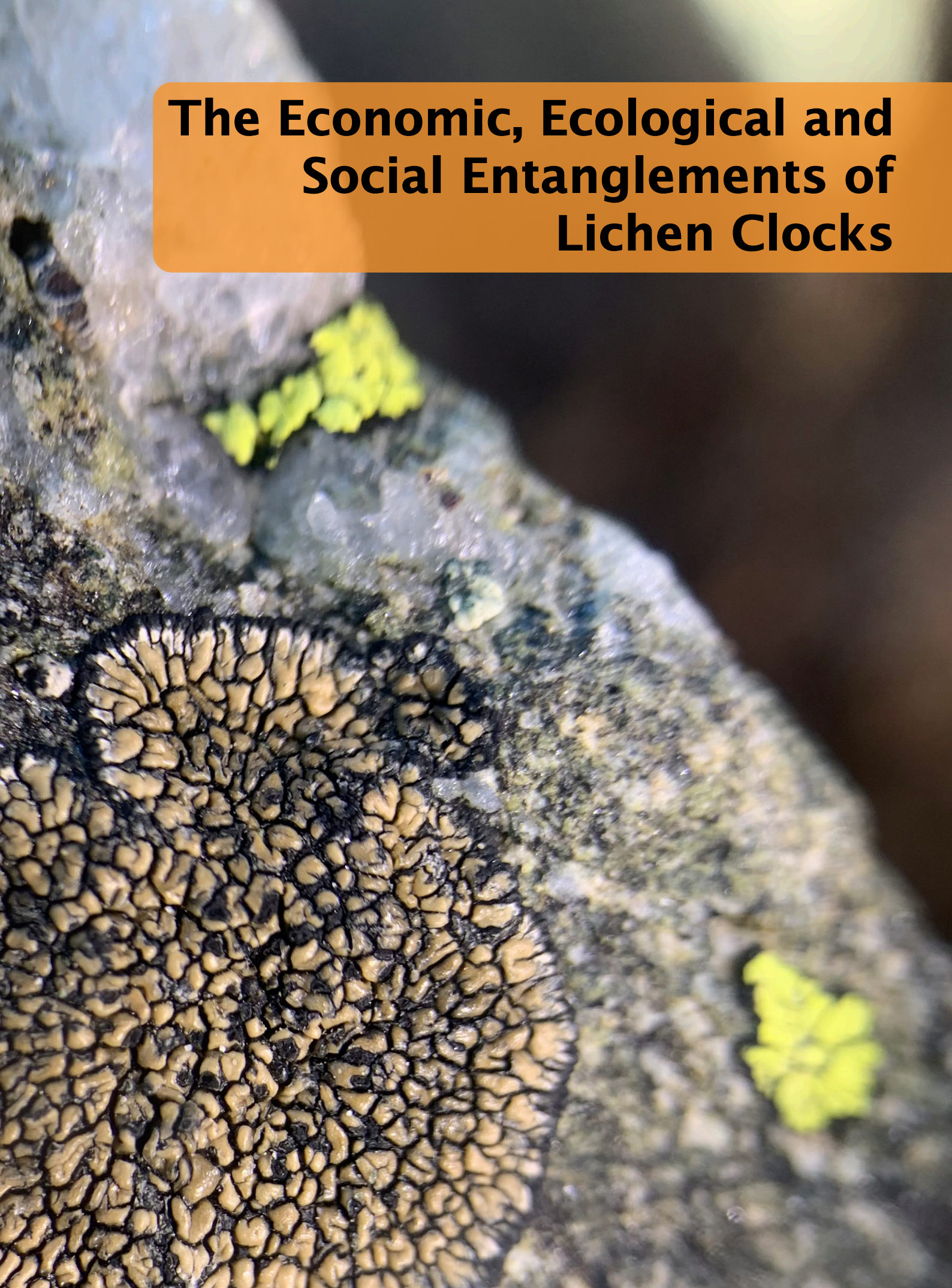


# The Economic, Ecological and Social Entanglements of Lichen Clocks



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## Contents:

**P3** | Introduction- The Economic, Ecological and Social Entanglements of Lichen Clocks

**P4** | Lichen Attraction - Reconfiguring Uncertain Identity with Hyphae and Algae

1.1 - Interrelation of Self and Lichen

1.2 - Queer Perspectives on Identity and Responsibility

1.3 - Lichen-Human Techno-Mediated Intimacies

**P8** | Queer Geographies and Encountering the Anthropocene

2.1 - Orientations and Accountability in Digital Geographies

2.2 - Encountering the Anthropocene and Exclusions

2.3 - Aesthetics and the Nature/Culture Divide

**P12** | Lichen Economics - The Problem of Value and Productivity

3.1 - 'Value' in Lichen Economics and Identity Economics

3.2 - Rethinking Value with Intimacy, an Economic Approach

**P14** | Conclusion

**P16** | Bibliography

# What can thinking through the process of the creation of a Lichen Clock open up in terms of knowledge production on social, economic and ecological factors?



Lichen Clock, Martigny, 2023 (Image: Florence Zuffrey)

## Introduction

Statement:

~~Lichen Clocks are biochronological time pieces that tell environmental and geological time.~~

Revised Statement:

*Lichen Clocks are phenomena through which you are invited to read ecological, social and economic paradigms.*

The Lichen clock is a 4 metre tall sculpture. Two boulders, where the lichen live, project atop a bronze tower. The tower is based on what some paleobotanists believe to be an ancient ancestor of Lichen, Prototaxites (Honegger et al, 2018, p.11-12). This theory is predicated on a few observations that the organism was also a mutual engagement between Algae and Mycelial Hyphae. The two organisms are then related to each other over aeons, this notion of mutual engagement compliments a contemporary investigation into a relationship between myself and the lichen. The contemporary lichen acts as an environmental biomarker of air quality (Richardson, 1992, p.1-3), the premise is that this could give a tacit connection to environmental conditions and shared ecology for the people of Martigny, where the sculpture is installed.

Reflecting critically upon the Lichen Clock, my individual journey emerges as merely a chapter within a broader discourse. This essay delves into the confluence of ecological and socio-economic dynamics that both shaped and were shaped by this artwork. My aim is to weave a critique that bridges the philosophical, ecological, and economic dimensions underpinning the project.

I structure the discussion around three core arguments, all framed within the context of the Lichen Clock project. In Section 1, I articulate how this initiative facilitated a personal metamorphosis, anchored in my interactions with lichen and ideas in queer identities. Section 2 focuses on how this endeavour reframed conventional ecological paradigms through the lens of queer theory. Section 3 embarks on an exploration of how the Lichen Clock complexifies economic valuations, intertwining introspective journeys with queer theoretical reflections. By melding my personal narrative with these expansive themes, my aspiration is to illuminate insights that transcend the confines of artistic creation.

# 1 Lichen attraction – Reconstituting Uncertain Identity with Hyphae and Algae

## 1.1 - Interrelation of Self and Lichen

In early 2021, I faced pivotal personal and professional hurdles. The disintegration of a once-valued professional bond rendered me emotionally unmoored and financially vulnerable.

*“I’d been writing about parasites. In the section of my ecology textbook titled SYMBIOTIC RELATIONSHIPS there were demarcated subheadings: Mutualism, commensalism, parasitism. I had to keep reminding myself that parasitism was a type of symbiotic relationship, not its opposite. That ‘symbiosis’ wasn’t a synonym for ecological harmony.”*

(Lafarge, 2020, p.61)

Daisy Lafarge reminds us—that symbiosis doesn’t always signify the healthiest of connections—which resonates deeply as I reflect on that time. As an artist, my craft is inseparably intertwined with my identity. Amid this turbulence, I channelled my efforts towards creating the ‘Lichen Clock’. The lichen, with its ancient symbiotic relationship between Algae and Hyphae, symbolised both the uncertain identity and the evolving ‘self’ I was in pursuit of.

Scott Gilbert’s assertion, “We are all Lichens” (Gilbert et al., 2012, p.87), hints at identities being a conglomeration of diverse entities coexisting in mutualism. He references the Holobiont principle, which extends the work of Lynn Margulis and builds upon Adolf Meyer-Abich’s foundational research. Holobionts embody a comprehension of identity as a union of a host and its accompanying symbiotic entities (Margulis, 1991, p.673–677 ; Baedke et al, 2020, p151-152). Lichen are holobionts, a symbiosis of unique entities (Mycelium and Algae) that can realise unique traits such as producing compounds or collective reproductive bodies. Such biological unions are reflective of our intricate socio-cultural entanglements, where in unison we also can supersede the limitations of the individual. In such a framework, how do we define the self when selves themselves can be seen as composites, amalgamations or holobionts? In a world where identities manifest as composites, such as holobionts, the conception of the ‘self’ beckons reevaluation.



Lichen Specimens, Natural History Museum, 2022, Image, Authors Own

The lichen—a fusion of mycelium and algae—serves as a poignant metaphor. It compels us to conceptualise the ‘self’ in a reality where distinctions fade and entities perpetually converge.

Defining the Self has been a challenge within philosophy too. Heidegger, in “Being and Time,” delineates a perspective of ‘self’ in ‘Dasein’—a human deeply entrenched temporally and in relationality with their environment (Heidegger, 1962, p36-40). His analysis of ‘techne’ or technology moves beyond the instrumental, suggesting that technology reveals the core essence of ‘being’. He deliberates between technologies that reflect Dasein’s inherent nature and those that distance us from the world (Heidegger, 1962, p97-102). Central to his thought is the act of “letting things be, or, be involved” which I interpret to be the outside-the-human (Heidegger, 1962, p404). While Heidegger’s philosophies have been influential, there is a potential for these conceptions to maintain an anthropocentric anchor, emphasising human-centric existential authenticity.

In contrast, Karen Barad’s “Meeting the Universe Halfway” compels us to reconsider this narrative, particularly towards ideas of knowing and the self, “the separation of epistemology from ontology is a reverberation of a metaphysics that assumes an inherent difference between human and nonhuman, subject and object, mind and body, matter and discourse” (Barad, 2007, p184-185). Veering away from a human-centric outlook, she introduces agential realism—a doctrine emphasising a reality continually shaped by what Barad terms ‘intra-actions’ of diverse human and non-human agents. For Barad, entities are not preexisting but emerge or come to ‘matter’ through specific ‘intra-actions’, thus contesting conventional binaries like subject-object and human-non-human (Barad, 2007 ,p.33). This paradigm encourages a recognition of existence as a dynamic becoming, where entities and the universe are in continuous co-constitution.

Positioning Heidegger alongside Barad is intended to magnify the divergence of Barad’s philosophy. While Heidegger’s exploration urges a reflection rooted in human existence, Barad propels us towards an less deterministic idea of ‘becoming’, rather than ‘being’, where reality is not a stable tapestry but an evolving ensemble of entangled ‘intra-actions’ that constitute and inform phenomena. Reflecting on the journey of the creation of the ‘Lichen Clock’, I wish to explore this dynamic. No longer just an observer, but a reflection on a space of mutual becoming—mirroring Barad’s emphasis on entities and phenomena co-becoming in tandem.

## I.2 - Queer Perspectives on Identity and Responsibility

Queer theory challenges traditional identity conceptions. Munoz aptly states, “Queerness is a doing, a perpetual motion towards the future” (Munoz, 2009, p.1). Embracing self-“othering” is crucial:

*“The label ‘queer’ denotes an emotive tie to non-normativity. Becoming other, by defying normative identities, is foundational to promoting radical difference.”*

(Yerlès, R. 2023, p.92)

Central to queer theory is an aversion to fixed identities, notably promoted by Butler. “Gender Trouble” delves beyond just gender, inviting us to explore broader existential facets. Butler suggests identities are constantly constructed, highlighting ‘Performativity’, where identities like gender arise through relational performance. She emphasises, “each identity’s incompleteness directly stems from its differential emergence” (Butler, 2000, p31). Boucher critiques Butler’s performativity:

*“Butler’s performativity theory, wavering between voluntarism and determinism, leans towards abstract individualism.”*

(Boucher, 2006, p.137)

He questions the ramifications of performativity on individual responsibility. If identities are fluid and interdependent, how is responsibility determined? (Boucher, 2006, p136). Boucher’s critique highlights the challenges posed by non-deterministic theories like performativity. In this work, I grapple with self-identity and ecological responsibility, aware of the socio-ecological-economic paradigms. Contemplating the significance of queer theory, I acknowledge the potential directional power of ‘othering’.

Barad expands upon Butler’s performativity, pushing the concept beyond mere human interactions. As Barad states, “Identity is a phenomenal matter; it is not an individual affair. Identity is multiple within itself; or rather, identity is diffracted through itself – identity is diffraction/différance/differing/deferring/differentiating.” (Barad, 2011, p125). Extending Butler’s critique could be applied in equal measure to Barad’s Agential Realism. Barad sees responsibility as entwined with agency, and emerges from the interactions and entanglements of both human and non-human agents within material-discursive practices. Responsibility is about the possibilities and accountabilities and the potential to change the unfolding of futures arising from these entanglements (Barad, “Meeting the Universe Halfway”, p.218). Identity, differentiating and constructions of the self then become a question of responsibility. If we are to understand any differentiations as having cascading effects across these entanglements.

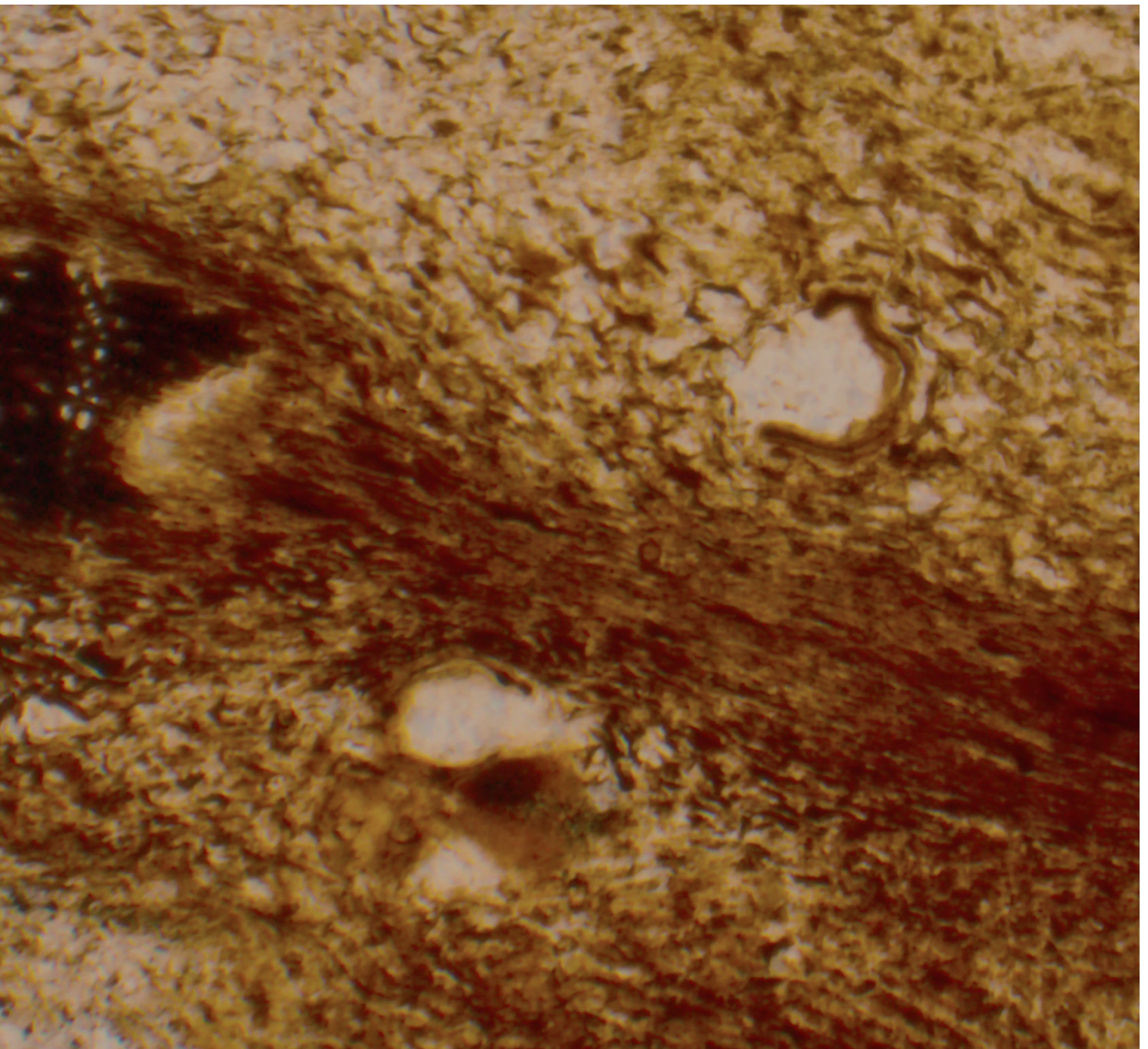
Queer theory distinguishes itself by viewing identity as a journey, prioritising differentiation over fixed resolutions. This adaptive nature of identity is perhaps something worth engaging with when considering today’s pressing environmental concerns and rapid ecological shifts (Steffen, W. et al, 2015). Does a multifaceted approach to change and distinction provide tools to address these escalating challenges?

### I.3 - Lichen/Human Techno-Mediated Intimacies

My engagement with lichen commenced digitally. While not exclusively so, this initial virtual interaction with this non-human organism through search engines, pixels, and research repositories holds significance when examining the concepts of self, intimacy, and connection. Arne Naess' 'Deep Ecology' underscores the value of immersive, experiential encounters within ecology as a pathway to perceive oneself as an integrated part of a vast, interconnected web of existence (Naess, 1973). The 'Lichen Clock' project encapsulated instances of connection and detachment, the latter predominantly rooted in a scientific analytical perspective of lichen and its ascribed utilitarian role in the endeavour.

Deep Ecology advocates for a cohesive perception of ecology and its individual entities. However, the facet of digital interaction introduces a new dimension. Although my exploration with lichen initiated online, it transitioned to a tangible experience, prompting important questions about the nuances of such techno-mediated encounters.

Lichen Microscopy, Hunterian Museum - Glasgow, 2022, Image, Authors Own



The contemporary proliferation of digital instruments for ecological discovery, as observed by Kays and Wikelski (2023), denotes an evolution in our ecological interactions. Pschera's "Animal Internet" investigates the confluence of digital technology and nature, illustrating how technology can blur our ecological perspectives (Pschera, A, 2016, p.28-29). This interplay between digital mediation and our ecological comprehension demands more profound reflection.

The digital domain was instrumental in shaping my Lichen Clock. Presenting itself online, the lichen intra-acts without spatial or temporal boundaries, intertwining with my endeavours and the digital environment. Consequently, the Lichen Clock encapsulates a techno-ecological viewpoint. Deep ecologists probe the detailed interrelations between humans and nature, accentuating the symbiotic essence of ecology and our duty to it (Arne Næss and George Sessions 1984). However, this homogenous perspective has its criticisms.

Timothy Morton offers pivotal perspectives, contesting the reductive interconnectedness often presented in ecological discourse and advocating for a more nuanced understanding of 'relationality'. His "Queer ecology" stresses the imperative to integrate both silicon (digital) and carbon (organic) frameworks, positioning relationality at the heart of discussions on material existence. With this multifaceted ecological perspective, I can unpack the numerous socio-ecological facets of initiatives like mine. Morton asserts that true ecological comprehension lies in relationality (Morton, T, 2010, p.227).

The rise of digital mediation in ecological scenarios reveals complex layers, also serving as a fertile ground for critique and exploration. As we traverse the digital and organic complexities of self-identity within this techno-ecological framework, a pivotal question emerges: Do digitally mediated engagements with ecology that lead to physical interactions reshape our perceptions of ecology?

## 2 Queer Geographies and Encountering the Anthropocene

### 2.1 - Orientations and Accountability in Digital Geographies

Deep ecology emphasises a thorough immersion in nature, linking such encounters to spatial and bodily engagement. David Abrahms articulates:

*"Spaces acquire depth through occupation alone. A rock cluster or a woodland only achieves depth when one is physically amidst these rocks or trees."*

(Abram, 2005, p.2)

This perspective positions our physical engagement central to deep ecology. Yet, my digital exchanges with lichen elicited feelings of spatial ambiguity, evoking a sense of simultaneous presence and absence within an ecological context. Mortimer-Sandilands prompts a reevaluation of conventional place concepts, advocating for renewed reflection on our sensual involvements with locales, thereby challenging standard spatial and bodily practices (2010, p.66-67). Extending upon this, Sara Ahmed's "Queer Phenomenology" introduces an important idea.





She conceptualises “orientation” as an ongoing shaping of individuals via tangible engagements with their environment. While bodies indubitably inhabit spaces, their alignments aren’t solely determined by external factors (Ahmed, 2006, p.85). Ahmed underscores that individuals gravitate towards specific entities, solidifying particular orientations. These inclinations guide us towards physical items, intellectual pursuits, emotions, and goals (Ahmed, 2006, p. 56).

Extending this perspective to digital realms deepens our grasp of spatiality and bodily engagements, expanding ecological horizons. Like physical domains, the digital milieu can mould our orientations, potentially cementing specific behaviours and fostering unique orientation patterns. Digital interfaces might encourage habits that, once established, affect our tangible-world interactions. Presently, I engage with the repercussions of such digital imprints, with Ahmed’s orientation framework offering insightful direction.

Recognising how our ambitions traverse digital and tangible arenas is essential. In the case of the Lichen Clock, my digital orientations did impact on a deeper resonance with the other possibilities of exploring lichen through the project, it became directed towards taxa I had predetermined were significant to the detriment of other narratives. Digitally reinforced behaviours can subtly realign our physical-world orientations. Deciphering the nuanced interplay between aesthetics, desires, orientations, and settings is crucial in understanding contemporary human-ecology dynamics. For instance, how do aesthetic preferences, amplified by digital exploration, influence our ecological interactions?

## 2.2 - Encountering the Anthropocene and Exclusions

The environment actively moulds human history, rather than simply serving as its backdrop. A prominent instance of this is Manchester, a city emblematic of the industrial revolution’s ideals and its ecological consequences. Growing up near Manchester, I see the urbanity that transitions us from the Holocene, marked by climatic constancy, to the Anthropocene, defined by pronounced human influence on Earth (Lewis, S. L. & Maslin, M.A. 2015, p177).

*“The quality [of lichens near Manchester] has been much lessened of late years...through the influx of factory smoke which appears to be singularly prejudicial to these lovers of pure air”*

(Grindon 1859 *ibid* D.H.S Richardson, p1).

Lichen, in prevailing scientific contexts, is viewed as an ecological barometer, reflecting human activity’s impact. What other perspectives might lichen offer? Adapting Samuel Johnson’s words:

*“No, Sir, when a man is tired of lichen, he is tired of life; for there is in lichen all that life can afford”*

(Drawn From: Hawkins, J. quoting Samuel L Johnson, 2012).

The ‘Lichen Clock’ incorporated two boulders adorned with lichen. This led me to Barrage de Mauvoisin, accompanied by Dr. Nicolas Kramar, geologist and Director of the Musée de la Nature in Sion.

As Nicolas elucidated the region’s geological history, from primordial sedimentations to tectonic interplays, each rock and cliffside relayed a tale. While seeking the right stones, we relied heavily on geological mapping—a practice critiqued for its colonial and extractive overtones by Rogers, S. L. et al. (2022). This tool made the vast landscape navigable, like a decipherable map (I once quipped to Nicolas, one location was akin to a ‘Rock Supermarket’). However, the real revelation was unearthing plastiglomerates beneath the dam.

Plastiglomerates, a fusion of natural sediment and melted plastic, epitomise the Anthropocene epoch, underscoring humanity's indelible mark on Earth (Corcoran et al, 2014, p.5-7). Their existence urges us to reexamine our ecological perceptions. Recognising these formations' significance, I ponder whether the 'Lichen Clock' narrative might have shifted had I engaged more with plastiglomerates. Maybe a plastiglomerate clock would have painted a more resonant picture of today's ecology. As Barad reminds us, and in relation to the confrontation with plastiglomerates:

"An ethics of entanglement entails possibilities and obligations for reworking the material effects of the past and the future. There can never be absolute redemption, but spacetime matter can be productively reconfigured, reworking im/possibilities in the process." (Barad, 2011, p.47)

By overlooking plastiglomerates, has a potential for reworking the future entangled with our past mistakes been missed? Further, does this exclusion, which is also a critical component of how things come to matter for Barad (2007, p218), perpetuate a dichotomy between nature and culture? What else may have unfolded had the plastiglomerates, in their aesthetically impalpable way, taken part in the unfolding phenomena of the clock?

Finding Boulders, Barrage de Mauvoisin, 2022, Image, Authors Own



## 2.3 - Aesthetics and the Nature/Culture Divide

Deep Ecology is contentious. While it highlights life's intricate interweavings, it faces criticism for its embedded moralistic stance (Reitan, 1996, p.411-424). There's also scrutiny over its seemingly scant recognition of prevailing patriarchal biases shaping nature's aesthetic ideals (Zimmerman, 1990, p.183). These biases, rooted in hetero-masculine frameworks, might influence our expectations of nature's appearance (Gaard, 1996; O. Abakare, 2021, p.114-115). Butler posits Deep Ecology draws ethics from aesthetics (Butler, date, p.3), while Callicott delves into the ecologist's mindset, noting that witnessing ecological degradation can foster a sense of empathy, propelling a shift towards an interconnected self-perception (Callicott, J. B, 1986, p.316).

This sentiment was evident in my project, particularly in the desire to preserve lichen health. But these empathetic considerations that I felt emerged during the creation of the lichen clock also sat alongside an awareness of my own aesthetic ideals about what the lichen was supposed to look like on the clock (that it had to be healthy so it looked 'good'). The examples on deep ecology make one wonder: did I prioritise the lichen's aesthetic or its well-being? It's likely a mix, instigating deeper introspection about my ecological drives.

Barad challenges the notion of ecological harm by recontextualising actions like displacing a lichen-covered boulder. She posits that there aren't truly "acts against nature", as all acts within ecology are inherently natural (Barad, 2011, p.60). This perspective dismantles the idea of a nature-culture dichotomy. She further muses, "What if we were to understand culture as something nature does?" (Barad, 2011, p.60), This is not to shirk responsibilities, as discussed through Barad's idea of responsibility previously. But it is a way of understanding how something like 'aesthetics', the idea of damage and purity can manifest in a nature/human divide, which may distort potentials for other modes of ecological engagement. This now leads us into concepts of value in ecology and economics as told through Lichen.

# 3 Lichen Economics – The Problem of Value and Productivity

## 3.1 - 'Value' in Lichen Economics and Identity Economics

50CHF per m<sup>3</sup>. This was the monetary value set by Commune de Bagnes for me to extract boulders housing lichen from the mountain.

In the realm of ecological discourse, assigning 'value' to living systems presents both philosophical and empirical challenges. Some ecological economists see that, by ascribing monetary value to ecological entities we could be better equipped to safeguard them, these ideals are tied up in notions of their importance to human welfare and future economic growth. (Costanza et al, 1997, p.15-16). Splash's critique of such valuations as 'shallow ecological economics' highlights the peril of oversimplifying in pure monetary terms the worth of ecology with a call look beyond simplified monetary considerations in order to genuinely grasp nature's intrinsic value (Splash, 2012: p.359-61). It is here that we see something like Lichen reduced to valuations dependent on perceived human societal utility.

Just as lichen on boulders are ascribed a monetary value, so too are queer identities. A common discussion around economics and queer identities in scholarly research is to present the inherent worth of queer people to economies in how greater acceptance and integration of queer people can improve productivity and national income (Flores et al., 2023) This can be understood as a perspective on queer economics known as 'Homocapitalism'. The acceptance of queer identities in the framework of homocapitalism depends on an alignment with capitalist interests as described (Rao, 2020, p.47-48; Charrett, 2021) This reduces identities to tangible evaluations, further, there is an implication that any social safety offered by society is contingent on a queer person's productive capacity.

Through the prism of a queer economic lens, the sobering reality emerges that our valuation frameworks are often skewed heavily towards a capitalist notion of 'worth'. Allen-Landwehr discusses that queer intimacies are seen socially as inherently 'non-productive', Non-traditional intimate structures, which may not align with established cis-heteronormative narratives, often find themselves at odds with the dominant capitalist ideology (Allen-Landwehr, 2023, p.17). While traditional economies have been steeped in transactional dynamics and where the very structures like non normative intimacies that enrich the tapestry of human connection are deemed "unproductive". The infusion of queer thought and ecological intimacy could offer a directionality and orientation away from these paradigms. Where value transcends materialistic confines, embracing non-productivity as a method. Thus, our economic systems demand a recalibration of 'value' and 'productivity'.

### 3.2 - Rethinking Value with Intimacy, an Economic Approach

In his essay, "The Soul of Man Under Socialism," Oscar Wilde taps into queer ideologies, exploring identity in relation to the 'other' (Wilde O, 2017). He spotlights the balance between interdependence and distinct individuality:

*"It will be a marvellous thing – the true personality of man – when we see it. It will grow naturally and simply, flowerlike, or as a tree grows... It will not always be meddling with others, or asking them to be like itself. It will love them because they will be different. And yet while it will not meddle with others, it will help all, as a beautiful thing helps us, by being what it is.."*

(Wilde O, 2017, p300)

Rock Receipt, 2022, Image, Authors Own



**BOURGEOISIE DE VAL DE BAGNES**  
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Page 1 / 1

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**FACTURE NO. 8201.167**  
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 Références 70950

**Bourgeoisie Val de Bagnes**  
 Prélèvement de pierres du 19.10.2022

Désignation	Quantité	Unité	Prix	Taux	TVA	Montant
Prélèvement de pierres	2	m3	50		1	100.00
No TVA CHE-369.539.032 TVA	Frs 100.00	Soumis à 7.7%			1	7.70
<b>Montant à payer</b>						<b>107.70</b>

Wilde's prose advocates for an individualism that balances ego with a universal interconnectedness to difference, speaking to a queer sense of intimacy. Of loving the stranger. Timothy Morton also advocates for a queer intimacy as a method to break the bounds of heteronormative social and ecological model through intimacies with the "strange-Stranger (Morton, 2010, pp278). We could see intimacy in the sense of Barad here, which is not about boundless connections but intimacy in recognising where boundaries are produced and differentiations are enacted. (Barad, 2007, p.142-145)

Intimacies, as I experienced through the development of the Lichen Clock were confusing, and in some ways fragmented. The Lichen Clock emerged under heteronormative economic frameworks, but this framework was then distorted by ethical dilemmas. The mental reconfiguring of ecological intimacy, replete with its myriad hues and rhythms and inconsistencies, beckons us to re-imagine our economic narratives. In dealing with the unfamiliar, we're bound by a complex web of interconnections. The value of nature, such as lichen landscapes, prompts us to broaden our understanding of intimacy. There's a synergy between ecological and queer narratives. Both realms encourage breaking away from restrictive structures, both are asymmetrical and unpredictable in nature, places of becoming-other apart from others. Or as Barad might states:

*"diffraction – diffracting diffraction – is particularly apt since the temporality of re-turning is integral to the phenomenon of diffraction.... intra-actions enact agential cuts, which do not produce absolute separations, but rather cut together-apart (one move).<sup>5</sup> Diffraction is not a set. pattern, but rather an iterative (re) configuring of patterns of differentiating-entangling. As such, there is no moving beyond, no leaving the 'old' behind. There is no absolute boundary between here-now and there-then. There is nothing that is new; there is nothing that is not new"*

(Barad, 2014, p.168)

Queer intimacy and Intra-action ask us to consider the entanglement with strangeness. We do not leave the past behind but reconfigure it. We are asked to be aware when and why we exclude things from phenomena and to participate in differentiating, together-with the stranger. The lichen clock, and my relationship with the lichen through this, highlights the entanglements intrinsic to our valuation systems. Under current paradigms, value is predominantly tied to productivity and monetary worth. Interestingly, while lichen clocks do not conventionally "tell the time", this anomaly underscores how time, productivity, and usability are confined by prevailing notions. My intimacy with the lichen presents an amusing contradiction in a social framework that attempts to monetise both our existences. Through this, the lichen and I were able to constitute something intimately 'un-productive' together, in friction with these conditions.

## Conclusion

The Lichen Clock metaphorically symbolises the interplay of time and ecology, but in engaging in this sculptural act I now reflect that the 'work' of the sculpture is in what it has revealed about my modalities of thinking. The work can be challenged here and through this reveal where actions and orientations can be queered. Embracing 'queer' directionality becomes essential.

The Lichen Clock has been a reflection on differentiation for me. To differentiate is essential, yet it's imperative to take into account our relational stances and the magnification of such relationships in today's digital era. Confronted with the irony of creating ecology-centred art while simultaneously impacting the very ecology, I delved deep into self-reflection. My interwoven journey with the lichen accentuated the intricate dynamics of identity, further complicated by prevailing economic, ecological, and social paradigms. Both myself and the lichen can be accounted for as agents of productivity, shaping a monetary value of the both of us. In this sense, we are undifferentiated, which is precisely the problem.

Differentiation and intra-action, as Barad insightfully posits, comes with an inherent obligation—to discern boundaries and to recognise with whom or what we align, as well as what remains excluded (Barad, 2007, p218). It's pivotal to remain conscious of our positions within this vast ecosystem, accepting the influences of various shaping forces.

Recognising our active role within the unfolding of phenomena implies an embrace of a queer adaptability—not just in navigating the ever-evolving landscape but also in acknowledging overlooked elements, like the plastiglomerates. Instead of succumbing to the notion that we're running 'out of time' in the face of ecological crisis, could we embrace a more queer, lichen-like time coupled with a renewed urgency towards differentiation, ensuring our actions reflect both respect and responsibility.

Lichen Microscopy, Natural History Museum, 2022, Image, Authors Own



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