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# THE SOUNDSCAPE OF *MAN IN THE HOLOCENE*

## An Exercise in Sensitization

### ABSTRACT

This paper discusses how the natural soundscape of Max Frisch's novella *Man in the Holocene* (1979) affords a contemplation on the inadequacy of human epistemology against the immense temporality of the geological deep time. The sound of rain, wind, and thunderclaps in Frisch's narrative evokes a vaster temporal scale and constantly challenges its protagonist Herr Geiser's faith in science and objective knowledge. Following Émilie Hache and Bruno Latour's advocacy of "resensitization," and Derek Woods's call for attention to scale variance and boundaries of our scalar epistemic framework, this article argues that the interrelation of sound, weather and our senses in *Man in the Holocene* sheds

light on the limits of an anthropocentric framework of understanding, the discontinuities between different scales, and how we can reposition ourselves across and inhabit multiple epistemological scales without losing sight of their discontinuities. Weather is a profoundly intermingled sensory experience and carries temporally and geologically vast, non-human agency. By focusing on meteorological phenomena and atmospheric sound, this paper aims to contribute to the scarce literature on sound in ecocriticism and on natural soundscapes in the studies of acoustic ecology.

KEY WORDS: rain, sound, scale, ecocriticism, Max Frisch

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## INTRODUCTION

In their paper “Moralism and Morality,” Émilie Hache and Bruno Latour challenge their reader with “an exercise of sensitization.”<sup>2</sup> They compare four excerpted texts from three philosophers and one scientist according to their abilities to hear “the call of nonhumans,” namely, the extent of their refusal and accordingly openness to the entanglement between humans and nonhumans.<sup>3</sup> Among them, Immanuel Kant’s extract on the concept of the sublime is regarded as the most ambivalent because whereas Kant recognises “nature’s deafening call,” he admonishes people against listening to it.<sup>4</sup> By closing our ears to nature, Kant establishes the immensity of the human mind despite the grandeur of nature since the latter is predicated on the former. This intentional deafness separates the human from the rest of nature by elevating humanity. In contrast, the late scientist James Lovelock’s Gaia hypothesis reverses the precedence in Kant’s formula. By personifying the Earth in a radical manner—the Earth as an enemy who can take revenge—Lovelock tests the limits of our imagination, forcing us to recognise our dependence on nature.<sup>5</sup> Lovelock’s anthropomorphism is, according to Hache and Latour, anything but naïve. It presents an exercise to re-sensitize ourselves, who were once desensitized by the belief that humanity is a possessive entity detached from everything else in the world, as represented, although ambivalently, by Kantian deafness.

The ability to sense the works is largely metaphorical in Hache and Latour’s exercise, whereas I suggest a turn to the corporeal aspects of these perceptive faculties. Susan Buck-Morss regards the same text by Kant as emblematic of “the alienation of the corporeal sensorium” of modernity for the sake of self-preservation and self-glorification.<sup>6</sup> For Kant, the sonic environment signals how daunting nature is, that threatens the self-sustained boundary of Man. It was “the boundless ocean in a state of tumult” and “the lofty waterfall of a mighty river” which make human beings aware of the disproportionality of our perceptive and aesthetic faculties against the immensity of nature. As Buck-Morss observes, modern desensitization functions to maintain the idea of an autonomous, self-contained, though sense-dead Modern Man. It is precisely such an ideal that contributes to the intentional deafness towards our embeddedness in a relational network of human and nonhuman beings described by Hache and Latour. This connection between the deprivation of sense and the rooted anthropocentrism urges us to listen to the excluded domain of our aural experience of nature.

<sup>2</sup> Émilie Hache and Bruno Latour, “Morality or Moralism?: An Exercise in Sensitization,” trans. Patrick Camiller, *Common Knowledge* 16, no. 2 (April 1, 2010): 311–30, <https://doi.org/10.1215/0961754X-2009-109>.

<sup>3</sup> Hache and Latour, 313.

<sup>4</sup> Hache and Latour, 317.

<sup>5</sup> Hache and Latour, 321.

<sup>6</sup> Susan Buck-Morss, “Aesthetics and Anaesthetics: Walter Benjamin’s Artwork Essay Reconsidered,” *October* 62, no. Autumn (1992): 5.

My paper will pursue the same line of inquiry as Hache and Latour to present an exercise of sensitization through reading Max Frisch's novella *Man in the Holocene* (1797) with a focus on its sonic environment. *Man in the Holocene* is a "noisy" book. Pluvial and atmospheric sound infiltrates Frisch's novella from the beginning—"thunder," "rain," "somewhere a tapping on metal," "gurgling around the house."<sup>7</sup> In contrast to the minimalist way of how Frisch depicts the crumbling landscape of an old man's mind, nature is represented with thorough preponderance of details via the protagonist Geiser's meticulous observations. Frisch's novella reverses Kant's intentional deafness. Whereas Kant suggests we refrain from hearing to protect ourselves from the humiliation from nature, Geiser begins to hear when self-preservation has become impossible facing his deteriorating health and precarious physical environment. In this sense, this novella depicts a process of sensitization for Geiser who struggles to but cannot unhear the noises and voices of rain, wind, and a flooding river. To borrow Hache and Latour's words, Geiser possesses high "moral intensity" which is measured against our ability to recognise the voices of beings that are not ourselves. Further, I would like to suggest that Geiser hears more. He not only hears the resonance between nature and himself, but also the dissonance when he tries to apply human science to understand what nature is trying to "communicate" with him through the nonstop rainfall that continues pouring throughout almost the whole story.

What he hears is what Derek Woods calls "scale variance,"<sup>8</sup> a concept that accounts for qualitatively different epistemological constraints that are posed to the operation of systems at different scales and our observation of them. Scale variance is what is missing in Hache and Latour's "ecological"<sup>9</sup> reading of Kant. Indeed, the unfathomable immensity of Nature is given rise by the silenced voices of nonhumans. Yet it also bears the marks of scalar differences between the Earth as an entity and human being as an individual, the perpetuity of rain and ocean and our ephemerality. My reading of *Man in the Holocene* will attend to both aspects through listening to the resonances as well as dissonances in the soundscape of Frisch's novella. I seek to show how an ecological and scalar reading of the novella re-sensitizes our intentional deafness towards nonhuman beings and the scalar differences. This article will start from giving voices to the meteorological beings and show how they inform us to read the novella through an ecological approach without losing sight of scalar differences. I will then demonstrate the novella's attentiveness to issues of epistemic scales and the variance across different scales. In the last section, I will argue that *Man in the Holocene* provides a possibility to imagine our embodied selves both as affective beings and scalar beings. This body is not bounded but mattered, embedded within the multi-scalar environment. As Tim Ingold points out, to hear is never an isolated

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<sup>7</sup> Max Frisch, *Man in the Holocene*, trans. Skelton Geoffrey (Champaign: Dalkey, 2007), 1-2.

<sup>8</sup> "Epistemic Things in Charles and Ray Eames's *Powers of Ten*," in *Scale in Literature and Culture*, ed. Michael Tavel Clarke and David Wittenberg (Cham: Palgrave Macmillan, 2017), 63.

<sup>9</sup> Hache and Latour, 317.

experience, but a multi-sensory perception intermingled with light and feeling.<sup>10</sup>

### “WHEN IT RAINS”

No human was there to hear the first drops of rain on Earth. The planet was different, and so was rain. Yet we may be able to imagine a mode of vibration, contact, and transmission similar to what our hearing system can detect today. The natural rhythms in *Man in the Holocene* are encompassing, intrusive, and irresistible, saturating the narrative soundscape of a small valley town in Ticino where the seventy-three-year-old protagonist Geiser lives. Rain, the source of all the sounds resonating in the valley, blocks up as well as cuts through. Heavy and incessant rainfall affects the synchronic and technological modes of transmission such as the highways and electricity, but the transmission from one temporal scale to another is made possible. Through vibrations, audible or not, a geological phenomenon which has been occurring on Earth for at least 2.7 billion years reverberates into the ears of a man in the Holocene.

*Man in the Holocene* contemplates the being of humans against the backdrop of the geological deep time. The Holocene epoch denotes the current period that has lasted for approximately ten thousand years since the end of the last glacial period, which coincides with the late and post-Stone Age history of humankind when massive intrusions by the *Homo sapiens* into nature have taken place. By introducing this geochronological category, Frisch navigates us into the depth of Earth’s geological past in the span of which human history is extremely brief. The designation “Holocene” itself can be seen as a gesture of integrating the human scope with the planetary one, whereas the term was surely motivated by a “geological” rationale—the end of the latest glacial period, but it was more significantly a “biological” rationale—the believed emergence of the *Homo sapiens* and human civilisation.<sup>11</sup> The nomenclature of the “Holocene” hence is the product of what Woods terms “scalism,”<sup>12</sup> namely the precedence of one framework of knowledge (“scale”) over others, in this case, the human scale over the planetary one. The novella calls our attention to the incongruity between the two scales concealed under anthropocentric scalism. Multiple aquatic and atmospheric sounds—the cascading of the river, the drizzly roof tiles, the chattering of wind—guide us in this deep journey beyond human history. Meteorological phenomena call upon us to march into the realm beyond realism. They predate us, they envelop us, they are the medium that affords our experience and perception, and they will outlive us.

Frisch’s novella does not assume a conventionally realist form. It tells the story of an aged widower Geiser coping with amnesia and the everlasting rainfall

<sup>10</sup> Tim Ingold, “The Eye of the Storm: Visual Perception and the Weather,” *Visual Studies* 20, no. 2 (2005): 97–104, <https://doi.org/10.1080/14725860500243953>.

<sup>11</sup> Robert V. Davis, “Inventing the Present: Historical Roots of the Anthropocene,” *Earth Sciences History* 30, no. 1 (2011): 63–84.

<sup>12</sup> Derek Woods, “Epistemic Things in Charles and Ray Eames’s *Powers of Ten*,” 79.

threatening to cause an abrupt erosion that could submerge the valley which he inhabits in solitude. Formally, the novella is comprised of fragmented sentences, cut-off excerpts of scientific discoveries and records from books and newspapers, and minimalist narration, where Geiser is rarely the centre of narration. The visual and textual result is a patchwork of different frames that informs the reader of how the narrative is layered within itself. As the story divulges, it becomes growingly ambivalent whether Geiser, the only human being in the book, is the protagonist. Geiser's natural ambience becomes far more present than Geiser's story. Somewhere a gurgling river, thunder whispers and groans, raindrops splashing and drumming on the windowpanes. They *tell* their own stories. Jane Bennett, meditating on the agential power of the non-organic, asks, "is there such a thing as . . . a life of the it in 'it rains'?"<sup>13</sup> Although Bennett's question does not address the meteorological soundscape, the atmosphere often communicates its moods and powers through sound—in wind, rain and thunder, as much as in rising tides and sliding lands. To read *Man in the Holocene* is to go through Geiser's process of sensitization, and cultivate the hearing towards the voices of nonhuman beings simultaneously with Geiser.

One may confuse Geiser's personification of meteorological phenomena with conventional pathetic fallacy. Poets write of sobbing rain and roaring rivers. Originally coined by John Ruskin to describe distorted representations of nature through the filter of human emotion, pathetic fallacy is now often used as a neutral term that refers to the attribution of human emotions onto inanimate beings in literature.<sup>14</sup> Ecocritics have revived this idea to argue that in Ruskin's original version, the concept already transcends the division between subjectivity and objectivity since Ruskin rejects the ontological opposition on which Kant insisted. Pathetic fallacy in literature subsequently "[i]nforms readers on affective attunement between human and nonhuman entities."<sup>15</sup> To put it in Hache and Latour's idioms, pathetic fallacy is a higher form of moral intensity, as the human subject is sensitized to a great extent to recognise the sounds of nature, be "attuned" to it.

Pathetic fallacy might capture the agentic capacity of the rain in relation to our humanistic scale of perception, whereas it remains an inadequate form of listening to the complexity of the geological, since it is predicated on a logic which denies scale variances and advocates that things can be expanded without modification of their basic elements. The emphasis on attunement can thus bury the discordances. As in *Man in the Holocene*, rain does not only tap and hiss, but also accumulates to the tipping point where it threatens to cause the erosion of the whole valley. By showing the qualitative change beyond a certain threshold, the novella prevents us from rendering

<sup>13</sup> Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke University Press, 2010), 53.

<sup>14</sup> John Ruskin, "Of the Pathetic Fallacy," in *European Literature from Romanticism to Postmodernism: A Reader in Aesthetic Practice*, ed. Martin Travers (London: Continuum, 2001), 79–81.

<sup>15</sup> Stefano Rozzoni, "From 'Pathetic Fallacy' to Affective Attunement: Reading Virgil's *Eclogues* through the Lens of Material Ecocriticism," *SubStance* 50, no. 3 (2021): 121, <https://doi.org/10.1353/sub.2021.0031>.

nature simply a symbolic backdrop of human(centric) drama.

A scalar reading and a new materialist one do not have to be incompatible. As Woods argues, continuity and discontinuity “paradoxically co-exist.”<sup>16</sup> Whereas things are interrelated to each other within one scale domain, the scale domains constrain and disrupt their activities across different scales. An ecological reading of Michel Serres’s idea of “cascade” can shed light on this paradoxical relationship. In *The Parasite*, the relationality of beings unravels in the manner of a “cascade:” parasites—biological, social or informational—take from the host who is the parasite of another host. Serres suggests that this parasitic relation is “the atomic form” of intersubjectivity and the pests introduce to a system interruptive disorder and emergent re-ordering simultaneously.<sup>17</sup> They, Serres pushes further, *are* the system, as much as noises (one of the multiple meanings of *le parasite* in French) are the foundation of information. In Serres’s reading of La Fontaine’s fable of a town mouse and a country mouse having a meal together, the sound of rain embodies this noise, “beating incessantly on the roof of the host and guest.”<sup>18</sup> He prompts us to understand the system as not in harmony but in disequilibrium. Noise/Rain houses us, conditioning the change and exchange of places of the hosts and the pests. The roof is a surface that separates the interior and the exterior, but rain penetrates acoustically, destabilising what counts as inside and outside. The roof can also be well understood as the limit of our knowledge. It is through sound that the presence of thresholds is revealed. Elsewhere Serres explicitly points to the association between scale and cascade, and how ecological temporal scales challenge our existing epistemic framework. He writes, “from the depth of the mountains and from the height of the sky, a temporal scale falls onto my shoulders, a scale that flows like a *cascade* towards me, an old man close to his death.”<sup>19</sup> These words beautifully resonate with *Man in the Holocene*. Rain, in Frisch’s description, demonstrates its agential capacity similarly. It resonates, interrupts, and cuts across different scales.

## SCALAR DISSONANCES

*Man in the Holocene* brings forth different scalar frames of reference and discontinuities among them to reveal the limits of our epistemological categories, which contributes to our representational incapacity that Timothy Clark describes. To grasp the scale of climate change from an individual’s perspective is as difficult as to “imagine what a novel’s interior monologue would look like if one tried to present it over a geological time scale.”<sup>20</sup> As the realist mode predominant in conventional

<sup>16</sup> Rozzoni, 121.

<sup>17</sup> Michel Serres, *The Parasite*, trans. Lawrence R. Schehr (Baltimore: The Johns Hopkins University Press, 1982), 5.

<sup>18</sup> Serres, *The Parasite*, 15.

<sup>19</sup> Michel Serres, *The Incandescent*, trans. Randolph Burks (Bloomsbury Academic, 2018), 6.

<sup>20</sup> Timothy Clark, *Ecocriticism on the Edge: The Anthropocene as a Threshold Concept* (London: Bloomsbury, 2015), 72.

novels has ceased to represent our reality, a different mode of writing is needed to account for this millennia-spanning, global process. Such mode of writing requires us to exceed “the drama at the normal scales of human-to-human interactions.”<sup>21</sup> An episode in the novella succinctly illustrates attentiveness to this variance. A professor of astronomy explains to Geiser about the solar phenomena of prominence, “which incidentally have nothing to do with the weather on earth and the solar investigator’s wife brought along a bowl of soup, minestrone, to be warmed up.”<sup>22</sup> Solar prominence, a phenomenon whereby high-temperature gases (though relatively cool compared to the Sun’s temperature) extend outwards from the surface of the Sun, does not have an impact on the weather on Earth, nor does it heat a bowl of minestrone. Prominence operates at different temporal and spatial scales that evade our sensorial perception, which, on the other hand, is sensitive to the warmth of a heated bowl of soup. What counts as warm for a minestrone does not make sense for the solar surface environment whose average temperature goes up to 5505 degrees Celsius. The soup would evaporate at such temperature; so would our “earthly” frame of reference. It is no coincidence that Geiser’s encyclopaedic excerpts are shown within enclosed rectangles, which not only resemble slips of paper but also signify the limits of the epistemological frameworks that will be useless when exceeding their frames.

The inappropriateness of implementing one coherent epistemological category to apprehend a phenomenon on another scale relates to what Clark describes as “scale effects.”<sup>23</sup> Scale is a “threshold” across which things “transmogrify,” a qualitative effect becoming visible from quantitative accumulations.<sup>24</sup> A disastrous landslide that Geiser speculates could take place is an illustration of this scale effect. The raindrops erode the mountainside in a million tiny ways until, at the tipping point, they congregate into a catastrophic event. To make sense of phenomena spreading onto different scales, we actively practice “scale framing,” projecting a single, coherent frame of reference to make a cut on the point where thresholds lie.<sup>25</sup> Through frame-cutting, one scale is made visible while the other invisible. The chosen frame opens as well as constrains what we can see and comprehend.

To speak of scale is always to speak of scales. The existence of one scale already implies other varying scales and accordingly their gaps and disjunctions. Clark provides an instructive yet not complete categorisation of three scales: the individual (Level I), the socio-technological (Level II), and the scale that is “a proliferation of emergent effects [which] has long exceeded the possibilities of human foresight or planning” preventing us from tracing the possible causes (Level III).<sup>26</sup> The expansion from Level I to Level III is not a continuum. The boundary between the scales is a threshold marked by fundamental discontinuities, across which framed knowledge

<sup>21</sup> Clark, 131.

<sup>22</sup> Frisch, 15–16.

<sup>23</sup> Clark, 72.

<sup>24</sup> Clark, 69, 59.

<sup>25</sup> Clark, 73.

<sup>26</sup> Clark, 7.

becomes untenable.<sup>27</sup> For example, what might be warm for the Holocene does not contribute to understanding the climate of the Cretaceous. Our current heating climate is the result of the accumulation of human carbon footprints *en masse*. Nevertheless, these disjunctions allow us to reflect upon contradictory epistemologies while keeping them all in view. Where one frame of reference terminates, another frame previously unthinkable, or unsensible, emerges.

For Geiser, the process of re-sensitization is made possible when rain obstructs all the possible communicative channels: the only highway is blocked, letters are running late, and Geiser's television loses signal. Instead of the "three-note horn" of the mail bus, rain is "drumming on the windowpanes," wind "hissing through the leaves" and when they cease, there is "a constant rushing sound throughout the valley."<sup>28</sup> The propagation of natural sounds overcasts the technological transmissions that compress space and time. By folding the distance between two distant locations, technologies conceal the gap between two scale domains—the individual and the social. The suspension of technological compression gives rise to a process of decompression—the distance between the things pressed together on the same plane starts to unfold. Having "no idea what is happening in the world"<sup>29</sup> in this status of isolation, Geiser is left with ample time to engage in a private act of collecting knowledge through reading, taking notes, and clipping them together, to make sense of the decompressed time-space.

With decompression, both time and space expand. Time seems infinite with the never-ending rain, while space appears void as mist fills up the valley. Geiser's increasing amnesia only exacerbates his loss of a concrete grip on reality. To fend off memory loss, Geiser resorts to writing and knowledge. He writes things on paper or directly cuts them out of his books, pasting these papers onto the walls of his living room. The pieces of paper containing geometric theorems, historical records, and anthropological particulars, not unimportant themselves, however, are out of place. They do not help in dealing with the landslide in the garden or a speculative one which could bury the whole valley.<sup>30</sup> Quantum physics cannot repair his stove and television, nor does "information about the conjectural brain of Neanderthal man" prevent Geiser's memory from deteriorating.<sup>31</sup> The accumulation of knowledge finally leads to the question: "What belongs where?"<sup>32</sup> None of it is relevant, not only for Geiser but also for the need to grasp this crumbling situation in which floods and erosions are advancing. Their useless frames begin to overflow the room to the extent that "there is no longer a living room," but a total invasion of an originally homely and hospitable

<sup>27</sup> To grasp this idea, it may be easier to think about how things operate differently at a quantum level and at a human scale, yet it has also become more recognised in biology and geology. See Derek Woods, "Scale Variance and the Concept of Matter," in *The New Politics of Materialism: History, Philosophy, Science*, ed. Sarah Ellenzweig and John H. Zammito (New York: Routledge, n.d.), 200–24.

<sup>28</sup> Frisch, 4, 9.

<sup>29</sup> Frisch, 26.

<sup>30</sup> Frisch, 12.

<sup>31</sup> Frisch, 38.

<sup>32</sup> Frisch, 38.



space.<sup>33</sup>

Weather presents a challenge to Geiser's wall of knowledge as well. The paper slips curl up at the edges due to humidity, and "when one opens a window"—when the house as a shelter is opened up—"the whole wall flutters and rustles."<sup>34</sup> These slips cease to express the scientific knowledge that is written on them, but give voices to the weather, the humming of another scale. "They refuse to lie *flat*," that is, refuse to be confined by the plane assigned to them by Geiser.<sup>35</sup> They keep reminding Geiser, through their curly and fluttering materiality, of the unfitness of the knowledge to which Geiser seeks recourse.

The paper slips are assaulted by the wind and rain—beings occupying another spatio-temporal scale—as the whole valley gets shrouded. To leave the town before being buried by landslides, Geiser marches into the mountain pass despite the storm. What has served him when he walked to the grocery store in town or inspected his garden, has now become a nuisance: "A walking stick would have been more useful than the umbrella, an oilskin better than the gabardine raincoat, which becomes heavy when wet."<sup>36</sup> This rain, endless, penetrating, and all-encompassing, is not unlike the very first rain on Earth which "poured in catastrophic torrents for thousands of years."<sup>37</sup> To make sense of this primaeval being, Geiser finds concrete, especially scientific, knowledge reassuring. Writing in an encyclopaedic fashion, he notes down different typologies of thunder and rain, taxonomizing them according to their acoustic properties. Thunder groans, chatters, crackles; rain is sometimes "as a hissing sound in the leaves of the chestnut tree," sometimes "as silence."<sup>38</sup> By rendering them taxonomic and transcribing sound onto paper, Geiser seeks "to hear no thunder, no rain, no splashing from the gutter, no gurgling around the house."<sup>39</sup> He is Kantian in his response to the "deafening sound of nature."<sup>40</sup> Listening is an invitational gesture. In listening, one opens up to allow in what is exterior and alien to oneself; whereas in naming, one imposes one's voice over the named, addressing without being addressed. Classical taxonomy as a way of knowledge production, according to Michel Foucault, tends to judge the value of different things based on the presumption of their propinquity to achieve a cumulatively inclusive and intelligible frame of knowledge amid infinitude.<sup>41</sup> It is a practice of naming based on a universal and primary language ("a tabula") which renders this process of ascribing meaning and causality possible.<sup>42</sup>

<sup>33</sup> Frisch, 39.

<sup>34</sup> Frisch, 39. "*Das ist keine Wohnstube mehr*" in original. Max Frisch, *Der Mensch erscheint im Holozän* (Frankfurt: Suhrkamp, 1981), 53.

<sup>35</sup> Frisch, 38, emphasis added.

<sup>36</sup> Frisch, 72–73.

<sup>37</sup> Cynthia Barnett, *Rain: A Natural and Cultural History* (New York: Crown Publishers, 2015), 4.

<sup>38</sup> Frisch, 25, 41.

<sup>39</sup> Frisch, 1.

<sup>40</sup> Hache and Latour, 319.

<sup>41</sup> Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*, trans. Alan Sheridan (London: Routledge, 2005), xviii–xxiv.

<sup>42</sup> Foucault, xxiv.

A tabula for Foucault is not unlike a scale for Clark.<sup>43</sup> Both concepts refer to different frames of reference as the precondition that allows the production of certain knowledge whereas restricting the content of knowledge thus produced. Geiser's taxonomy of thunder and rain cannot operate to help him comprehend an apocalyptic landslide. One of his taxonomic notes, "in its [thunder blast's] wake, rain comes pouring down," is followed by him narrating, "at intervals the power goes off again."<sup>44</sup> The continuous pouring of rain is juxtaposed with the sporadic supply of electric power. Similarly, a paper slip on the term "Man" the last sentence of which reads, "the proportion of civilized areas in the world is constantly increasing" comes before the narration: "There have been landslides; not here, but farther up the valley."<sup>45</sup> Again, one rises while the other falls. What Geiser encounters is more than conflicting tendencies, it is rather competing judgements of values operating at different scales. They are so incompatible that what is favourable can be destructive if seen from another scalar domain. To assume continuity of all knowledge-making then is to evade knowledge production at another scale and to assume there is only one tabula at work. Yet there exist multiple scales. What we must consider are the discontinuities among them and the erosion of a tabula veiled as universal.

Foucault's claim that "[e]stablishing discontinuities is not an easy task even for history in general" can also be applied to geology, where order and continuity are privileged over gap and discontinuity.<sup>46</sup> The studies of the geological formation of Earth are dominated by uniformitarians who contend there is a continuum between the present-day geological processes and what happened in the distant past. On the other hand, there is also evidence, for example the pauses in sedimentation, which suggests that lithology is diachronous and that continuity of geological records is often truncated by gaps that are far more prevalent than intelligible records.<sup>47</sup> These gaps, or unconformity, divulge a cyclical, rather than linear temporality of the Earth's past, as interrupted by catastrophic events: geological formation is "an endless cycle of rock accumulation, uplift, erosion, and renewal on Earth," within whose timespan the human is less than minuscule.<sup>48</sup> The Earth vibrates at a rhythm of its own.

Thinking of discontinuities and a more expansive scale helps us to depart from an anthropocentric perspective by revealing the inapplicability of narratives about *our* geological past to the geological past. After returning from his failed march in the stormy valley, Geiser loses his appetite for knowledge and documentation: "All the papers, whether on the wall or the carpet, can go. Who cares about the Holocene?"

<sup>43</sup> Though Foucault's aim is to reveal how a tabula operates, classifies and disciplines, for Clark, the point is to highlight the contradictory but coexisting frames of reference and the inadequacy of horizontal formula proposed by scholars who stress the interconnectedness on the same plane. One can state that Foucault's tabula is a specific scale.

<sup>44</sup> Frisch, 6.

<sup>45</sup> Frisch, 54.

<sup>46</sup> *The Order of Things*, 55.

<sup>47</sup> Derek V. Ager, "More Gaps than Record," in *The Nature of the Stratigraphical Record* (Chichester: John Wiley & Sons, 1993), 52–53.

<sup>48</sup> Marcia Bjornerud, "An Atlas of Time," in *Timefulness: How Thinking Like a Geologist Can Help Save the World* (Princeton: Princeton University Press, 2018), 25.

Nature needs no names. Geiser knows that. The rocks do not need his memory.”<sup>49</sup> He realises that the act of naming the geological epochs, the thunder and the rain, is nothing but an anthropocentric practice the validity of which automatically dissolves on a deeper geological temporal scale. An actual erosion suspected by Geiser might not occur, yet, to borrow Matthias Preuss’s comments on *Man in the Holocene*, an “erosive effect” emerges, revealing the limits of the humanistic scale.<sup>50</sup>

According to Preuss’s reading of Frisch’s novella, the erosive effect in the narrative not only “evokes a way of writing that testifies to the poetic agency of non-human agents,” but also contributes to “the leveling of a hierarchic order of agents” by assembling “mineral, fungal, vegetal, animal, and human makers . . . on the same plane.”<sup>51</sup> Alluding to erosion’s capacity of ingestion, Preuss sees different human and non-human agents swarmed together. This is illustrated by the synchronous relationship between eschatological events in the novella—the erosion of the land, the epidemic of the chestnut trees and Geiser’s illness—taking place at the same time.<sup>52</sup> This “erosion of difference,” however, risks neutralising the particularity of various human and nonhuman agents that possess different forms of agency.<sup>53</sup> Woods astutely points out the dangerous tendency of new materialism that replaces the dualism of humans and nature with the monism that refers all the differences back to one underlying unity to the extent that different agents look epiphenomenal and behave in the same way.<sup>54</sup> It is true that this idea of erosion endeavours to minimise the human-centred agency through valorising the entanglement with nonhuman agents. Yet by privileging continuity over discontinuity, the idea of “erosive effect” elevates an idea of the nonhuman that is no less abstract than the idea of the human that it seeks to oppose.

On the other hand, continuity and discontinuity co-exist in paradoxical ways. A totalising view of nature can lead to the conclusion that nature makes no leaps, since the emergence and operation of different entangled matter functions within a smooth, continuous domain.<sup>55</sup> But nature does make leaps, as anti-uniformitarian geologists would argue. Thus I would like, following anti-uniformitarian geologists, to give voice to the discontinuity or the impossibility of such “erosion of difference” as

<sup>49</sup> Frisch, 107.

<sup>50</sup> “How to Disappear Completely: Poetics of Extinction in Max Frisch’s *Man in the Holocene*,” in *Texts, Animals, Environments: Zoopoetics and Eco-poetics*, ed. Frederike Middelhoff et al. (Freiburg: Rombach, 2019), 258.

<sup>51</sup> Preuss, 257–58.

<sup>52</sup> This “correspondence,” if seen through the lens of “scale reading,” is valid on Level II but overlooks the planetary scale.

<sup>53</sup> Preuss, 264.

<sup>54</sup> Woods, “Concept of Matter,” 2017. This is also the reason why Andreas Malm accuses Bennett of absolving humans of environmental crimes in *The Progress of This Storm*. At the core of this is a debate between dualism and monism. Dualism reproduces the opposition between humans and nature and turns the problem of climate change into an endless blame game, whereas monism flattens out this opposition at the cost of differences, risking rendering the material agency that Bennett seeks to revive an empty and abstract idea. See Andreas Malm, *The Progress of This Storm: Nature and Society in a Warming World* (London: Verso, 2018).

<sup>55</sup> Woods, “Concept of Matter,” 214.

already embedded in Frisch's writing.

One difficulty for anti-uniformitarian theory is the lack of evidence, namely indicators of the existence and the scale of such gaps. How could something absent be recorded? In the novella, Geiser quotes a book entry entitled "Ticino in Prehistoric Times: The First Inhabitants," which is a mythological origin story of the early inhabitants of Ticino veiled as a historical record. It is stated, "this we know from completely reliable sources, such as the Roman naturalist Pliny the Elder (A.D. 23–79) and Julius Caesar (100–44 B.C.)."<sup>56</sup> Not only is the reliability already dubious in this passage, but it is also challenged by Geiser's subsequent narration after the quoted entry, "It is not true, incidentally..."<sup>57</sup> He continues, "It is not true, incidentally, that no horns are sounding in the valley."<sup>58</sup> Geiser's narration thus functions both as an implicit disapproval of the previously quoted "historical record," and a correction of his own words in an earlier passage where he says that the valley is without a horn.<sup>59</sup> The presence of the horn is made possible through the negation of its absence. Records, therefore, are unreliable not only for what is recorded, but also for what is not.

*Man in the Holocene* creates a record of the absent gap. Much earlier before his departure, Geiser writes a note about the fluvial process of River Maggia, at the end of which he jots down, "(SEE 'EROSION')."<sup>60</sup> If we follow this "index," as that which Geiser practises in his own reading process, and read the clipping alongside the term "erosion," we will jump to the conclusion of this book, leaving out all the narratives about Geiser's expedition.<sup>61</sup> We would, like other villagers, never "hear about his outing;"<sup>62</sup> or, like uniformitarian geologists, we would be oblivious to the unrecorded gaps; that is, to use Woods's expression, inattentive to the scale variances. We would read the story in this sequence: "The youngsters are loud in their enjoyment; the erosion going on outside does not worry them in the least. . . . The village stands unharmed."<sup>63</sup> The life in the village remains continuous, filled with anthropogenic sounds, undisturbed by neither rain nor Geiser. However, it is impossible to skip the disturbance since we necessarily practise a linear reading which includes Geiser's excursion. The geological phenomenon of "geyser," after which Geiser is named, is a turbulent ejection of hot spring water with steam from the underground. It is a phenomenon which intermittently disrupts the seemingly continuous surface of the earth. By offering two possible orders of reading, *Man in the Holocene* creates a record of the gap between the two cycles, which could otherwise be regarded as an overall smooth, ongoing process.

<sup>56</sup> Frisch, 10–11.  
<sup>57</sup> Frisch, 11.  
<sup>58</sup> Frisch, 11.  
<sup>59</sup> Frisch, 4.  
<sup>60</sup> Frisch, 31.  
<sup>61</sup> Frisch, 107.  
<sup>62</sup> Frisch, 83.  
<sup>63</sup> Frisch, 31, 110.

Discontinuity, therefore, has a twofold purpose here. First, it reveals the constraints of the anthropocentric frames of reference, scientific rationalism above all, which are veiled as universal. Second, in doing so, it sheds universal categories and embraces contradictory evaluations to be understood without having to produce a “correct” one to trump others. The inappropriateness of one epistemic frame on another scale does not necessarily invalidate its applicability within its own scalar domain. What is invalidated is its universal applicability. Gaps, discontinuity, and contradiction, therefore, can act as a generative force that enables the proliferation of knowledge: the human is a being forming personal narratives while participating in broader impersonal dynamics.

Scales are not bounded domains. Rather, we inhabit many scales simultaneously. It begs the question how we can keep discontinuity in view in our material connectedness and vice versa? Donna Haraway proposes in reference to Hannah Arendt that the issue is one of “train[ing] one’s imagination to go visiting.”<sup>64</sup> Bennett, while stressing the ethical task of cultivating our ability “to know more than it is possible to know,” puts an emphasis on the material relationship between human and nonhuman vital bodies.<sup>65</sup> To think of matter as active, generative forces means simultaneously to “readjust the status of human actants” who are also equally endowed with vital materiality.<sup>66</sup> Our material bodies have the potential to function as a vector to knock on the door of another scale and go visiting.

### THE SENSITIZED ANIMAL

With the rejection against imagining our bodies as bounded, singular beings, I would like to first look at the environment which these bodies inhabit. In Geiser’s case, it is the soundscape filled with the chorus of rainy pitter-patter. Sound is, by one definition, “a vibration that travels through the air or another medium and can be heard when they reach a person’s or an animal’s ear.”<sup>67</sup> When we hear rainfall, we hear the vibration induced by raindrops’ resistance or rain being resisted by surfaces—of umbrellas, rooftops, tree leaves. Total absorption does not create an audible sound, but resistance does. With resistant surfaces various possible relationships arise—dampened, soaked, irrigated, inundated, even suffocated. A surface may or may not stop the rain, yet it does not stop the sound. Sound transmits, through its medium, through our eardrums and bones, bringing the world to vibrate together.

*Man in the Holocene* begins with Geiser trying to erect a pagoda of crispbreads and failing. It is a resistance against the sound of nature, “to hear no thunder, no rain,

<sup>64</sup> Ibid.

<sup>65</sup> Bennett, *Vibrant Matter: A Political Ecology of Things*, 13.

<sup>66</sup> Bennett, 10.

<sup>67</sup> “Sound,” Lexico (Dictionary.com & Oxford University Press), accessed June 24, 2019, <https://www.lexico.com/en/definition/sound>.

no splashing from the gutter, no gurgling around the house.”<sup>68</sup> It is never clear whether the gable is collapsed by Geiser’s cough or by the sound of rain.<sup>69</sup> Perhaps both. A sudden cough makes a trembling hand tremble even more, which may be the direct cause of the quake. Yet rain spectrally haunts the pagoda on every occasion. Whereas Geiser starts this little project out of resistance to hear, the pagoda always ends up crumbling after “a tapping on metal.”<sup>70</sup> Lowell Duckert reminds us that the Latin *imbrex* (roof tile) has its root in *imber* (shower of rain).<sup>71</sup> Rain interrupts the house of Reason for Serres, just as it trembles Geiser’s crispbread-pagoda. In the vibration and propagation of sound, causes and their effects conjoin, which renders the act of tracing a definite causality impossible. Here a complex system of vibrating and vibrant agencies replaces the linear chain of cause and effect, leading to influxes that feed into its own system and contribute to a higher level of complexity.

In this confederation, however, we never lose sight of the scalar difference, when something as little as a distant tapping on metal could shake a four-layered pagoda, or more manifestly, when the sound of rain saturates the whole valley, suspending the honking of cars, barking of dogs, and the regular chiming of the church bell—those which reverberate on the anthropocentric scale. Sound transmits in a medium, but also cuts across. Raindrops tap on the roof, but also seep into Geiser’s house. Thunderclaps are caused by lightning which literally opens a hole in the air. Once the light is gone, the air collapses back which creates a rolling rumble that vibrates in the air and finally reaches Geiser’s ears. To hear is the process of making sense of the sound, or in Serres’s idioms, to generate information out of static noises. Our understanding of an acoustic phenomenon, according to Alva Noë’s philosophy of perception, is what we *achieve* depending on our sensorimotor knowledge and capacity to make sense. To hear, therefore, is more than a passive reception, but a material-semiotic practice in which we are both the host and the guest of what we hear. Our knowledge determines the scope of our sensibility and sensitization as well.

Geiser’s body, aged and ailing, is oddly abstract. He seldom walks, moves or touches things. He appears in the living room, bathroom, post office and grocery store, without a trajectory that connects these isolated locations. With minimum bodily engagement with the world around him, it is as if Geiser is cocooned by a crest surrounding him just as his house is keeping him from rainfall. Sound penetrates nevertheless. It visits Geiser’s house and by doing so invites Geiser to be a guest of the valley, to fathom its distance by his body.<sup>72</sup> The valley, unlike his house, invokes and demands his bodily presence in connection with material surroundings. The

<sup>68</sup> Frisch, 3.

<sup>69</sup> Frisch, 1.

<sup>70</sup> Frisch, 1.

<sup>71</sup> Lowell Duckert, “When It Rains,” in *Material Ecocriticism*, ed. Serenella Iovino and Serpil Oppermann (Bloomington: Indiana University Press, 2014), 119.

<sup>72</sup> To sound something also means “to ascertain (the depth of water in the sea, a lake, or a river), typically by means of a line or pole, or using sound echoes.” Lexico, s.v. “Sound” (Dictionary.com & Oxford University Press), accessed June 24, 2019, <https://www.lexico.com/en/definition/sound>.

movement between a small distance, for example from one rock to another, is described in unproportionate care and detail, “step by step,” because “[t]he important thing is the next step and the one after that, so that one does not twist an ankle, one’s knees do not give way, one does not slip suddenly.”<sup>73</sup> His abstract, inert body is forced to matter, echoing in a versatile and unpredictable encounter with the natural environment. The mattering of his body and the mattering of the valley are simultaneous processes constituted by an assemblage of the bodies being able to affect and to be affected. The stones stay or tip over as Geiser steps on them; water fills up his shoes and soaks his socks. At one point, Geiser has to crawl on all fours.<sup>74</sup>

Once he walks into the rain, there is a sudden decrease of references to the acoustic qualities of the rain, but the rain itself becomes everywhere to be heard, touched, and felt. Geiser becomes a “whole animal, situated in the environment, free to move around and explore.”<sup>75</sup> By “free,” Noë does not mean a condition without constraint, but, not unlike Bennett’s position, refers to an ability of movement—“sensorimotor skills,” that is, an implicit knowledge about the possible ways one can move without actually moving.<sup>76</sup> Noë asks us to imagine that we want to visit a castle on the hill in the centre of a town. We can either use a map to figure out a route first and then take departure, or we can employ a “cruder” strategy—just by keeping the castle within our view and heading towards its direction. The latter allows one to “take advantage of the fact that we have more immediate links to the world.”<sup>77</sup> A situated perceiver does not need a map which *represents* the reality to guide her movement; she inhabits the map in which her linkages to the map and other things on the map are already there.

The map is the most important tool for Geiser to navigate through the perilous mountain pass. Even though other equipment—the umbrella, the raincoat, the thermos—are either failed or forgotten, the map is kept and remembered and, despite its non-correspondence to the versatile environment, provides a sense of comfort. The scale affects once again. When Geiser finds shelter in a chapel that is marked on the map, he expects that he can know “from a map exactly where one is at a particular moment.”<sup>78</sup> Once he sets foot on the mountain, he is still lost. His bodily engagements with stones and gullies are the only things on which he can rely. The map provides a useless scale—“1:25,000.”<sup>79</sup> While Noë poses the relationship between the map and the environment as hierarchical and Geiser as scalarly co-existing; both imagine a possibility of going visiting through one’s embodied movement, which contains the implicit possibilities of as many movements as possible.

<sup>73</sup> Frisch, 72, 77.

<sup>74</sup> Frisch, 74.

<sup>75</sup> Alva Noë, *Action in Perception* (Cambridge: The MIT Press, 2004), 20.

<sup>76</sup> Noë, 19.

<sup>77</sup> Noë, 24.

<sup>78</sup> Frisch, 77.

<sup>79</sup> Frisch, 15.

The enactment of a movement then is a simultaneous mattering of one's body, the sensorimotor knowledge, and the environment, which, as Geiser discovers, "has all become a question of luck."<sup>80</sup> Whether a stone is going to tip over or whether a man is going to trip can only be emergent in the process of mattering. Going visiting for Haraway is about "holding open the possibility that surprises are in store," even if, in Geiser's case, such a surprise can be lethal.<sup>81</sup> Yet what surprises promise is not only our viability, vulnerability, permeability, but also our possibility to cultivate a different sensorimotor skill, to expand our implicit bodily knowledge, to hear and to enact. With Geiser's changing of position from the host of his house to a guest of the valley, the sound of rain morphs from gurgling around the house to the roar of the waterfall and a stream in the valley. The emphasis on position, therefore, makes Geiser always aware of his bodily relation not only with the things within one scale, but also with the scales themselves. His enaction of the movement bears the traces of both interconnectedness and discontinuities. Just as the traveller in La Fontaine's Fables, rain sets the host/guest in the perpetual process of passing by, from one house to another, one relationship to another.

## CONCLUSION

*Man in the Holocene* tells a tale of scales through Geiser who goes visiting the Deep Time of geological formation dominated by daunting yet generative discontinuities. His process of re-sensitization or relearning how to hear is simultaneously the process of unlearning the anthropocentric narcissism based on the predominance of a singular human scale. As Bjornerud would suggest, to understand the *chronos* of Earth, we must learn from the *kairos* of the rock, of the plant and of the rain.<sup>82</sup> By bringing in perspectives from the disciplines of geology and acoustics, I hope this article continues the ecocritical line of pursuit. It is also for this reason that rain is the primal material element in my reading. The sound of rain, vibrating and inviting, penetrates a peaceful village house, a dysfunctional social network, and an unfathomable valley, forcing Geiser to embody-with it. Its vibrant sound and humidity materialise multiple scales, penetrate the house of knowledge tiled by an anthropocentric delusion and reconfigure the human body as a living body. Sound hence works as a verb. It is to measure the bottom of a scale through the transmission of an echo and to allow one to become "a whale [a sonorous animal], diving deep down steeply to a great depth."<sup>83</sup> □

<sup>80</sup> Frisch, 74.

<sup>81</sup> Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016), 127.

<sup>82</sup> "An Atlas of Time," 26.

<sup>83</sup> Lexico, s.v. "Sound."



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