifice that again, I am very happy with myself, and nature is a huge part of that. o I did do open water swimming for a long time as a coping strategy.

23. collections (of rocks, bones, nests, seeds etc.) have all been beloved “interests” more or less consistently since childhood.

24. Being in nature restores my soul. I feel refreshed, energised and rebalanced. It’s absolutely essential for my life. I feel like I absorb the energy of life from the planet and release the negative energy that builds up in my body. I use homeopathy, natural medicine, and healing foods. I’ve started growing mushrooms and have some purely medicinal varieties.

26. I love to go canoeing or kayaking. I’m constantly going for hikes or walks with my dogs.

27. Forest bathing. I wish for more walks, more solo exploration of local environments with no time limit

31. mainly as a gardener now, also as a photographer. I have a small field with a veg patch, orchard, hens, beehive and a lot of wildflowers and ‘unkempt’ areas. I grew up with dogs and horses

32. It’s my favourite thing! And all of my work is about connection with nature. I go to the woods, beach, I sit by the river, I caress rocks. I am usually moved to tears of joy and bliss in nature as I feel the consciousness of everything speaking to me, asking to be loved. I go to my favourite oak tree, she is like a mother and my old friend, I sing to her and cry and sit up in her arms. I’m an artist and all my work are based on the peak experiences of being in nature. I draw and paint in nature, sit, walk, listen, run, laugh, explore.

34. I work outdoors running an outdoor nursery site at my school. I don’t think I would have come to the realisation that I am autistic if I hadn’t had the calm and clarity of having been working outside for several months.

37. I love to go sit by the sea, especially at sunset. I also enjoy the woods and feeling the fresh air and energy from the trees. I like to go on nature walks and to look at tiny plants or other tiny things others don't notice. I collect shells, stones, pinecones etc.

Appendix 5: Participant age of identification and current age distribution

