

**THEATRE
ACADEMY**

X UNIARTS HELSINKI

2019

THESIS

A Slight Bend of the Forearm

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MA ECOLOGY AND CONTEMPORARY PERFORMANCE



ABSTRACT

Date: March 4, 2019

AUTHOR Christiana Bissett		MA ECOLOGY AND CONTEMPORARY PERFORMANCE	
A SLIGHT BEND OF THE FOREARM		55 PAGES	
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The contested practice of dowsing is a technique for searching for underground water, minerals, ley lines, or anything invisible, by observing the motion of a pointer. Throughout this process of artistic research, I have developed my own relationship to the method of dowsing. This paper illustrates a landscape which has become through and with this method.

The movement of dowsing rods is simultaneously an expression of your own knowing, as it is an indicator which you can analyse for new results. Information can be seen as multidirectional as it seemingly flows both from and into the body. As such it breaks down the linearity of knowledge production and reception, rather suggesting a form of fluidity. Throughout this paper, I will question what it might mean to know or believe, given the challenges which face us, in an age of fundamental change.

Looking in detail, at the way in which dowsing is understood in popular culture, and layering with my own experiences, this thesis seeks to unpack the nature of a binary in which some knowledges are centralised in order to establish a realm where others might only be considered as 'alternative'. I will propose that the nature of this binary is both gendered and ableist, and that the exclusion of perceptual and bodily based knowledges, has a significance in how we might approach our ecological condition.

After presenting this analysis on the state of knowledge and truth, with reference to the post-structuralist turn and the so-called 'post-truth' era, this thesis will explore how my own investigation in contemporary performance responded to the complexities of truth and fact in the age of climate crisis.

ENTER KEYWORDS HERE

dowsing divining witchcraft magic performance theatre somatics neurodiversity
ecology knowing

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Introduction

The name of this research process, '*A Slight Bend of the Forearm*', is taken from a paper written by Professor of Engineering Bo Nordell in 1988. Nordell cites tests in electromagnetic strain on human bone, as a possible scientific justification for the dowsing response. His paper contains all of the complex terminology one would expect from the engineering discourse, including technically labelled diagrams as well as detailed figures of results, in values of voltages and temperatures. Despite the scientific methodology of his paper as a whole, Nordell's research concludes with a line which I found strikingly open, subjective and specific:

In my opinion the divining rod itself is of less importance to explain dowsing. The rod moves for one reason only, a slight bend of the forearm.¹

As I will expand over the course of this thesis, this citation was deeply significant in the unfolding of my research into, and with, the practice of dowsing. I found that in Nordell's calm evasion of further explanation, there contained a confidence and contentedness in the causation of dowsing: that it works simply because it does. While I cannot presume that the poetic reading I took from this wording was anywhere near Nordell's intention, the sentiment I found in his words resonated with a feeling I hope to convey throughout this paper. That is, there is something I found in the act of dowsing, which opened up a different form of knowing.

¹ Nordell, Bo. 1988. "The Dowsing Reaction Originates From Piezoelectric Effect In Bone". Presentation, 6th International Svedala Symposium on Ecological Design, 1988.

On reflection, given my now several year relationship with dowsing, and the feelings it has affected, the physical practice has worked as an anchor for my thought, on a range of issues within ecological thinking and its implications for contemporary performance. Particularly this investigation has opened up for me, a concern in the nature of knowledge within our complex and specific environmental climate. Throughout this paper, I will question what it might mean to know or believe, given the challenges which face us in an age of fundamental change.

Looking in detail, at the way in which dowsing is understood in popular culture, and layering with my own experiences, this thesis seeks to unpack the nature of a binary in which some knowledges are centralised in order to establish a realm where others might only be considered as 'alternative'. I will propose that the nature of this binary is both gendered and ableist, and that the exclusion of perceptual and bodily based knowledges, has a significance in how we might approach our ecological condition.

After presenting this analysis on the state of knowledge and truth, with reference to the post-structuralist turn and the so-called 'post-truth' era, this thesis will explore how my own investigation in contemporary performance responded to the complexities of truth and fact in the age of climate crisis. In relation to climate crisis, this paper is written with an assumption of some shared reality, in regards to environmental change, and its impact on our collective experience. Coined by Latour, the 'climatic regime' is a term which might summarise our present situation:

...in which the physical framework that the Moderns had taken for granted, the ground on which their history had always been played out, has become unstable. As if the décor had gotten up on stage to share the drama with the actors. From this moment on, everything changes in the way stories are told, so much so that the political order now includes everything that previously belonged to nature – a figure that, in an ongoing backlash effect, becomes an ever more undecipherable enigma.²

I find that this definition captures for me the level of change we are experiencing in society, as well as across the arts and humanities. It tells that we find ourselves in a time of fundamental reorientation as storytellers and image makers, whereby ecological degradation on a global scale has affected not only the stories that ought to be told, but the references and languages with which we might tell them.

In many ways, this foundational shift in the humanities creates a daunting outset for a masters thesis in ecology and performance, beset with contradictions and sudden shifts. However, I find the discipline of artistic research to be a generative and responsive place from which to respond to the complexity of our times, likewise through a framework of dowsing, I hope that this thesis might propose, or re-propose ways of knowing, when the world feels somewhat unknowable.

² Latour, Bruno. 2017. *Facing Gaia*. Polity

Dowsing as a Method

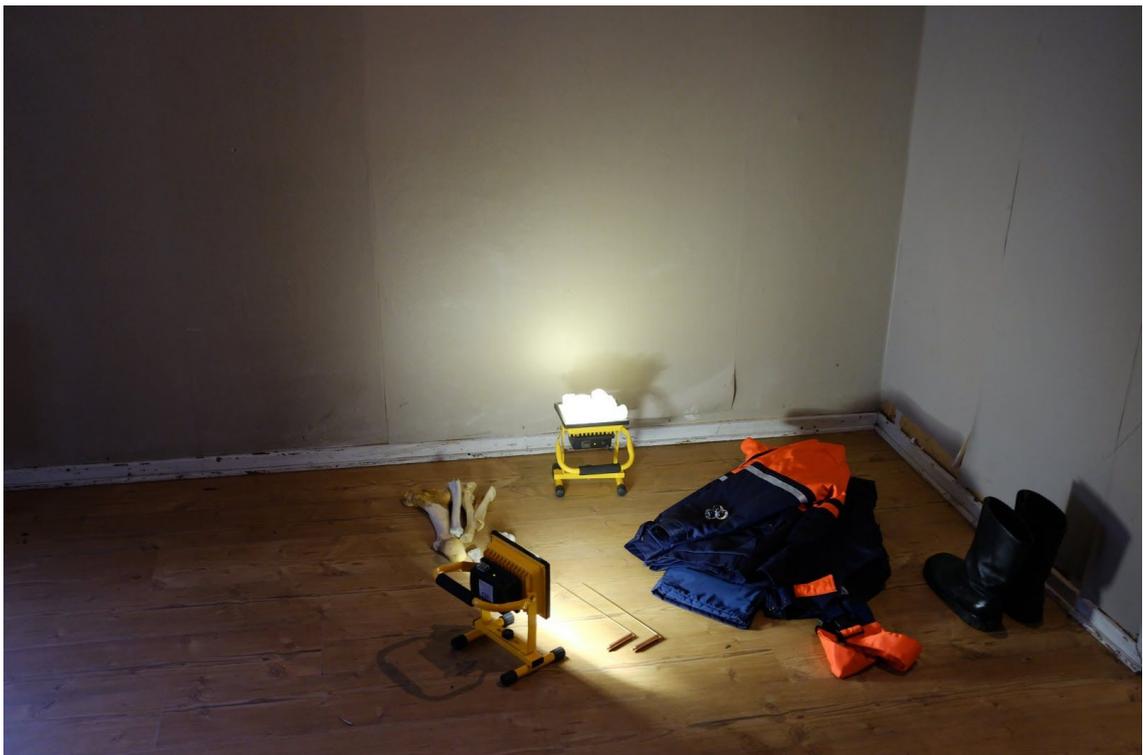
A week before my performance premier in studio 3, I am sitting outside of the black box studio, in the central tori. A fellow student is treading slowly across the breadth of this large atrium like space. He repeats this trajectory from one side of the space to the other, only with each breadth he moves approximately one foot on the long axis of the building. He is scanning, his gaze is focused on the ground and he is clearly concentrated.

The floor here is made up of many identically sized wooden blocks placed very close together, but the gaps between them have a depth of a couple of inches. Every now and again this student bends down and peers into the gaps. Eventually his winding motion brings him to the bench where I sit. I ask him if he is looking for something and he replies that he has lost a small key. A little unsure of myself, I tell him that I have some tools for searching if he would like to try them. Then in the Tori I give him a short instruction in the method of dowsing.

Both then and now I begin with a disclaimer, that the feeling of dowsing, as I experience it, is particularly difficult to describe. But I will try to unpack why a practice of dowsing, has become simultaneously the interest of my research, and also a method of knowing.

The practice of dowsing for me, is a means of experiencing *with* my surroundings through something like liquidity. The movement of dowsing rods is simultaneously an expression of your own knowing, as it is an indicator which you can analyse for new results. Information can be seen as multidirectional as it seemingly flows both from and into the body. As such it breaks down conceptions of the linearity of knowledge production and reception, rather suggesting a form of fluidity.

The body is one, or a collection of many individual points in a network of environmental agencies. Dowsing spatialises this idea, as it performs the interconnection between the body, bodies of water, or any other flow of magnetic or energetic presences. Dowsing relies on a type of knowledge which is not cognitive in the sense that it is not channelled via rational process as associated with the head, but it is still a perceptual cognition. I find that this form of thought works best in fact, when my head is distracted somehow. I have often times found myself surprised to see the rods cross, that a process has been happening without my conscious attention. Rather this ‘thinking’ takes place predominantly in the bone of the forearm.



Dowsing tool kit, prior to *A Slight Bend of the Forearm* 2017. Photo by Antti Ahonen

Dowsing undoes the illusion of air as empty space, and rather suggests that matter might permeate the solid and non solid structures surrounding us. As a method, dowsing proposes that information does not follow a single direction - from transmitter to receiver - but rather *becomes* among many agents. In its inexplicability, dowsing relies on a trust of this information, in an abductive sense, dowsing works only because of a slight bend of the forearm.

For Robin Nelson artistic research likewise might develop what he called forms of 'liquid knowledge'³, the form of knowledge which Abramovich reflects '*comes from experience*'⁴. For Nelson '*A [practice as research] methodology extends the softening trajectory towards liquidity, but developing its own criteria for credibility and rigour*'⁵. Dowsing, and the tools of dowsing rods, have brought me some understanding of this field, and structured research which explores what many forms this rigour might take.

Throughout this thesis, I will refer back to the experience of dowsing method as a particular form of knowing, and attempt to develop, through my experience of dowsing, a field of ideas. I will extend the type of thinking that dowsing has helped me to understand, into other perceptual processes and suggest further arenas where it might be applied as a tool for thought.

My initial interest in dowsing arose from conversations with my father, a trainer for a construction college in Glasgow. As part of his role he engages with labourers across trades, discussing with them the current on-site practices. He recounted an anecdote, whereby the mention of dowsing was met with smirks and side glances between colleagues who would sheepishly admit to the use of dowsing rods on site. He reminded me, that as a child I had attended a summer

³ Nelson, Robin. *Practice as Research in the Arts Principles, Protocols, Pedagogies, Resistances*. Palgrave MacMillan, 2013, 53

⁴ Ibid.

⁵ Ibid.

school at the local museum of farming and agriculture. Alongside lessons in vegetable cultivation, we participated in a day of dowsing across the fields. I was around ten years old, however a visual has remained with me, whereby the group all found continuity in our results. I recall that as a group we found ourselves spread across some distance, as led by the act of dowsing, in what appeared to be a clear diagonal across the field. When compared to the underground water map presented by the leaders at the day's end, I felt unshaken that our collective experience, despite being un-reified by the map, was somehow authentic. This first memory of dowsing, is largely representative of the sensation which I then became accustomed to, when I developed the practice throughout this research.

When I began to experiment with the practice of dowsing again, I did so through the most readily available information - wikihow instructions. Likewise I recruited the most available material, two bent steel coat hangers. I practiced on the landing of my home in Helsinki Pasila. I was inspired by the pedestrian qualities of these conditions, the makeshift aesthetics and space for subjective interpretation. The instructions with which I began, and continued to reference throughout the practical research are as follows:

Hold the rods steady in your hands. steady and straight, at an arm's length from your body. Make sure the rod ends are not tipped upward or downward. This will ensure you are able to get a good reading of the area.

Walk back and forth slowly over the area that you are testing. Make sure you hold them lightly but with some grip so they do not roll or shift in your hands as you walk.

Wait for the rods to cross or move. Once the rods detect, the end of the stick should rotate or be pulled downward. The rods may also cross over each other when you stand in a certain spot⁶

From these instructions, I built up confidence in a dowsing method, moving around the infrastructure of my home, creating a feedback system where I would expect the rods to cross in relation to, for example, the water pipes leading to the bathroom or kitchen. I tried to attend to this practice with a very open and flexible understanding of its workings, following my instincts without too much thought on the rationale of the function.

Through this training, I have established a method for finding water, or other charged infrastructure. It is a method that I cannot explain, but one that I deeply know.

⁶ "How To Use Dowsing Or Divining Rods". 2019. *Wikihow*.
<https://www.wikihow.com/Use-Dowsing-or-Divining-Rods>.

History

Dowsing is dictionary defined as “*a technique for searching for underground water, minerals, ley lines, or anything invisible, by observing the motion of a pointer*”⁷. While known by some as *water witching* or *divining*, from the latin *virgula divina*⁸, I personally refer to the act as ‘dowsing’, originating from the verb to *douse*⁹ - meaning to drench or soak. For me, this conjures imagery of immersion. I imagine that in this act of soaking, that I become more materially connected to my environment, that as water might create a conductive circuit, I become aware of my own conductivity in relation to my surroundings.

The geomantic act recruits different materials in its many forms, including the pendulum, a ‘Y’ shaped wooden stick, and right angle bent metal rods. Some dowsers work without any instruments¹⁰. The earliest recorded references of dowsing appear in texts dating back to the 1500s. The earliest written example is found in Agricola’s *De Re Metallica*, wherein the text and accompanying woodblock prints illustrate the use of dowsing by German miners in their search for underground metal ore. We can understand from Agricola’s account, that at this time dowsing’s validity was contested:

...There are many great contentions between miners concerning the forked twig, for some say that it is of the greatest use in discovering veins, and others deny it. ... All alike grasp the forks of the twig with their hands, clenching their fists, it being necessary that the clenched fingers should be held toward the sky in order that the twig should be raised at

⁷ Oxford English Dictionary, s.v. “Dowsing,” accessed 26. February. 2019, <https://en.oxforddictionaries.com/definition/dowsing>.

⁸ Vogt, Evon Z., and Peggy Golde. 1958. “Some Aspects of the Folklore of Water Witching in the United States”. *The Journal of American Folklore* 71 (282), 519.

⁹ Oxford English Dictionary, s.v. “Douse,” accessed 26. February. 2019, <https://en.oxforddictionaries.com/definition/douse>

¹⁰ Nordell, Bo (1988)

that end where the two branches meet. Then they wander hither and thither at random through mountainous regions. It is said that the moment they place their feet on a vein the twig immediately turns and twists, and so by its action discloses the vein ; when they move their feet again and go away from that spot the twig becomes once more immobile.

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Despite the pass of time, this description of the dowsing response, remains a good example of how I too experience the practice. While I familiarised myself with a slightly different instrument, two separate rods rather than one stick, Agricola's account of how the material appears to perform its own movement, separate from my influence, is representative of how I, and those I have shared the practice with, have experienced it on first tries.

Examples in the UK show that the dowsing skills of well diggers in the Victorian era were highly sought after and operated on a 'no water no charge' basis¹². Despite its popularity in central Europe, the practice is thought not to have been overtly present in the Nordic and Scandinavian regions, given that it is not mentioned in Magnus' 1555 '*Description of the Northern Peoples*'¹³. This has been confirmed somewhat through my experiences, when explaining my research here, as many do not recognize the practice by name. I have found the best means of explanation to be a demonstration of two pointed index fingers held and crossed in front of the body.

¹¹ Agricola, Georgius (1556). *De Re Metallica* (tr. Herbert Hoover, 1950, Dover Publications, New York ed.). Basel. p. 38

¹² Barrett, William and Besterman, Theodore (1926). *The Divining Rod* Methuen & Co Ltd, London.

¹³ Nordell, Bo (1988)

Measurement Beyond the Critical Zone

Like in Agricola's account, today dowsing is still a contested practice. In contemporary society it evades association with any one logic or group, and remains a relevant technique in esoteric and spiritual realms, as well as within agricultural trade and the construction industry. The British Society of Dowzers, for example, contains within its organisation four distinct branches of: Architecture, Earth Energies, Water & Services and Health & Wellbeing. It intrigued me that dowsing knowledge on this platform is being passed between the toolkits of construction site managers, and practitioners of spirit and energy release.

As such, it appears significant, not *what* exactly the dowsing rod reveals but rather what the dowser intends to find. As such the instrument of the dowsing rod lends itself to Karen Barad's description of the apparatus or measuring device:

Measurements, including practices such as zooming in or examine something with a probe, don't just happen (in the abstract)- they require specific measurement apparatuses. Measurements are agential practices, which are not simply revelatory but performative: they help constitute and are a constitutive part of what is being measured. In other words, measurements are intra-actions (not interactions): the agencies of observation are inseparable from that which is observed. Measurements are world-making: matter and meaning do not preexist, but rather are co-constituted via measurement intra-actions.¹⁴

¹⁴ Barad, Karen. 2012 'What Is the Measure of Nothingness: Infinity, Virtuality, Justice' Hatje Cantz, Berlin. 2012, 9

Dowsing, in this sense, illustrates that even where the same material instrument might be used, the gathered information intra-acts too, with how it is politicised and understood in subjective terms. It is, at least in part, the intention of the user which produces the specific results of the dowsing rod, in both a conscious level as well as, Barad explains, the quantum level:

If the measurement intra-action plays a constitutive role in what is measured, then it matters how something is explored. In fact, this is born out empirically in experiments with matter (and energy): when electrons (or light) are measured using one kind of apparatus, they are waves; if they are measured in a complementary way, they are particles. Notice that what we're talking about here is not simply some object reacting differently to different probings but being differently. What is at issue is the very nature of nature.¹⁵

When thinking generally of measurement apparatus, for example the kitchen scale we might call to mind the act of calibration. In establishing a constructed standard, we may understand each measurement within a field of others and thus use this information to support or create expectations. I calibrated my own dowsing practice to look for water, given that this made sense to me, whereas other practitioners may depend on realities of spiritual nature in order to construct their results.

Made up of interactions between multiple forces agencies and factors, the measuring instrument of dowsing can form intra-actions which are far from objective and quantifiable, but rather deeply subjective, flexible and reliant on the condition of its use to create specific results. This, I will argue, might in fact make

¹⁵ Ibid, 6

dowsing as a practice, a useful case study as we try to understand the nature of knowledge in our contemporary political and ecological climates.

In Bruno Latour's recent writing, he discusses the importance of our perceived position when understanding the world. He returns many times to a comparison of a view from 'inside', and that from 'outside', asking what it might mean to live not 'on' the earth, but rather 'in' it:

In our current environmental crisis, a new image of the earth is needed - one that recognises that there is no such thing as a view from nowhere and that we are always implicated in the creation of our view.¹⁶

When this sentiment is read in relation to Barad's quantum break down of information, we have a very clear picture of the networked nature of knowledge and fact. Latour, in his *Plea to the Earthly Sciences*, puts forth a proposal on the nature of fact. For Latour, it is of great consequence that the political nature of the instrument, of the measurement as put forth by Barad, was never made transparent by our scientific studies, but rather all 'social connections' were delegated to the social sciences. He writes that *'by failing to give a social explanation of science and technology, we got rid of social connections all together.'*¹⁷

Dowsing became a fascinating practice for me then, in its liminality. In moving between discourses of traditional medicines and folk heritage, as well as mechanical engineering papers, I was able to spatialise Karen Barad's words into a practice, and establish a measurement system which relied on trust of my own agencies and their intra-actions. I knew that my relationship to dowsing was

¹⁶ Koffman, Ava. 2019. "Bruno Latour, The Post-Truth Philosopher, Mounts A Defense Of Science". *New York Times*, 2019.

¹⁷ Latour, Bruno. 2007. "A Plea To The Earthly Sciences". Lecture, British Sociological Association, East London, 2007.

social in some senses, responsive to suggestion and intention, and yet simultaneously valid and true. Dowsing as one concrete idea appears not to exist in any formulated 'outside' but is generative only when the user applies their own intention, and body to their surroundings.



Participant in a dowsing workshop, as part of research process. Photo by Christiana Bissett

Dowsing prompts us to dig beneath the immediate layers of our environment, encourages a capacity which is sensory on a three dimensional level. Latour discusses the idea that the majority of our knowledge exists within a thin layer of the earth's crust and atmosphere, this is known as the critical zone¹⁸. I propose that dowsing, while quite literally allowing us some disputed, somatic or even possibly imaginary engagement with a layer or two beneath our regular day to day focus, might also throughout the course of this thesis, help to point towards other modes of knowledge creation, which might allow us access to something beyond the critical zone.

¹⁸ Latour, Bruno. 2018. *Down to Earth*. John Wiley & Sons.79

Disproving Dowsing

For this very same liminality, dowsing made headlines in the UK press in Winter 2017/18. On the back of reports by one ‘whistle blowing’ science writer Sally Le Page¹⁹, national newspapers condemned the use of ‘witchcraft’ by contemporary water supply companies. On questioning, 10 of the UK’s 12 water companies admitted that tradespeople within their staff, still used dowsing while fulfilling their professional duties.

In one article, a water management specialist admits *‘it’s not going to do any harm’*²⁰ however the size of the media backlash against the finding revealed a vulnerability, in a society deeply concerned with climate denial and fake news, towards even the ‘harmless’ unknown.

One journalist writes: *‘Imagine your house was burning down, and you called the fire brigade, only to have them turn up and instead of unrolling their hoses, they start performing a rain dance.’*²¹ He continues to explicitly outline the way in which this practice threatens our relationship to the scientific fact:

So, you see someone you recognise as knowing more than you, doing something something you assumed to be nonsense, in a professional capacity, how do you resolve this dissonance? Either you call your own judgement and decisions into doubt, which our brains don’t really like doing, or conclude that maybe it’s not nonsense. And once your done with

¹⁹ LePage, Sally. 2017. "In 2017, UK Water Companies Still Rely On “Magic”". Blog. *Medium*.

²⁰ Weaver, Matthew. 2017. "UK Water Firms Admit Using Divining Rods To Find Leaks And Pipes". *The Guardian*, , 2017.

²¹ Burnett, Dean. 2017. "Divine Intervention: Yes, Water Companies Using Dowsing Really Is That Bad". *The Guardian*, , 2017.

that one thing, reasoned that what we've been told about science and logic isn't necessarily correct, why stop there? Maybe the earth is flat! Maybe bigfoot does exist! Maybe your face will change if the wind stays that way and so on...²²

Having, at the time of this media storm only recently begun my experimentation with the practice of dowsing, I was quite deeply affected by these headlines. In particular I was interested why such a seemingly harmless act, of holding two sticks above a water pipe, might cause such a scale of media material. The Guardian, for example, published 4 articles²³ within the week of the news, one strongly titled '*Divine intervention: Yes water companies using dowsing, really is that bad*'²⁴.

In understanding why perhaps the relationship between this practice and the popular media is so specific, we might refer to Latour's recent interview in the NY Times, where he references our current political landscape as '*the post truth era in which society as a whole is presently condemned to live*'²⁵. Here he unpacks the seeming fragility of the scientific fact in the wake of our equally fragile awareness of human-made climate change. He compares this fragility with the ubiquity of the scientific method's authority in recent history:

I think we were so happy to develop all this critique (on structuralist knowledge) because we were so sure, of the authority of science, and that the authority of science would be shared because there was a common world. Even this notion of a common world we didn't have to articulate,

²² Ibid.

²³ See: Weaver, Matthew. 2017., Burnett, Dean. 2017 and Ball, Philip. 2019. "Water Divining Is Bunk. So Why Do Myths Continue To Trump Science?". *The Guardian*.

²⁴ Burnet, 2017

²⁵ Koffman, 2019.

*because it was obvious. Now we have people who no longer share in the idea of a common world and that of course changes everything.*²⁶

We see here a reflection that our popular relationship with scientific fact has become radically different in recent times. Dowsing as a practice, has been a popular method in Europe until now, it is unlikely that it has increased in usage or visibility. And so it is important to ask why the critique that was launched happened *now*. Some theorists have proposed that it was in fact the existence of the post structuralist movement, thinkers such as Latour and Badiou which opened up the vulnerability of the scientific fact, and as such created a space for the climate denial which we see in today's global political leadership:

*By showing that scientific facts are the product of all-too-human procedures, these critics charge, Latour, whether he intended to or not - gave licence to a pernicious anything-goes relativism that cynical conservatives were only too happy to appropriate for their own ends. As early as 2004 he publicly expressed the fear that his critical 'weapons' or at least a grotesque caricature of them, were being smuggled to the other side, as corporate-funded climate sceptics used arguments about the constructed nature of knowledge to sow doubt around the scientific consensus on climate change*²⁷

However, the work of this movement of thinkers might have simply been confirmed in this new relationship to scientific truth, rather than weaponised. Ava Koffman proposes that if climate skeptics and other junk scientists have made anything clear, its that the traditional image of facts was never sustainable to begin with:

²⁶Ibid.

²⁷Ibid.

The same way that a person notices her body only once something goes wrong with it, we are becoming conscious of the role that Latourian networks play in producing and sustaining knowledge only now that those networks are under assault.²⁸

If true, we might consider what possible approaches we could take in response to the rising denial of climate change. Here I argue, that the recent journalism on dowsing is representative of a fortification, of the scientific method, an over correction of the gradual undoing of the authority of scientific knowledge. The choice of dowsing, as the object of critique is purely symbolic. This undefined practice, while unharmed in its day to day use is seen by those writers as a representation of all which might unravel should we continue to give way too fully to the constructed nature of fact. However I would argue that this overcorrection itself might likewise be a dangerous force, and indeed that our contemporary understanding between the social and the scientific is already one which defies a binary. Now that so much of the world has embraced the political nature of fact, we might try to find alternative discursive methods which do not rely on the assumption of a common world.

²⁸ Ibid

Material Outcomes

Through my continued relationship to dowsing, I found some examples of interactions and conversations which provided counterpoints to the public perception described above. In particular I found that the means through which I gathered my performance materials, offered space for reflection on how we might understand 'truth', at least in the context of objects and their capacities.

Working in TeaK I was confronted by the full scale of the theatre machine, in it's ideal economic environment. As a student I was given the privilege of a full production team with whom to make my vision possible. This team was comprised of a producer, lighting technician, audio visual technician, sound technician, costume designer, props manager and stage manager. On my first day in the black box space where my final thesis performance would take place, I was met by these seven staff members who worked to produce around me, my vision for the stage. In particular, this introduction was where I was introduced to my props manager, Taria.

Trips to the props department revealed most clearly the artifice and illusion often used in the creation of the traditional theatrical moment. In my spare time I have ventured in, to be fascinated by rocks made of sponge, Glass made of plastic and ice made of glass. In this form of theatre, it is what an object represents semiotically which constitutes its truth on stage. In the traditional format then, there exists a very different relationship to a material's truth, from what I hoped to develop in my work. In this performance, rather than purely representational presence, the materials were recruited for their participation in my relationship to the dowsing method.

These materials constituted the map which I established throughout the performance. Crystal and nettle were chosen due to their long-standing use in dowsing related practices, and the bone gestured towards my body's own material capacity. Their value passed down through oral tradition, the crystal, nettle and bone required a different type of relation than a traditional theatre prop.

Of course this is not radical in relation to contemporary performance art practices, however I found that the way in which my materials were gathered became an extension of their significance on stage, in a way which helped me to understand how we might deal with complexity in a 'post-truth' era.

In *The Three Ecologies*²⁹, Guattari, develops his proposal for material, and social engagement through his theory of singularisation. He proposes that in examining our relationship to singularities, we might re-engage with subjective forms which have been lost to the techno-scientific, that is the dominance of scientific method, whose continued prevalence is revealed in some of the articles cited above.

In exploring the relationship to my materials in the performance, I entered another dialogue with the props department, as my experiments with dowsing depended on a trust that these specific materials would somehow engage with the material landscape I encountered through dowsing. This conversation was an exciting one to have within the context of the props department, and they immediately respected my request of 'authentic' materials. Throughout these interactions and engagements, I was navigating different forms of knowledges, surrounding what an object or material is. I found this fluidity akin to the practice of dowsing. The props department participated in the narrative which I had developed around dowsing in a full sense, and as such the materiality of the

²⁹ Guattari, Felix. 2005. *The Three Ecologies (Athlone Contemporary European Thinkers)*. Bloomsbury Publishing.

stage was richer and fuller than I could have expected. This relationship, built between myself and the props department, felt as though it navigated a particularly complex understanding of materials, in a way which they were both material and social, functioning as both stage props and on another register altogether. This relationship I feel is representative of a type of collaboration and communication which might be significant as we operate in such complex times in relation to truth. Returning to Guattari's writing, he discusses our cultural inability to find ways of communicating which counter the dominant technocratic modes. These scientific models can be understood as the repressive forces playing out on Guattari's 'existential territories' as factors of limitation in our life experiences. This is a paradox clearly outlined in *The Three Ecologies*:

So, wherever we turn, there is the same nagging paradox: on the one hand, the continuous development of new technoscientific means to potentially resolve the dominant ecological issues and reinstate socially useful activities on the surface of the planet, and, on the other hand, the inability of organized social forces and constituted subjective formations.

³⁰

The subjective formations Guattari refers to then are territorialized through alternative approaches, primarily, the distancing from normalised subjective positions. I would liken this distancing to the type of experience I had in the props department, and surrounding my materiality, in that it was made explicit that there were many ways of engaging with an object's truth, and that it is possible, as artists or spectators to choose which approach we might take.

³⁰ Ibid. 31



Studio experiments with bone and nettle. Photo by Christiana Bissett

One means through which I understand this to happen is engagement with singularisation. Conceived not through signified language, but through material flux, singularization in Guattari's terms takes place "*at the junction of the facts of sense, of material and social facts*"³¹, which will destabilize the ground of the subjectivity.

Guattari then calls that '*we rid ourselves of all scientific references and metaphors in order to forge new paradigms that are instead ethico-aesthetic in inspiration.*'³² He presents singularities as:

³¹ Ibid. 36

³² Ibid. 36

*Turning points and points of inflection; bottlenecks, knots, foyers, and centers; points of fusion and condensation, and boiling; points of tears and joy, sickness and health, hope and anxiety, 'sensitive' points.*³³

Points of potentiality within a material, object or thing that are unique to that thing, and to the environment in which it is engaged. In *A Thousand Plateaus*³⁴, Deleuze and Guattari make an example of wood to illustrate that the singularities cannot be simply observed but that surrender and interaction is required in order to sense what the singularities of that given thing are:

On the one hand, to the formed or formable matter we must add an entire energetic materiality in movement, carrying singularities or haecceities that are already like implicit forms that are topological, rather than geometrical, and that combine with processes of deformation: for example, the variable undulations and torsions of the fibers guiding the operation of splitting wood. On the other hand, to the essential properties of matter deriving from the formal essence we must add variable intensive affects, now resulting from the operation, now on the contrary making possible: for example, wood that is more or less porous, more or less elastic and resistant. At any rate, it is a question of surrendering to the wood, then following where it leads by connecting operations to a materiality, instead of imposing a form upon a matter.'

A moment later Deleuze and Guattari remark that "...matter-flow can only be followed"³⁵. This is what it means to say that nonhumans are actants, that they are actors in their own right. The singularities too expand beyond the material in question and into the body which follows it, and all other forces present in their

³³ Deleuze, Gilles. 1993. *Logic of Sense*. Columbia University Press. 52

³⁴ Deleuze, Gilles. 1987. *A Thousand Plateaus*. Minneapolis: U of Minnesota Press. 450

³⁵ *Ibid.* 459

interaction. What I argue here, is that in acknowledging that material contains qualities that are simultaneously social and physical, depending upon the bodies which interact with them, I find a way of understanding the dowsing response, which evades the narrative of proof and disproof put forth by the media. Furthermore, the way in which my materials were gathered in relation to my final work, demonstrated how this might be enacted on practical terms.



Final Selection of materials, *A Slight Bend of the Forearm* 2018. Photo by Sanni Siira

Taria and I scheduled a trip to rent crystals from a shop in Eerikinkatu. We took the tram together on a sunny day and on arrival, Taria explained that we were working on a project in the Theatre Academy. I was surprised and grateful that the shop owner offered to lend the crystals for free. When I asked how she might like the crystals to be taken care of, the exchange switched to Finnish, and the two women exchanged tips for the charging and cleansing of the crystals. Taria reassured me that she had a spot in mind in the props department, where the new moon would come through a well positioned window. We arranged that after

each day in the black box studio, I would collect the stones, and they could reside there overnight. In this shared trip, our contract of the performer and props department became centred around this very specific engagement with the crystals. While I don't assume it was out of the ordinary for Taria to engage with a material in such a way, her ability to respond to my performance and arrange her duties to include the charging of these crystals, meant that the reality of the performance extended beyond the limits of the stage. Her practice as a props maker accounted for the singularities of the objects completely, dealing simultaneously with their capacities as healing objects, aesthetic signifiers and all else.



Audience interacting with materials, *A Slight Bend of the Forearm* 2018. Photo by Sanni Siira

This interaction for me, was such a significant part of my performance presentation. It revealed that trust I had in the method of dowsing, could expand beyond my own experience, and into a broader field. It demonstrated a fluidity in how we treat materials and as such suggested ways of knowing, which might account for its networked nature.

Water-Witching

My concern towards the fortification of the scientific fact is furthered by the tone of many of the articles used in my research. On close reading of the original 'expose' and the subsequent outcry, I became aware that the language used within the majority of these texts opens this crisis up not only as one regarding knowledge but also the gendered nature of its production.

Christopher Hassall, from Leeds University school of biology, was quoted in the Guardian: *"This isn't a technique, it's witchcraft ... Drinking water is a fundamental human necessity and something that the water companies should be managing as effectively and efficiently as possible without using these medieval witchcraft practices."*³⁶

Today, the critiques launched, fall on workers for leading water companies. As established earlier in this paper, the origins of dowsing show that the practice was never easily designated to the realm of witchcraft, but existed too in the productive space of ore mining. As such we should understand that dowsing as a practice has no inherent connection to witchcraft, but is simply a practice also utilised by those working with magic.

The association with witchcraft then, appears to be vilinising enough then to override any other historical contexts in which dowsing may have been found, and establish enough reason to conclusively denounce the practice. Likewise these arguments came aligned with a question- should the public be paying for the services of water management companies when this is part of their technique? Here we see then, a double bind of witchcraft being directly pitted against productive forces of capitalist society.

³⁶ Weaver, Matthew. 2017

Silvia Federici unpacks this relationship in depth within her work *Witches, Witch-Hunting and Women*. The act of dowsing or divining is implicitly mentioned as a form of traditional practiced art which was hunted during historical witch trials:

*Among the condemned there were women who had achieved a certain degree of power in the community, working as folk healers and midwives or exercising magical practices, such as finding lost objects and divination*³⁷

Federici continues to closely examine how the rise of capitalism took on the knowledges and practices of women. She writes *‘together with the ‘witches,’ a world of social/cultural practices and beliefs that had been typical of pre-capitalist rural Europe, but which had come to be viewed as unproductive and potentially dangerous for the new economic order, was wiped out.*³⁸

This relation between the folk practice and to productivity is echoed in the contemporary accounts we see of dowsing in the media. *‘Ofwat should be looking into this because it’s a total waste of money’* the original ‘whistle blower’ science writer Sally La Page writes³⁹. Her calls for investigative intervention come in spite of the statement made by a spokesman for the sector’s trade body Water UK:

*‘Water companies are spending millions of pounds each year on innovative leakage detection schemes which has helped to reduce leakages by a third since the 1990s, and it’s unlikely that a few individuals doing some divining has had much impact.’*⁴⁰

³⁷ Federici, Silvia. 2018. *Witches, Witch-Hunting, and Women*. PM Press., 26

³⁸ *ibid.*

³⁹ LePage, Sally. 2017

⁴⁰ Weaver, Matthew. 2017

It seems reasonable to assume that this statement is true, that the lo-fi nature of water dowsing does not hugely ‘drain’ the pockets of UK consumers and so we can assume that the arguments put forth above are not in relation to any specific expenditure, but rather illustrate a more general attitude towards something which seemingly defies technical innovation as a force for progress.

Federici puts forward explicitly that the erasure of these knowledges contributed to our distancing from environment, destroying a holistic concept of nature, knowledge of our bodies, and relationships with those around us. *‘It was a world that we now call superstitious but that at the same time alerts us to the existence of other possibilities in our relationship to the world.’*⁴¹

According to the work of Federici *“The ‘rationalization’ of the natural world—the precondition for a more regimented work discipline and for the scientific revolution—passed through the destruction of the ‘witch.’”*⁴²

The clarity with which this historical analysis might also be read from the contemporary relationship between the public and the art of water dowsing, furthers the thesis that the times in which we live, demonstrate a fragility of the nature of knowledge, and that this fragility might expose itself in ways which are fundamentally gendered. This is further confirmed when observing the vitriol with which each of these journalists write their critique:

*It’s 2017, nothing is certain any more. But in a world awash with misinformation and bogus beliefs taking precedence over established fact, we can ill afford more getting out there. We need to stop the leaks as soon as they happen.*⁴³

⁴¹ Federici, Silvia. 2018, 21

⁴² Ibid, 28

⁴³ Burnett, Dean. 2017

I find the language used in this example to be really striking. The assumption of a common 'we', in defence of the true 'fact', prompts me to ask who this writer assumes their audience to be? The threatening tone taken, that we 'cannot afford' further beliefs, ignores the complexity of fact in our contemporary society, and therefore the seeming call to arms which concludes the article, bares a resemblance to the 'othering' rhetoric of populist political approaches.

Given the complexity of our relationship to fact, the media response to water dowsing might represent a fortification of outdated conceptions of truth. These conceptions depend on continued divisions of knowledge forms in a way which is both gendered and geared towards the profit driven productive forces of capitalism. The attitudes displayed in this overview of current literature surrounding dowsing, helped to further my understanding of what the practice was for me and my artistic research. In the act of dowsing , I was in some level re-understanding a form of knowledge which has been exiled on an institutional level. Re-engaging with practices such as dowsing, might be considered a resistance against the gender based violence against knowledges which have been exiled for fear of the feminine and fear of magic.

The Ideomotor Effect

Within these articles, as well as within much of the material on dowsing, one of the most common ‘dis-proofs’, comes from the revelation that the body itself is involved. The Ideomotor Effect, known popularly as the causation for movement on ouija boards, describes small and imperceivable physical movements, which fall out-with our rational consciousness. In very many articles online, the use of the ideometer effect as causation for the movement of dowsing rods is considered a finite and conclusive reason to disprove the validity of dowsing as a practice at all. This response suggests that our subconscious knowledge is something untrustworthy, that any form of response which is not process directly through the conscious mind should not be considered.

During the enlightenment, we were encouraged to prioritize our most rational of senses, and our relationship to landscape became mediated through the scientific medium:

Science taught people not to trust their senses, which could always be deceived; being and appearance thus parted company. Truth no longer was felt to appear spontaneously through complementation or observation, so there arose a veritable necessity to hunt for truth beneath deceptive appearances. Knowing had become conceived of as the result of an activity.⁴⁴

In an interview with my colleague Shelly Etkin, Silvia Federici defined magic as the confidence of “*knowing that you know something*”⁴⁵. This trust of perception,

⁴⁴ Szerszynski, Bronislaw. 2003. *Nature Performed*. Oxford: Wiley-Blackwell.

⁴⁵ Federici, Silvia , interviewed by Shelly Etkin, Berlin, June 04, 2017.

has in many ways been lost by western modes of thinking, with a detrimental effect on our relation to our environment. Amanda Boetzkes, in her work on ‘Ecology, Vision and the Neurological system’⁴⁶ shares accounts of Inuit communities in Nunavut, whereby the transformations of their local landscapes, as caused by global warming “*have instigated fundamental re-orientations of bodily perception*”⁴⁷. Where her interviewees once relied upon the consistent relations, between the sky and ground, irregularities in the atmosphere have unsettles long developed methods of navigation and hunting:

*To a culture accustomed to carefully reading the environment—the sky, the movement of clouds, the direction of the wind, the position of stars, the thickness of ice, the rays of the sun, subtle animal behaviors—the signs of the Anthropocene are manifold. In this new geological epoch, the environment has become illegible.*⁴⁸

She cites elder who summarises that the world has tilted on its axis. The capacity to feel here the re-orientation of the planet illustrates a relationship to the horizon, to the angles of the sky and atmosphere and ground which is explicit. This sensory capacity, while likely available to many, has been desensitised out of lack of necessity. My relationship to dowsing, while not remotely comparable to the experience of indigenous people, did act as some superficial training in my ways of being with the layers of landscape I inhabit. For example, it became possible through the many hours of practice to recognise which movements from the rods responded to the tilt of the ground, or a subtle wind, rather than what I recognised specifically as a dowsing response. Here then dowsing acted as a conduit for a re-orientation of my bodily awareness, and as such, opened up what might become when my body is open to such sensorial experience.

⁴⁶ Amanda Boetzkes, “Ecologicity, Vision and the Neurological System,” in *Art in the Anthropocene*. Edited by Heather Davis and Etienne Turpin. 271-282 Ann Arbor: Open Humanities Press, 2015.

⁴⁷ *Ibid*, 271

⁴⁸ *Ibid* 271

I would argue, in this sense, dowsing fulfills many of the desirable qualities of critical performance in the anthropocene. The metal sticks illustrate an extension of the human body while revealing a complex network of agencies between the body and its environment. In his introduction to *What is Posthumanism?* Cary Wolfe describes the importance of understanding ‘*the prosthetic coevolution of the human animal with the technicity of tools*⁴⁹. Dowsing and its reliance on embodied knowledges as well as literal prosthetic indicators, does well to illustrate an example of how we might begin to understand the human body in this turn. The seemingly direct exchange of information between bone, water, magnetism and instrument, bypasses the brain and therefore enlightenment environmental perceptions. My next question in some sense then was, how might dowsing contribute to this conversation in a more collective sense than just my own experience, what would it mean to present this skill as an artistic work?

Boetzkes suggests that there is scope in the art world, to renegotiate what it means for something to be looked at or perceived. She tasks that it is the role of the artist to question with which senses and sensorial knowledge they engage:

If this new epoch calls us to imagine the impact of modern human life beyond the parameters of individual phenomenology, to account for systemic activity on micro and macro scales, and in relation to geological time, then there is equally a desire on the part of artists to redefine the limits of vision in order to incorporate and represent new orientations.⁵⁰

As I furthered my research then, it was important to understand further, the specificities of my own body in relation to dowsing, to pin what specific perceptual processes I might wish to share within a performance space.

⁴⁹ Wolfe, Cary. (2013). *What Is Posthumanism?*. U of Minnesota Press. 15

⁵⁰ Boetzkes, Amanda (2015), 272

Physiological Peculiarities

In my own relationship to dowsing, I was able to re-understand forms of knowing, but I re-learned to work with the movement of my own body. My relationship to movement, both artistic and otherwise has been mediated greatly by my dyspraxia. Dyspraxia is a developmental feature of the brain, causing difficulty in activities requiring coordination and movement. It falls under an umbrella of medically defined ‘disorders’ including dyslexia, adhd and autism spectrum disorders, grouped together as ‘neurodiversities’, this is opposed to ‘neurotypical’.

In this section, I would like to propose that in diversifying our understanding of knowing we might also account for neurodiverse ways of perceiving and understanding. That the networked relation to our environment that felt when in the act of dowsing, in some ways exists already in the experience of neurodiverse subjects.

Erin Manning’s *Thought in the Act*, opens with a proposition, on what we mean when we discuss human perception, such as that described by Boetzkes in the previous chapter. Referring to the accounts of several subjects, she poses the thesis that we are certainly not referring to neurodiverse experience, but rather assume that what we mean by ‘human’ thought, is based upon on the processes of perception and analysis of a neurotypical population. The neurotypical condition, is distinctive, in its ability to prioritise and focus within a seeming hierarchy of information. It is such that priority is most often given to the human language present in a given environment. For Manning:

We mean expressing oneself predominantly in spoken language, and most of all, we mean being immediately focused on humans to the detriment of other elements in the environment. “Most people attend to human voices above all else.”⁵¹

An inability, to establish and follow this hierarchy of attention, is referred to within the physiological sciences as Mindblindness. It is inferred, that to experience your environment without the prioritised position of the human, implies a lack of empathy, the inability to perceive what is happening in another human mind. Mannings writing continues to establish a theory, of how we might better understand the perceptual conditioning of a neurodiverse mind. She proposes:

To experience the texture of the world “without discrimination” is not indifference. Texture is patterned, full of contrast and movement, gradients and transitions. It is complex and differentiated. To attend to everything “the same way” is not an inattention to life. It is to pay equal attention to the full range of life’s texturing complexity, with an entranced and unhierarchized commitment to the way in which the organic and the inorganic, color, sound, smell, and rhythm, perception and emotion, intensely interweave into the “aroundness” of a textured world, alive with difference. It is to experience the fullness of a dance of attention.⁵²

⁵¹ Manning, Erin. 2014. *Thought in the Act*. Minnesota: University of Minnesota Press. 3

⁵² Ibid. 4

The dance of attention in Mannings writing, comes to mean a pattern, of almost unidentifiable forces, *'that modulate the event in the immediateness of its coming to expression'*⁵³. She describes that this dance is giving attention with, rather than to⁵⁴.

I would like here, to propose that we might explore the aesthetic capabilities already present in the experience of neurodiverse subjects, as a means of challenging anthropocentric and human centric thought. In my own experience of movement, I have often found great difficulty in following instructions given to me either through vocal instruction or physical mirroring exercises. In some cases this has caused me to conclude that my own body, is simply defective, unable to process information with ease and grace. Clumsiness, for example, in the canteen when having to carry out sequenced tasks of picking up utensils and dispensing foods, can be understood as an inability to efficiently order information.

However, in the process of dowsing, I was never aware of my dyspraxia as a perceptual inability. I would rather propose that through my neurodiversity I was able to embrace the networked way in which information was created between the body, the sticks and the rest of the surrounding environment. In this sense I identify strongly with Manning's 'dance of attention'. That in the experience of the neurodiverse brain, there is a capacity to deal with imminence and the multiplicity of agencies which create an environment. This, I feel is of immense significance to current discourse on ecological thinking.

⁵³Ibid.

⁵⁴Ibid.

One text which is finding renewed significance in this contemporary discourse is Nan Shepherd's *The Living Mountain*⁵⁵. A detailed account of her sensory and emotional relationship to the Cairngorm mountain range, the text was written in 1944 although remained unpublished until the seventies. In its first chapter the text introduces the concept of the 'fey'. In Scots this term has multiple overlapping usages. In its vaguest sense, it describes a connection to the spiritual world. In my childhood, it was used to describe my grandmother, who was said to have 'the sight'. In Shepherd's work then we see another example of connection between environmental connection, femininity and magic. Shepherd reflects that this connection to the landscape, is simultaneously something which is spiritual in nature but also fundamentally bodily when she states that '*Our devotions have more to do with our physiological peculiarities than we admit.*'⁵⁶

I would propose that Shepherd's writing, despite being penned half a century before her contemporary, has at its core, the same destabilisation of the human, as Manning unpicks throughout 'A Thought in the Act'. Approached with subtlety and through lived experience, Shepherd suggests ways of being in space, which appear to provoke states of being, and knowing similar with the 'dance of attention' found in Manning's neurodiverse subjects. Thus here I feel that there might be some connection to be found in the ways of knowing which I have tried to unravel above as both feminine and magical, also with the type of perceptual experience of subjects who are neurodiverse.

Returning to the idea of focus points: first, Manning suggests that the 'dance of attention', where the immanence of materials becomes visible, requires the absence of imposed human presence. In the account of one referenced subject, he describes the perception of flowers which appear to dance and move around him as he watches, and the change which occurs in this perception at the moment

⁵⁵ Shepherd, Nan. 2008. *The Living Mountain*. Canongate Books.

⁵⁶ Ibid. 4

his shadow enters his frame: *“I would see that the moment I put my shadow above the flowers, the story would immediately stop forming”*⁵⁷. Manning concludes that the imposing presence of the human form interferes with the perception of the field which had previously allowed him to experience with and through the dynamics of the flowers. When our own perspectives pointed out to us again, we instead give our attention *to* the scene.

This sentiment is present too in Shepherd's gentle suggestions for spending time with the mountain. A particularly touching moment of her texts suggests a gentle practice of watching the landscape through an upturned gaze. This can be done, she encourages through the simple tilt of the head, or by directing one's gaze through straddled legs. However simple, this action is deeply rewarding in the uncanny secrets of a landscape it unlocks. *“How new it has become”* she writes:

*From the close-by sprigs of heather, to the most distant fold of the land, each detail stands erect in its own validity. In no other way have I seen of my own unaided sight that the earth is round. As I watch, it arches its back, and each layer of the landscape bristles - though bristles is a word of too much commotion for it. Details are no longer part of a grouping in a picture of which I am the focal point, the focal point is everywhere. Nothing has reference to the looker. This is how the earth must see itself.*⁵⁸

Like the account of the landscape in Manning's work, Shepherd values here the capacities of a dispersed frame, where the looker is not centralised as key point of reference but rather disorientation disperses the view. Shepherd's text echoes the words of the indigenous elder, who refers to world's tilt. For both Shepherd and this unnamed source, a level of removal from one's environment is facilitated by the movement of a vertical axis. I would propose too that this relates to how I

⁵⁷ Manning, Erin. 2014, 5

⁵⁸ Shepherd, Nan. 2008, 40

experience the movement of thought in the act of dowsing. When, as described in earlier accounts, I attempt to facilitate an isolation of my forearms, it might be understood as removing my 'human' view in some senses. In moving away from the key mode of perceptual tools being my eyes, I facilitate a relationship to my arms which recruits them as material responsive to agencies other than my own.

Epistemologically, 'ecology' stems from the greek 'oikos'⁵⁹, meaning the home or house. In this understanding, we see the earth always in relation to our position to it, as a resource and container for our activities. I think what both Manning and Shephard are in fact suggesting here, is a defamiliarization with our environment, in the hopes of truly seeing it. This process might be described as one of 'uncanny'. The uncanny describes something strangely familiar and yet unfamiliar. The word's German form 'unheimlich'⁶⁰ directly translates as unhomely, perhaps then even 'un-ecological'. Perhaps a process of isolation from the landscape, an aesthetics of the uncanny, might be a technique by which we can truly recognise processes, agencies and modes of becoming in our surroundings.

In the work *A Slight Bend of the Forearm*, I attempted to play with this rotation of axis. As a means of extending the isolation from the forearm of the dowser, into the experience of an audience being isolated from their environment of the theatre. In both processes there is a sense of the body being made explicit. In the dowser it is the material structure of the bone and flesh of the arm which is approached anew. In the theatre I hoped that exposing the material of its workings, namely the lighting rig might mirror this experience. This action took place in the change of a camera angle, replacing the footage of the floor with an upturned ceiling. Inspired by Shepherd's words, in my experiments I found this

⁵⁹ Oxford English Dictionary, s.v. "Ecology," accessed 2,26,2019, <https://en.oxforddictionaries.com/definition/ecology>

⁶⁰ Oxford English Dictionary, s.v. 'Unheimlich', accessed 2,26,2019 <https://en.oxforddictionaries.com/definition/unheimlich>

focus to drastically alter my relationship to the space. Rather than hanging, lighting fixtures appear to stand, as the sprigs of heather, '*erect in their own validity*'⁶¹.

Dowsing in its strangeness, its un-explainability, its capacity to recruit the forearm bone, as a sort of alien tool, using its boneness in a way other than for strength, might provide this unhomely feeling. Perhaps dowsing might function as a process or bodily erasure, as one blends into the landscape, and network rather than watching an instrument separate to it, the body is both instrument and observer. Unfamiliar in its function and yet trusted as a means of knowing.



The body as part of the performance landscape, *A Slight Bend of the Forearm* 2018. Photo by Sanni Siira

⁶¹ Shepherd, Nan. 2008, 40

This altered mode of perception , accredited to neurodiverse subjects, has new grounding in the development of a theory called ‘complimentary cognition’⁶² by Dr Helen Taylor of Cambridge University. In her research she unpacks the possibility that humans evolved a range of complimentary ways of thinking in response to dramatic climate changes which took place over a thousand years ago. She relates this evolutionary theory to a division known as the exploitation / exploration trade off where ‘exploitation’ denotes the utilisation of known information, while contrasting ‘exploration’ is the unearthing of new possibilities. She proposes that the evolution of these two forms of neural programming, might have evolved in order to communally process a much larger selection of information. She posits that this range in capacity for perception, as is expanded in Manning’s dance of attention, was critical to our survival in the past and might be critical in our contemporary challenges.

This approach has a significant impact on how we understand disability and environmental studies. In a collection of eco-crip writings edited by Heather Davis⁶³, neurological diversity and its relationship to the humanities and ecological studies is unpacked in a paper by Sarah Gibbons⁶⁴. Gibbons traces the attitudes of scholars who attribute a rise in neurodiversity to unsustainable environmental behaviours. Using Jaquette Ray’s formulation of the ‘ecological other’⁶⁵, she argues that mainstream environmentalism has contributed to the exclusion of disabled people and american culture. She cites:

⁶² Macer, Richard. 2018. *Farther and Sun: A Dyslexic Road Trip*. Documentary. Edited by Matthew Huxford. Directed by Richard Macer. BBC.

⁶³ *Art in the Anthropocene*. Edited by Heather Davis and Etienne Turpin. Ann Arbor: Open Humanities Press, 2015.

⁶⁴Gibbons, Sarah, “Neurological Diversity and Environmental (In)Justice,” in *Art in the Anthropocene*. Edited by Heather Davis and Etienne Turpin. 531-551 Ann Arbor: Open Humanities Press, 2015.

⁶⁵ Ray, Sarah Jaquette. (2013). *The Ecological Other*. University of Arizona Press.

*The figure of the disabled body is the quintessential symbol of humanities alienation from nature, as environmentalism played a significant role in constructing the disabled body, a historical legacy that continues to shape the corporeal bases for its various forms of exclusion.*⁶⁶

Gibbons shows how discourse surrounding autism often draws problematic comparisons between the changes represented by ecological devastation and the changing condition of human neurology. For her, this discourse distinctly frames the condition of neurodiversity to be 'unnatural', however we can see from Taylor's hypothesis that there is a very tangible means of reframing the discussion in a way which is generative. This too helps to evade the eugenic implications which arise when we consider the implication that environmental health might mean the elimination of disability. Rather Taylor encourages us to see the diversity of processual types as a critical engagement to our environment rather than simply a symptomatic disadvantage.

How then might this neurodiversity then contribute explicitly to the area of concern here, to theatre and performance? I would like to continue in my argument towards an aesthetics which might also build upon the idea of explorative problem solving, through imagination, and perhaps the de-stabilisation of the visual. In the time of ecological crisis, I will propose that not only is our relationship to science being fortified, but that our relationship to the capacity of art is also being transformed to fit the expectations of bodies which use quantifiable data to decide which art is worthwhile.

⁶⁶ Gibbons, Sarah, (2015). 532

The Black Box Experiment

There occurred an important shift in my research when I moved my thinking about the practice, from what I could learn as an individual through the act of dowsing, towards what happens when it is presented in a shared space, as performance. On the simplest of levels, I remember very clearly a sensation I encountered when I presented dowsing to my classmates as a performative act for the first time. The context was a small showing in the final session of our Plant Thinking course. In a studio on the 6th floor my classmates exited the space and I staged, rather theatrically, their re-entrance into the room as 'audience' to my performative moment. In secondary school the 'black box experiment' teaches scientific methodology to deduce what might be the contents of a sealed black box. The movement of my work into artistic contexts, including the black box theatre, was a way of more comprehensive understanding my own method of dowsing.

In the room, I was standing in anticipation, rods held at shoulder height. I began to walk and waited as usual for the feeling of confidence in the practice, for the rods to cross almost without my noticing. But on this occasion, the waiting continued and I began to stress. The awareness of spectators had entered by full body, and seemingly restricted my capacity for the dowsing response. Somehow, through patience, and perhaps through feigning, I managed to fulfil the score that I had in my head. However this unlocked an important question, about what happens when a system such as dowsing is performed in front of an audience. How might the complexity of the dowsing knowledge being either transmitted to an audience, or otherwise analysed from an 'outside'.

From this position, It seems relevant to acknowledge, the expectations, I understood in relation to the performed elements of this research project. Some

of these expectations come from wider context of discourse within performance, others from the context of the Theatre Academy, and of course many of my own personal desires.

Just as Barad⁶⁷ explains that the instrument of measurement in quantum physical terms produces the nature of the result, the work we create as artists is being produced by many the economic and social conditions surrounding the practice. In Bojana Cvecij's paper on imagining and feigning⁶⁸, she describes a shift in the political expectations placed upon performance. Through the rigidity of institutional funding bodies, she explains that performance has to pitch its validity in facile terms. Audiences of performance, she says, '*must arrive to the work, knowing what they will see upon their arrival*'⁶⁹. For Cvejic, within her primary context of contemporary choreography and performance, she sees the bleed of language formalised for these funding application forms, into the space of programme notes. The standardisation of what then is expected in a successful application, becomes a standardisation in how we then we might pitch a performance work to a respective audience. As such Cvejic argues, that performance becomes instrumentalized, explicit in its political worth, evidencing what it might seek to do, before you attend. In this sense setting up a value system whereby an audience member may assess the quality of a work in its success of failure in producing the results which it promised in advance. It is now widely accepted that the value of a production or project ought to be measurable in a way which is demonstrative to these funding bodies and institutions. If we consider Barad's provocation then, that the measurement apparatus is constitutive, we might ask how these systems affect the art which is co-produced by these factors.

⁶⁷ Karen Barad. 2012 '*What Is the Measure of Nothingness: Infinity, Virtuality, Justice*' Hatje Cantz, Berlin 2012.

⁶⁸ Cvejic, Bojana. "Imagining and Feigning." Lecture, How To Do Things With Performance, Helsinki, November 8, 2017.

⁶⁹ Ibid.

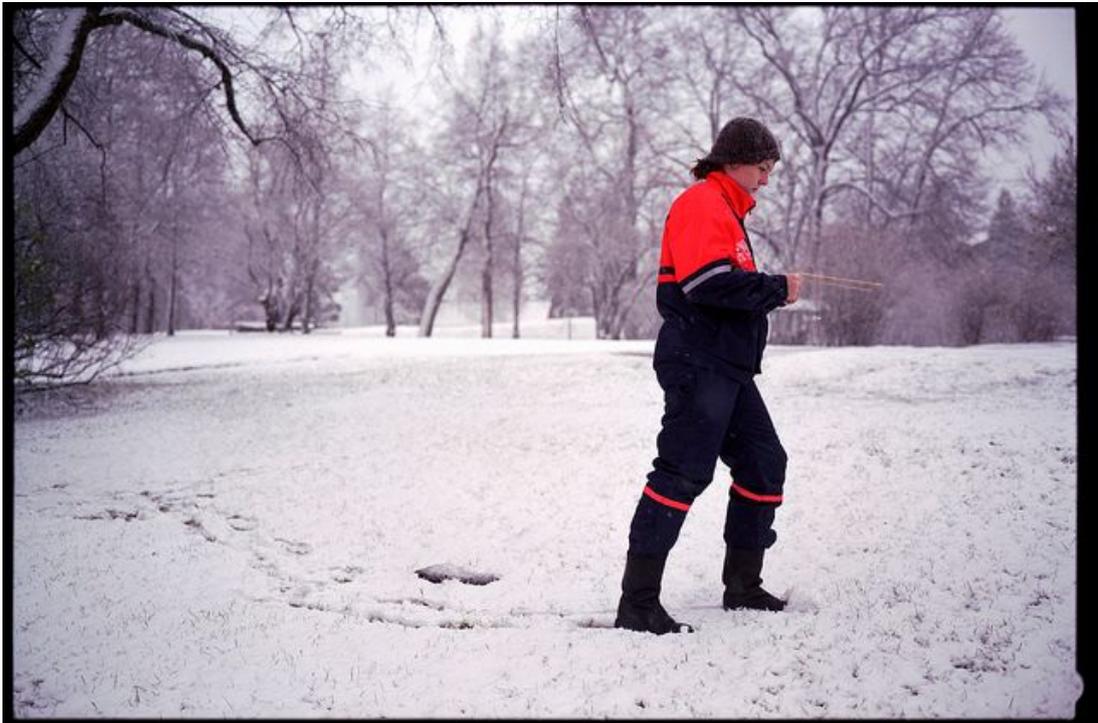
Furthermore in the context of this MA programme in Ecology and Contemporary Performance, and its implicit or explicit relation to climate change, I find myself negotiating, what my works position might be within a sphere that is in many ways demanding more than minimalist gestures towards our collective circumstance.

In Lavery's introduction to *Green letters*⁷⁰ journal titled, what can theatre do? He suggests that it is in fact theatres ability to evade the cause and result nature of funding bodies, which might contain its most generative capacities. He takes the theory of 'weak action' into the realm of performance, suggesting:

If theatre's ecocritical potential is located in how the immanence of the medium poses a challenge to human intentionality, then to prescribe a meaning that audiences are expected to act upon is problematised in advance. In the face of such a contradiction, the most – or maybe best – that one can hope to achieve is to produce a theatre that highlights its own incapacity to signify, its own failure to act. To appropriate Vattimo's terminology, the point of 'weak performance' is not so much to do as to 'undo', to impose a certain limit on the possibilities of theatre, to trouble notions of mastery and intentionality, to remain hypothetical and suspensive.

I feel that this type of weakness featured in the first public performative action of this research, which occurred almost directly after the media flurry around dowsing. In my uncertainty of how to share the practice performatively, I decided to offer the practice as a peripheral happening, simply existing on the outskirts of the house which featured my classmates artworks.

⁷⁰ Lavery, Carl. 2016. "Introduction: Performance and Ecology – What Can Theatre Do?". *Green Letters* 20 (3), 229-36. 232



A Slight Bend of the Forearm 2017. Photo by Antti Ahonen

There were certainly some intentional and unintentional semiotic signifiers involved in this iteration of the work. The clash in aesthetics of workers tools with my own dowsing tools of bone and crystal sought to engage with an uncanniness. The Lemminkäinen costume, contained within its own history, a mixture of these ideas, with a reference to the Kalevala in its trade name. I suppose this illustrates how our societies might integrate elements of folk knowledges and histories into its commercial identity, while leaving behind many of the beliefs which in fact constitute them.

Aside from these signifiers, the performance itself had little clear intention, other than to investigate the feelings, and my own capacity for dowsing in the context of an artistic event. I found that having spent more time with the practice since my first performative example, I was able to enter the familiar mode of focused

unfocus, and that isolating the dowsing response was not a struggle as I might have worried. After gradually establishing a map across the snow covered ground, marked with bones and crystals, the objects were simply removed. Underwhelming in many senses, this lack of action in response to the act of dowsing contains, perhaps a form of weakness, akin to that Lavery refers to.

Just as the dowsing task was not present in order to carry out some form of productive labour, the performance too existed without an explicit intention. Rather what I feel I offered in this performance was a mode of experience similar to the dowsing method. While spectators, who took the form of those entering and leaving the house, as well as dog walkers and runners in the local park, might not have processed the performance in a conscious way. It's presence might somehow have stimulated thought through its strangeness. It might have caused people to hazard a guess as to what exactly was happening in this space. In this sense, Bojana Cvejic suggests that in regards to the demands on theatres instrumentalization, we might propose that *'theatre changes its quest, from the impossible real, to the possible imagined.'*⁷¹

For Cvejic, the weakness introduced in Lavery's text might be embraced through a dedication to the imagined. She describes her own performative engagements with imagination, in how she seeks to integrate audiences into something of a shared imaginary. Her task, in order to stimulate the imaginative capacities of the audience is to establish a theatre which is bodiless, *'sending some parts of its body on vacation'*⁷². She seeks to compose a sensorial imagination in her audience, and stimulate an abstention of oneself. For Cvejic, to imagine is a process of absenting oneself.

⁷¹ Cvejic, Bojana. 2017

⁷² Ibid.

It is here that I might begin to establish a triangulation between this theory of imagination, and the ideas previously explored surrounding neurodiversity. Just as we read from Manning, and indeed echoed in the work of Nan Shepherd, in their relation to their environments, they too engaged in a process of absenting themselves from the image, removing oneself as focus point.

I suggest then that in Cvejic's call for engagement with the sensorial imagination, she proposes a stage which bares resemblance to the perceptual processes of neurodiverse subjects. In this proposal she claims that audiences might take a form of "*leap towards new life*"⁷³, perhaps with an exploratory capacity similar to that established in Taylors 'complementary cognition'.

In some sense, this is what I hope I explored in my black box edition of *A Slight Bend of the Forearm*. The minimalism of the stage provided a suggestion that the performance took place in the spaces around just the theatre space. I hoped that through the gradual reveal of my dramaturgy, audiences might be filling in for themselves what the method responded to. After the second night of performance, I approached two friends in a discussion about the work. One is an architect, who's daily practice involves explicit engagement with the infrastructures wired and plumbed through our domestic and public settings. He asks me, at the end of the performance, wasn't it revealed that the marked spots on the ground directly corresponded with specific points on the ceiling? He walked me throughout the space to demonstrate that above each small pile of materials, was some feature such as a projector, wifi router or power outlet.

⁷³Ibid.



A Slight Bend of the Forearm 2018. Photo by Sanni Siira

Perhaps others were imagining what pipes lay under the ground, creating another narrative altogether. Some audience members asked whether there was a level of fakery, that perhaps I knew where I was going to lay the objects. In this sense performance occupied a specific reality. As I had occupied the theatre space for some four weeks prior to the performance, it is true that I had dowsed the area so many times, that discernable patterns had been established in where each of the objects lay. There is no way for me to unpack how much of each evening's performance was responsive only to the space in its present state at that exact moment, and how much in fact it was in response to the memory of having found some sort of response to a space the evening or even week before. This level of uncertainty then was shared, somewhat between both myself and the audience.

In some way, this provided what I had hoped for, a shared commitment to an idea. An abductive trust in the relation between my body, the rods and the non-visible agencies in the space. But with enough visual space to explore the possibilities, and unsettle our collective relationship to the walls around us. While I cannot speak for the audiences of the work, as the performer, I left the performance with the same trust that I had found my dowsing method. That something had happened, and while unquantifiable, existed in a very real sense.

Conclusion

Contrary to the examples above, where dowsing has been critiqued for its seeming obstacle to the profits and productivity. An example from 2009 appears to show the co-option of dowsing's capacity by exactly a profit driven organisation.

In a New York Times article⁷⁴, nestled beneath a flashing logo banner, advertising the paper's integrity: *'The Truth is Worth it'*, an article describes the dubious nature of a device being used by Baghdad bomb detection squads. Sold by UK firm ATSC, the devices were fabricated to mimic the dowsing response, and sold to Iraqi checkpoint security for sums up to 60,000 dollars per hand set. The article describes the feeling of knowing by Iraqi border guards, reminiscent of my own dowsing experience, the ability to build up a relationship between your instrument and body: *"Whether it's magic or scientific, what I care about is it detects bombs,"*⁷⁵ said Maj. Gen. Jehad al-Jabiri, head of the Ministry of the Interior's General Directorate for Combating Explosives.

In 2013 the CEO of ATSC was prosecuted for fraud, and sentenced to ten years of prison time for the sale of 70,000 devices across many war torn countries in the Middle East and Africa. The judge commented that the fraud had *"promoted a false sense of security and contributed to death and injury."* He also described the profit as *"outrageous"*.⁷⁶

I reference this example as a cautionary example, of what might otherwise might be read as a defence of the capacity of dowsing to instil confidence in one's own

⁷⁴Nordland, Rod. 2009. "Iraq Swears By Bomb Detector U.S. Sees As Useless". The New York Times. November 4, 2009.

⁷⁵Ibid.

⁷⁶Ibid.

body. That while I feel it is important that we explore this realm of somatic knowledge, it too is a knowledge which might be co-opted and exploited. In this case the scale of exploitation reflects the racialised and global nature of weapons trade and its profits. I am reminded that different forms of knowledge, despite their histories and lineages, may only be understood with reference to the power dynamics at play in our society.

The method of dowsing, which has led my process throughout the last two years, has created a landscape through which I have unpacked ways of knowing. The thoughts have taken place on multiple scales and planes, from my own internal neural system to societal conceptions of the nature of fact. What I have tried to unpack throughout this thesis, is a sense that these planes are linked on social and material levels, and that somewhere in these connections I have found suggestions for being with knowledge and perception in fluid, flexible and dynamic ways.

There is in each section of this writing, scope for much deeper analysis of these ideas. In some capacity, these developments have already continued in my thinking and practice beyond this thesis, and will to do so long after the completion of these studies. In particular I feel invested in further exploration into the relationship between the neurodiverse subjecthood, and our ecological crisis. In how we might already have within our physiological structures, the capacity for fundamentally different aesthetic relationships to our environment, which might contribute to the urgency of our climatic regime.

The act of dowsing then, has not only been a training in the search for water, but a training in trust, trust of a process and of my own body. In its ability to navigate both my body through space and the development of new thoughts, dowsing has fundamentally altered the way in which I know.

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