



Giulia Ciola

<https://orcid.org/0009-0002-6914-7476>
Iuav Università di Venezia (Venecia, Italia)
gciola@iuav.it

The Potential of Atmosphere as a Framework of Inquiry in the Study and Practice of Fashion for Environmental Attunement

El potencial de la atmósfera como marco de indagación en el estudio y la práctica de la moda para la adaptación medioambiental

Recibido: 08/06/2025
Aceptado: 14/04/2026

Ciola, G. (2026) «The Potential of Atmosphere as a Framework of Inquiry in the Study and Practice of Fashion for Environmental Attunement». *Inmaterial. Diseño, Arte y Sociedad*, 11(21), pp 82-101
[DOI 10.46516/inmaterial.v11.277](https://doi.org/10.46516/inmaterial.v11.277)

Keywords:

Atmosphere, relationality, body, fashion, attunement

Palabras clave:

Atmósfera, relacionalidad, cuerpo, moda, attunement

Abstract

The current epoch is unfolding as a moment of planetary crisis. The reasons for such a disruptive condition are often identified in the dualist system that has shaped western epistemologies, generating a profound disconnection between humans and nature (Escobar, 2018). As long as the environment in which humans are enmeshed is perceived as a separated object, instead of a process of relational co-creation, the chances of catalysing a systemic paradigm shift seem scarce. In the field of fashion and textile, designers have attempted to overcome the natureculture divide (Haraway, 2003) in various experimental ways. Although these actions seek to re-connect with the environment, they are challenged by the dualist framework within which they perform and which inhibits the body from actually *feeling* that connection. This contribution would like to propose a framework of inquiry based on embodiment and relationality – the *atmosphere*. Through a selected literature review of the concept of atmosphere in aesthetics, cultural geography and fashion, the non-dualist and relational character of atmosphere emerges (Griffero, 2019; Böhme, 2016). In atmospheric space, the climatic and affective fluxes of bodies, materials, humans and non-humans encounter, mix and shape (Anderson, 2009; McCormack, 2008; Ingold, 2010). Yet to understand and feel the relational dynamics of existence occurring among bodies and environment, it is necessary to find ways to tune in with atmospheric fluxes. This article argues that within the framework of atmosphere, fashion – understood as a sensorial and embodied practice (Entwistle, 2023; Ruggerone, 2016; Kwan, 2020; Robinson, 2025) – can constitute a promising terrain to foster environmental attunement and non-dualist perspectives.

Resumen

La época actual se está desarrollando como un momento de crisis planetaria. Las razones de tal condición disruptiva se identifican a menudo en el sistema dualista que ha dado forma a las epistemologías occidentales y ha generado una profunda desconexión entre los seres humanos y la naturaleza (Escobar, 2018). Mientras el entorno en el que están inmersas las personas se perciba como un objeto separado en lugar de un proceso de cocreación relacional, las posibilidades de catalizar un cambio de paradigma sistémico parecen escasas. En el ámbito de la moda y el textil, los diseñadores han intentado superar la separación *natureculture* (Haraway, 2003) de diversas formas experimentales. Aunque estas acciones pretenden volver a conectar con el medioambiente, se ven desafiadas por el marco dualista en el que se desenvuelven y que inhibe al cuerpo de sentir realmente esa conexión. Esta contribución desea proponer un marco de investigación basado en la encarnación y la relacionalidad: la atmósfera. A través de una revisión bibliográfica selectiva de este tema en estética, geografía cultural y moda, emerge el carácter no dualista y relacional de la atmósfera (Griffero, 2019; Böhme, 2016). En el espacio atmosférico, los flujos climáticos y afectivos de cuerpos, materiales, humanos y no humanos se encuentran, mezclan y conforman (Anderson, 2009; McCormack, 2008; Ingold, 2010). Sin embargo, comprender y sentir las dinámicas relacionales de la existencia que se dan entre los cuerpos y el entorno es necesario para encontrar formas de sintonizar con los flujos atmosféricos. El presente artículo sostiene que, en el marco de la atmósfera, la moda —entendida como una práctica sensorial y encarnada (Entwistle, 2023; Ruggerone, 2016; Kwan, 2020; Robinson, 2025)— puede constituir un terreno prometedor para fomentar la sintonía con el medioambiente y las perspectivas no dualistas.

Introduction to an Atmospheric Literature Review for Fashion

The crisis of the current turbulent times in the 21st century's mid-20s, while stirring fear and hopelessness, is also urging us to find new unprecedented ways to live in the world and to think of the future. In the attempt to identify and tackle the issues that brought the planet with its living and non-living inhabitants to this state of precarious habitability, many theorists from diverse fields agree that one undisputable reason is rooted in the Cartesian split (Haraway, 2003; Escobar, 2018; Ingold, 2012; Fletcher, 2023) – the dualist conception of reality that has shaped epistemologies, hence systems and minds, of the Global North. By acknowledging a systemic problem in the forced separations that rise from dualism – body-mind, nature-culture, human-environment – efforts to theoretically and empirically respond have begun emerging in various disciplines.

In the study and design of fashion, current approaches range from experimentation using regenerative materials and processes to the development of critical frameworks aimed at identifying and narrating the relationships between fashion, body and environment. Studies on sensorial fashion also fall within this scope, and a significant body of literature has emerged through the work of theorists and practitioners such as Joanne Entwistle (2023), Elena Ruggerone (2016), Anneke Smelik (2021), Sara Chong Kwan (2020) and Todd Robinson (2025). The argument

developed here builds on this scholarship, which seeks to articulate fashion from the perspective of the body while situating it within the current ecological crisis. In this context, the body–fashion paradigm is expanded into an entanglement of body–fashion–environment. The aim is to speculate on the possibility of reframing fashion as a tool whose affective capacities can catalyze forms of bodily environmental attunement. Rather than outlining these possibilities in detail (an exploration in which the author is currently involved), this article aims to define the theoretical instruments necessary to cultivate an approach that interweaves body and environment, as well as the affective and the climatic.

To this end, a framework grounded in the concept of atmosphere is proposed as a promising epistemological tool for addressing such entanglements. Despite its interdisciplinary breadth and proliferation, this concept remains relatively under-explored within the field of fashion and design. To identify the core aspects of an atmospheric framework, the article presents a selective literature review that does not aim at exhaustiveness, but rather draws on a transdisciplinary constellation of sources to distil its key dimensions – namely relationality, non-dualism, climate and affect. Drawing primarily from aesthetics, cultural geography, anthropology and fashion studies, these works collectively demonstrate how atmospheric thinking can foster a non-dualist, co-constitutive understanding of the world, opening up the possibility of considering fashion as a tool for attuning to the environment and, ultimately, for overcoming dualist thinking.

The Lived Body and Pre-Dualism in Atmospheric Space

Analysing fashion through the lens of the senses entails recognising the body as central to the experience of the world. Rather than a passive object, the body constitutes a site of knowledge production, not subordinate to the cognitive and interpretative operations of the mind. Within philosophy, phenomenology has been instrumental in advancing this claim, foregrounding the body's role in shaping how we understand and engage with the world. Edmund Husserl distinguishes between the lived body—the experiencing subject—and the physical body—the object that is experienced (Husserl, 1989 in Wehrle, 2019). The body thus exceeds its materiality, encompassing an immaterial dimension tied to sensing and experiencing. In Maurice Merleau-Ponty, the body is both the locus of experience and the medium through which communication with the world occurs (Merleau-Ponty, 1962 in Negrin, 2016). He emphasises the relational character of embodiment, whereby the body is always situated among other bodies that come into contact and mutually determine one another. The notion of the lived body as a site of knowledge production is thus central to a philosophy of atmosphere. With Hermann Schmitz, initiator of a new phenomenological approach, the term atmosphere enters aesthetics (*Der Gefühlsraum*, 1969). He situates cognition within the bodily dimen-

sion, understood as exposed to and affected by space rather than confined to the private sphere of the soul. As Schmitz argues, 'it is necessary to consider the felt body as the object that lives "in" and "through" spaces' (Griffero & Tedeschini, 2019, p. 3), in contrast to the physical body limited by anatomical boundaries. It is within this spatially extended body that immediate emotions are experienced, understood in his theory as atmospheres.

An aesthetic of atmospheres is theorised by philosopher Gernot Böhme who is responsible for identifying in the atmosphere 'what relates objective facts and constellations of the environment with my bodily feeling in that environment' (Böhme, 2016, p. 1). He situates atmospheres in an *in-between* which emerges when entities – still not defined as subject and object – meet. According to Böhme, atmospheres are quasi-objective in the sense that they are out there and not enclosed into a subjective individual, however 'they are nothing without a subject feeling them' (Böhme, 2016, p. 2). Böhme's articulation of atmosphere goes further in their aspect of blurriness of subject and object. If in Schmitz the body is extended into space exposed and touched by atmospheres that linger out there, for Böhme they are conceived 'as something that proceeds from and is created by things, persons or their constellations' (Böhme, 2016, p. 11). This pre-dualistic nature of atmospheres is also developed by Tonino Griffero who attempts to fathom their ambiguity by defining them as 'quasi-things', for they are felt so clearly by the body to be almost physical and yet not graspable. 'Atmospheres are not the

outcome of two autonomous and fixed poles (subject and object) but express a relation prior to its (fixed and cohesive) relata. The core of this “we-space” or in-between, however, is always the felt- or lived-body (Leib), that is, the non-physiological and non-anatomical dimension’ (Griffero, 2019, p. 416).

In summary, aesthetics offers a definition of atmosphere that encompasses several inter-related aspects: (i) the world is experienced through a lived body; (ii) bodies are engaged in a continuous process of affecting and being affected; (iii) these interactions occur in a space where subject-object distinctions are not yet fixed; and (iv) it is within this space of encounter that atmospheres arise. This condensed excursus on the philosophical theory of atmosphere highlights the embodied and non-dualist character of the concept, thereby establishing a framework for exploring the relational dynamics of things based on their ability to affect. Nevertheless, the proposal to adopt an atmospheric framework extends beyond the purely sensorial dimension of the body. Atmospheres are indeed co-constituted spaces, shaped by both the material and immaterial qualities of things. Within these spaces, the environment itself participates, bringing in the dimension of climate and invoking the meteorological connotations embedded in the term ‘atmosphere’.

Material and Immaterial: the Affective and Climatic Atmospheres in Geography

As much as an atmosphere may refer to an emotional experience, undoubtedly, we might use the same term when speaking of the air. The gaseous envelope that surrounds the earth is indeed called atmosphere and is divided in layers that differ in composition, properties and distance from the sea level. Terrestrial life moves and lives in the troposphere, breathing its air and interacting with its weather manifestations. In everyday language, this layer might be called informally atmosphere or simply air, although it might be inappropriate in strictly scientific terms, it is more accepted in fields such as cultural geography, environmental humanities, anthropology and art. It is precisely from these hybrid disciplines that a literature on atmosphere has been developed in the past decades, focusing on its affective character.

Cultural-political geographer Ben Anderson investigates the action of affect exerted by atmospheres, drawing also on the phenomenology of aesthetic experience analysed in the previous paragraph. Particularly, he points out how Böhme, in order to describe the quality of atmospheres ‘to fill up spaces like a gas’ (Anderson, 2009, p. 79), starts from the materialist roots of the concept. That is to say, that the affective action of atmospheres seems to share

the spatial quality of air which pervades, changes, is never static, envelops and surrounds people. Anderson argues that this affective performance involves people as a collective and not individually, reflecting on how affective experience occurs ‘beyond, around, and alongside the formation of subjectivity’ (Anderson, 2009, p. 77). What the debate on affect adds to the understanding of atmosphere is the aspect of its material and immaterial qualities. When Anderson uses the verbs ‘to envelop’ and ‘to surround’ to refer to the affective intensity of an atmosphere, inevitably he charges the immateriality of affect with a material character. A similar theoretical attempt is explored by another cultural geographer, Derek McCormack, whose work seeks ‘to rethink the materiality of atmosphere in terms that are simultaneously meteorological and affective’ with the ambition of avoiding ‘rehearsing a division between two distinct ontological domains: one cultural and the other physical’ (2008, p. 414). According to McCormack, there has been an exclusion in considering ‘the animate agency of phenomena such as wind, frost, ice and fog’ (2008, p. 415) in the studies around atmosphere. In this article, I will not review his case study of the balloon (McCormack, 2008). It is enough to point out that the analysis of the balloon flying in the air shows: (i) how atmospheres exist between entities; (ii) how they are produced ‘through a process of “tuning” or “arranging”’; (iii) how they ‘occur through an “envelopment” or “folding” together of bodies and forces’ (Steven *et al.*, 2019, p. 7). In other words, atmospheres fluctuate among bodies who move in a space

which is dynamic, temporal and more-than-human, and they are continuously created and re-created by bodies who are connected through these intensities. McCormack’s work helps to see the relationality of things in the space-time of atmospheres, inevitably questioning any separation and isolation of entities. Moreover, in his study, the materiality of affective atmospheres emerges as more physical in its action of envelopment, while the enveloped bodies are lightened, they ‘become more abstract, less immediately fleshy, and less tangibly human. Bodies become aerostats, gusts of wind, enveloped hydrogen, circulating materials’ (McCormack, 2008, p. 426).

Crucially relevant for reflecting on this entanglement of bodies, environments, humans and more-than-humans are the field studies conducted by Gail Adams-Hutcheson in milk farms in New Zealand. The researcher interestingly brings out the dynamics of affect occurring among entities in a specific time and space. Adams-Hutcheson observes how the atmospheric conditions influenced the mood of the farmers she was interviewing, as well as the wellbeing of the cows, which consequently provoked, for instance, joy or preoccupation in farmers. Furthermore, the case study showed how those atmospheric feelings would transfer among the bodies present in that space, as if the affect exerted by the weather could diffuse through the embodiment of people. In Adams-Hutcheson’s words, ‘the affective materiality of the weather’ ... ‘was ubiquitous yet impossible to ignore. Heat and stress, stress and heat passed between us’ (2017, p. 14). The relation-

ality traced through the affective action among human and non-human elements that emerges from her work is a fascinating aspect which deserves further emphasis. Indeed, as this contribution speculates, if experiencing the world through atmospheres means being open and attentive to the entangling that occurs via affective fluctuations, what would it mean to become ourselves – as bodies enmeshed in an emerging world – open and attentive to the forces of the atmospheric space? We are reminded by anthropologist Kathleen Stewart that:

an atmosphere is not an inert context but a force field in which people find themselves. It is not an effect of other forces but a lived affect. A capacity to affect and to be affected that pushes a present into a composition, an expressivity, the sense of potentiality and event. It is an attunement of the senses, a to make potential ways of living or living through (2011, p. 13).

Perhaps then, becoming aware of how bodies are made and unmade by atmospheric material and immaterial forces could lead to imagining ‘different modes of relationality’ (Engelmann & McCormack, 2017, p. 245) and fashion – as an assemblage of embodied material practices – might serve as a tool to foster such a body sensorial awareness towards the worldly fluxes and processes.

Atmosphere and Attunement in the Weather-World

Seeing the world in airy ways is not usual. The ground of the Earth is where terrestrial beings dwell, supported by its concreteness, dependent on its morphology. When moving and walking on it, the tendency is to picture this navigation as solely happening on the surface of the ground, while it’s rarer to see it as a crossing through air. Perhaps for its apparent invisible and immaterial character, air falls secondary and yet breathing air is what allows our existence. Anthropologist Tim Ingold describes life on Earth in less earthly terms, seeking to bring air back into the narrative. ‘A zone of admixture and interchange between the more or less solid substances of the earth and the volatile medium of air. It is in this zone that all terrestrial life is lived’ (Ingold, 2010, p. 121). Similarly to McCormack, also in Ingold the materiality of things is reframed. On one hand, air acquires a tangibility by acknowledging its presence and affectivity, on the other hand, in this operation, the solidity of the ground and of the entities walking on it are lightened up by letting air in. The landscape is not formed, static and fixed but it is affected by the airy atmospheric fluxes. If in the narration of space and terrestrial dwelling, theorists ‘have neglected the fluxes of the medium in which they are immersed. In a word, they have shut out the weather’ (Ingold, 2010, p. 131), then what happens if we refill the world with air? We would finally

be able to grasp the fundamental principle for which matter is always a becoming (Ingold, 2012b, p. 435) rather than being fixed in a solidified world in which perception would be impossible (Ingold, 2012a, p. 83). Air as ‘a condition for interaction’ (Ingold, 2025, p. 95) and also a medium in which the constant contamination between human and non-human, material and immaterial are able to occur. This world then cannot only entail the ground but it is an encounter and an entanglement of earth-sky materialities.

A weather-world for Ingold (Ingold, 2012a, p. 81) becomes a climatic-world in philosopher Emanuele Coccia. He writes of a world in which all species are connected and transform each other based on climatic dynamics rather than on regular metabolic cycles (Coccia, 2023, p. 3). Although Coccia does not focus on framing atmosphere in any way, his argument is relevant in this paper, for it introduces the historical specificity of the conception and perception of climate. The current planetary crisis invests climate with the agency of determining the stability or instability, predictability or unpredictability, the security or insecurity of life on earth. Although climatic conditions have always shaped the ways of living of the planet’s inhabitants, what now seems to have changed is their force and impact. Moreover, climate is here understood not as an external and fixed phenomenon but rather as a flux of atmospheric materialities that emerge from the relation bodies-environment. These bodies are transcorporeal, as scholar Stacy Alaimo would define, ‘where human corporeality is inseparable from “nature” or “environment”’ (Alaimo, 2008, p.

238), suggesting in this way that climate and bodies shape each other. This process of co-constituency is framed by cultural and feminist theorist Astrida Neimanis in her work on ‘weathering’ where she argues that the relationship between human bodies and climate change is ‘a mutual becoming’ (Neimanis & Walker, 2014, p. 560). Therefore, humans are not related *to* the world but they world with it. And ‘the weather is not so much what we perceive as what we perceive *in*’ (Ingold, 2010, p. 131). In a weather- and climatic-world, all species are engaged with one another in a process of co-participation and co-creation of themselves and the world. In a time of planetary crisis, climate is not only a series of weather phenomena but is charged with the specific agency to trouble a once-thought stability. Social scientist Blanche Verlie argues for the potential in thinking about atmospheres as climatic and affective. Verlie writes that ‘climatic-affective atmospheres account for how atmospheric affects both produce and emerge from the affected atmospheres that constitute climate change’ (Verlie, 2019, p. 7). Similarly, this paper would like to situate atmospheres in a specific historical time as much defined by a climate which is experienced as uncontrollably in change. The following conclusive paragraphs will attempt to enable all the theories and suggestions illustrated so far to converge, in order to speculate on the potentiality of thinking in atmospheric ways to overcome a natureculture divide. The argument though will be that in order to mobilise such a potentiality, we cannot only theorise on atmospheres but we need to tune in with them. Living in a ‘weather-world means that

“we do not act upon it, or do things to it; rather we move along with it” (Ingold, 1993, p. 164 in Adams-Hutcheson, 2017, p. 11). Indeed, to embrace and live in atmospheric ways, we humans ought to learn how to attune with atmospheric fluxes. And material practices – such as fashion and textile – might be tools of activation.

Attunement and Affect in Fashion Embodied Practices

Attunement carries the verb ‘to tune’. ‘Tuning’ in music is the action of adjusting the frequency of multiple elements in order to have a desired assemblage of sounds. It requires attention and sensitivity to be able to grasp the character and performance of each sound in becoming. Even if not related to music, the use of attunement here shares with musical tuning the openness and the substance of the elements. Indeed the body is urged to enhance its sense-ability and to tune in with material fluxes emerging from co-created atmospheres. In a scenario of forced and rooted division, distance, disconnectedness with atmospheric fluxes – environmental, climatic, affective, of matter, of more-than-human – activating attunement might catalyse a practice of sense-enhancement and a paradigm shift from separated-bodies to bodies immersed in a space where matter is in becoming. As Adams-Hutcheson writes, ‘bodies collide and collude, which creates a pressing sense of the now, a becoming which correlates to the microclimate’ (2017, p. 9). The encounter and exchange of entities is responsible for the changes in the atmospheric fluxes, both climatic and affective. A practice of attunement then aspires to enact attentiveness towards the ways we are impacted by and impact upon the atmospheric space, a process which is ‘crucial to any attempt to make the conditions of the

present palpable as a prelude for the articulation of different forms of ethical-political awareness' (Engelmann & McCormack, 2017, p. 242). A process of 'learning to become affected' (2017, p. 255), as cultural geographers Sasha Engelmann and Dereck McCormack state in their paper on artistic experiments for attunement. If in their case studies the focus is on solar force and crafting of airy flying objects, the attempt in this paper is to situate the inquiry very close to the body, to the clothes that dress it every day.

In fashion studies, the relationship between the felt experience of the body and the dress has appeared in literature starting from the late 1980s and increasing in the past twenty years (Filippello & Parkins, 2024, p. 13). It is not the aim of this review to include a comprehensive summary of the studies on fashion and embodiment. Nonetheless, the selection of academic works illustrated below aims to reveal the possibilities of approaching fashion and textile practices within the framework of atmosphere as ways of attunement. For a more exhaustive overview of the literature on fashion and embodiment, the introduction to the book *Fashion and Feeling* (2024) by Robert Filippello and Ilya Parkins provides a clear and complete analysis. This text is also a crucial reference for the argument presented here as it seeks 'to untether fashion discourse from the strict boundaries of the subject and to shift it toward interpersonal and communal engagements rooted in the affective experience of clothes' (p. 12) and to do so the authors propose adopting the theory of affect:

The employment of affect in academic inquiry contributed to an understanding of the body as constantly dynamic, an ever-evolving relational assemblage of forces operating across both our mind and our soma, henceforth disrupting the Cartesian mind/body dualism (an achievement that owes a great deal to feminist theory and to 'new materialism') (p. 8).

Their work inserts itself in the analytical shift towards emotional and bodily experiences, which is pivotal in the affective turn.

Affective methodologies are usually applied in fashion to investigate 'the non-representational manifestations of fashion'; that is to say, to study 'what fashion "does" to us on an embodied and preconscious level' (van Tienhoven & Smelik, 2021, p. 165). An affective approach stresses the often overlooked dynamics that occur between body-dress-environment, revealing a range of happenings that, even if immaterial, are very much physical. By stirring a shift from the visual to the sensuous, affect studies unveil a sphere of world experience not produced by a cognitive process but rather lived and felt by the body (Thrift, 2008). Like in the theory of atmosphere, a phenomenological thinking informs the articulation of affect. According to scholar Lucia Ruggerone, adopting the affective perspective is a promising move, indeed 'this scholarship seems to offer more useful tools for the investigation of the body-clothes assemblage: firstly it proposes a radically alternative notion of the

body, which finally allows us to overcome the Cartesian dualism; secondly it conceptualises practices not as bounded events, but as fluxes or becomings' (Ruggerone, 2016, p. 578). Ruggerone identifies in affect studies a place that could offer novel tools to explore the non-representational understanding of fashion which is lived, practised, embodied and experiential. Interestingly, she speaks of the entity body-clothes as assemblage, entailing the distributed agencies of all parts which in their coming together emerge as a co-created entity. In similar ways, atmospheres can be understood as assemblages, constituted by undefined parts whose material becomings encounter, occur and morph. In Ruggerone's words 'the bodies/assemblages are clusters of connections between a variety of material and immaterial elements: molecules, neurons, cells but also ideas, signs, cultural symbols, etc.; all these elements and their constantly moving relations impact on the affective potential of the body' (p. 578). People and clothes are 'hybrid agencies' that affect each other, while also affecting and being affected by the materialities of the environment (Payne & Smelik, 2024, p. 9). Undoubtedly, new materialism ideas merge into affect theory whenever we focus on the dynamism and vibrancy of the material entities affecting and being affected. As fashion scholar Anneke Smelik and researcher Maaïke van Tienhoven explain at the end of their empirical experiment with affective methods applied to fashion, 'affective analysis helped us to "think through the body"' (2021, p. 178), which inevitably occurs through its materiality.

Building on the paradigm shift triggered by the affective approach so far explored, this contribution embraces the idea of fashion which is embodied, lived, in emergence and in becoming, activated and created by a body that 'gets dressed' and 'practises'. The ability of fashion to act on the sensorial dimension of bodies supports the possibility argued in this paper that fashion could function as a tool which, through enhancing bodily sensorial attentiveness, fosters attunement with outer processes.

Atmospheres: Fashion Between Body and Environment

Affect by being situated in the body emerges as a material experience even if the registered data are immaterial elements – feelings, reactions or emotions. The starting point is nonetheless an object with its materialities and with the peculiarity of being ‘the first physical point of contact, the interface between the “self” (as contained in the body) and the material, social and cultural world’ (2020, p. 3) as described by fashion theorist Sara Chong Kwan. Kwan is one of the few scholars who connected fashion to atmosphere.¹ In her work on sensory fashion, Kwan speaks of ‘dress as a sensory atmosphere for the body’ (p. 1) that emerges from the entanglement of both the individual direct experience of the wearer and social and cultural understanding (p. 6). Her argument stems from the idea of dress not as a static object inherently charged with a constructed fixed meaning, but rather of dress as a practice. Like in Smelik and in Ruggerone, by looking at dress in affective ways, the object loses its apparent physical boundaries and becomes matter in becoming. In the words of Joanne Entwistle, another key theorist, the ‘dress’ is a ‘leaky margin’ between ‘self and other, individual and society’ (Entwistle, 2000), opening the fashion object to the fluxes that emerge from the worn dress. Moreover, Entwistle defines dress as:

[a] ‘situated bodily practice’ identifying ‘a theoretical and methodological framework for understanding the complex dynamic relationship between the body, dress and culture. Such a framework recognises that bodies are socially constituted, always situated in culture and the outcome of individual practices directed towards the body: in other words, ‘dress’ is the result of ‘dressing’ or ‘getting dressed’ (Entwistle, 2023, p. 11).

From inert object to active becoming, dress emerges as a space of exchange between inner and outer happenings. ‘Getting dressed’ activates a series of experiences that are felt and lived by the body while simultaneously playing an influence in the environment in which the action occurs. Both Kwan and Entwistle conceptualise the environment primarily in social and cultural terms, whereas this article seeks to foreground its climatic dimension. An atmospheric framework applied to fashion studies and design thus attends to the material and immaterial relational fluxes unfolding between body, fashion – understood as an assemblage of embodied material practices – and environment, as articulated through air, weather and climate change. In its artefactual form, fashion occupies the interstitial space between body and place, precisely where atmospheres emerge. Within this space, the apparent solidity of the artefact yields to the immaterial fluxes of climate, while remaining simultaneously shaped by the materi-

¹ Other relevant works are: Robinson, 2023, on the atmosphere in men’s fashion; Chiu-si, Ciola, Vaccari, 2025, on the atmosphere in Mariano Fortuny’s *oeuvre*.

al dynamics of the ecological processes embedded within its own materiality.

In this regard, the recent work of designer and scholar Todd Robinson on the potential of practice-based methodologies, such as fashion, to generate alternative ways of relating and responding to climate, stands out as a significant empirical contribution (Robinson, 2025). Robinson identifies a gap in the discourse on the body and fashion in relation to weather and climate change, emphasising the urgency of acknowledging the atmospheric entanglements of fashion practices and advocating for an environmentally engaged approach to design (Robinson, 2025, p. 4). His attempt to position fashion as a site for creatively re-framing human-environment relations is exemplified in his analysis of the Driza-Bone coat – a garment laden with both colonial connotations and functions of weather protection. By interrogating its history, meaning and function, Robinson reimagines the garment, re-proposing it into shapes that ‘facilitated aerated movements’ within a performance that ‘explicitly addressed the meteorological context in which it was set’ (p. 17).

As noted at the outset, this article does not aim to provide an overview of empirical applications of an atmospheric framework within fashion studies and design. Robinson’s work is nevertheless relevant insofar as it advocates for a comparable shift towards a fashion practice grounded in attunement. Rather, this contribution has sought to establish a theoretical premise – not yet present in literature – for exploring the entanglements between body, fashion and environment,

proposing atmosphere as a concept capable of fostering original fashion practices that engage with climatic conditions and, by extension, the climate crisis.

Conclusion: Openings Rising from an Atmospheric Framework in Fashion

Through a selective engagement with studies and practices on atmosphere across aesthetics, cultural geography and fashion, this article has delineated the basis for understanding atmosphere as a framework of inquiry. Across these fields, a shared phenomenological orientation locates the body as the primary site through which the world is experienced prior to cognitive processing. Aesthetics foregrounds the embodied, pre-dualist and co-participatory conditions through which atmospheres emerge. Cultural geography and social anthropology articulate the double valence of atmosphere as both climatic and affective, emphasising the entangled fluxes through which bodies and environments co-constitute one another. Within a weather-world, air unsettles the apparent solidity of bodies while simultaneously affirming the materiality of climate and affect. In atmosphere, material and immaterial blur, subject and object are destabilised, and body and environment unfold as processes of becoming.

Despite their ubiquity, atmospheres are not simply given; perceiving the world atmospherically requires a cultivated attunement. Material practices can operate as mediators of such attunement, activating sensitivities capable of fostering deeper shifts in modes of perception and

world-making. In this context, fashion emerges not merely as an object of analysis but as a productive terrain for experimentation. By drawing on insights from affect theory, fashion through an atmospheric framework can be re-articulated as an assemblage of embodied material practices which have the potential to catalyse reflection on the entanglements with climate (-change and -crisis) and attunement with the environment.

Having depicted the space from which to speculate, some questions arise that could guide further research. How can fashion enhance our senses other than sight? What would it mean to take fashion material and design processes outside and expose them to affective and climatic atmospheres? How can the atmospheric processes of a piece of clothing be felt by a wearer? At a moment in which the fashion industry is compelled to move toward more regenerative and, implicitly, more attuned practices, the question becomes not only how such shifts are implemented, but how they are experienced – how they might catalyse a more profound transformation in the ways we perceive, inhabit and ultimately world the world.

Acknowledgments

This contribution arises from the author's ongoing doctoral research conducted at Iuav Università di Venezia and co-funded by Museo di Scienze di Trento (Muse) as part of the PhD Programme in Design Cultures (40th cycle), Ministry of University and Research, PNRR pursuant to Ministerial Decree 630/2024. The author gratefully acknowledges both institutions for their valuable discussions and scientific advice, in particular, professor Alessandra Vaccari from Iuav and director Massimo Bernardi, as well as Samuela Caliarì, Carlo Maiolini and David Tombolato from Muse.

Bibliography

- a** Adams-Hutcheson, G. (2017). Farming in the troposphere: Drawing together affective atmospheres and elemental geographies. *Social & Cultural Geography*, 20(7), 1004–1023.
<https://doi.org/10.1080/14649365.2017.1406982>
- Alaimo, S. (2008). Trans-corporeal feminisms and the ethical space of nature. In S. Alaimo & S. Hekman (Eds.), *Material feminisms* (pp. 237–264). Indiana University Press.
- Andersen, N. B. (2023). New phenomenology in architecture: Embodied environmental communication for meaningful situations. *Architectural Research Quarterly*, 27(4), 325–336.
<https://doi.org/10.1017/s1359135524000083>
- Anderson, B. (2009). Affective atmospheres. *Emotion, Space and Society*, 2(2), 77–81.
<https://doi.org/10.1016/j.emospa.2009.08.005>
- b** Böhme, G. (2006). L'atmosfera come concetto fondamentale di una nuova estetica. *Rivista di Estetica*, (33), 5–24.
<https://doi.org/10.4000/estetica.4319>
- Böhme, G. (2016). *The aesthetics of atmospheres* (J.-P. Thibaud, Ed.). Routledge.
- Brown, S. D., Kanyeredzi, A., McGrath, L., Reavey, P., & Tucker, I. (2019). Affect theory and the concept of atmosphere. *Distinktion: Journal of Social Theory*, 20(1), 5–24.
<https://doi.org/10.1080/1600910x.2019.1586740>
- c** Chiusi, C., Ciola, G., & Vaccari, A. (2025). Fortuny, estetica dell'atmosfera e biofilia della moda: pigmenti, morfologie e aura d'inizio Novecento. *ZoneModa Journal*, 15(1), 17–35.
<https://doi.org/10.6092/issn.2611-0563/21925>
- Coccia, E. (2023). Don't call me Gaia. *E-flux*.
<https://www.e-flux.com/architecture/hydroreflexivity/571453/don-t-call-me-gaia/>
- e** Engelmann, S., & McCormack, D. (2017). Elemental aesthetics: On artistic experiments with solar energy. *Annals of the American Association of Geographers*, 108(1), 241–259.
<https://doi.org/10.1080/24694452.2017.1353901>
- Entwistle, J. (2000). Fashion and the fleshy body: Dress as embodied practice. *Fashion Theory*, 4(3), 323–347.
<https://doi.org/10.2752/136270400778995471>
- Entwistle, J. (2023). *The fashioned body: Fashion, dress and modern social theory*. Polity.
- Escobar, A. (2018). *Designs for the pluriverse: Radical interdependence, autonomy, and the making of worlds*. Duke University Press.
- f** Filippello, R., & Parkins, I. (2024). *Fashion and feeling: The affective politics of dress*. Palgrave Macmillan.
- Fletcher, K. (2023, [add full date]). *Kate Fletcher | Fashion and nature | INSIDE / OUT* [Video]. YouTube.
<https://www.youtube.com/watch?v=J7pSqcQ514M>
- g** Gregg, M., & Seigworth, G. J. (2010). *The affect theory reader*. Duke University Press.
- Griffero, T. (2019). Pathicity: Experiencing the world in an atmospheric way. *Open Philosophy*, 2(1), 414–427.
<https://doi.org/10.1515/opphil-2019-0031>
- Griffero, T., & Tedeschini, M. (Eds.). (2019). *Atmosphere and aesthetics: A plural perspective*. Palgrave Macmillan.
<https://doi.org/10.1007/978-3-030-24942-7>
- h** Haraway, D. J. (2003). *The companion species manifesto: Dogs, people, and significant otherness*. Prickly Paradigm Press.

- i** Husserl, E. (1989). *Ideas pertaining to a pure phenomenology and to a phenomenological philosophy, second book: Studies in the phenomenology of constitution* (R. Rojcewicz & A. Schuwer, Trans.). Springer.
- Ingold, T. (2010). Footprints through the weather-world: Walking, breathing, knowing. *Journal of the Royal Anthropological Institute*, 16, S121–S139.
<https://www.jstor.org/stable/40606068>
- Ingold, T. (2012a). The atmosphere. *Chiasmi International*, 14, 75–87.
<https://doi.org/10.5840/chiasmi20121410>
- Ingold, T. (2012b). Toward an ecology of materials. *Annual Review of Anthropology*, 41(1), 427–442.
<https://doi.org/10.1146/annurev-anthro-081309-145920>
- Ingold, T. (2025). Landscape, atmosphere, and weather-world. In N. Gansterer & A. Arteaga (Eds.), *Contingent agencies: Inquiring into the emergence of atmospheres* (pp. 89–102). Hatje Cantz.
- k** Kazig, R. (2016). Presentation of Hermann Schmitz' paper, "Atmospheric spaces." *Ambiances*.
<https://doi.org/10.4000/ambiances.709>
- Kwan, S. C. (2020). The ambient gaze: Sensory atmosphere and the dressed body. In [Ed(s). name(s)] (Ed[s].), *Revisiting the gaze: The fashioned body and the politics of looking*. Bloomsbury Visual Arts.
<https://doi.org/10.5040/9781350154247.ch-003>
- m** Merleau-Ponty, M. (1962). *Phenomenology of perception* (C. Smith, Trans.). Routledge.
- McCormack, D. P. (2008). Engineering affective atmospheres on the moving geographies of the 1897 Andrée expedition. *Cultural Geographies*, 15(4), 413–430.
<https://doi.org/10.1177/1474474008094314>
- n** Negrin, L. (2025). Maurice Merleau-Ponty: The corporeal experience of fashion. In A. Rocamora & A. Smelik (Eds.), *Thinking through fashion: A guide to key theorists*. Bloomsbury Visual Arts.
<https://doi.org/10.5040/9781350376557.0012>
- Neimanis, A., & Walker, R. L. (2014). Weathering: Climate change and the "thick time" of transcorporeality. *Hypatia*, 29(3), 558–575.
<https://doi.org/10.1111/hypa.12064>
- p** Payne, A., & Smelik, A. (2024). Fashion's fibres as planetary flows. *Fashion Highlight*, (4), 8–13.
<https://doi.org/10.36253/fh-3327>
- r** Robinson, T. (2023). Atmospheres, editorial. *Critical Studies in Men's Fashion*, 10(2), 141–146.
https://doi.org/10.1386/csmf_00072_2
- Robinson, T. (2025). From Driza-Bone to moving in air: Reimagining fashion practice as part of environmentally attuned fashion futures. *Fashion Theory*, 1–25.
<https://doi.org/10.1080/1362704x.2025.2501845>
- Ruggerone, L. (2016). The feeling of being dressed: Affect studies and the clothed body. *Fashion Theory*, 21(5), 573–593.
<https://doi.org/10.1080/1362704x.2016.1253302>
- S** Schmitz, H. (2017). The felt body and embodied communication. *Yearbook for Eastern and Western Philosophy*, 2017(2), 9–19.
<https://doi.org/10.1515/yewph-2017-0004>
- Schmitz, H. (2019). *Der Gefühlsraum*. Verlag Karl Alber. (Original work published 1969)
- Stewart, K. (2011). Atmospheric attunements. *Environment and Planning D: Society and Space*, 29(3), 445–453.
<https://doi.org/10.1068/d9109>

- t** Thrift, N. J. (2008). *Non-representational theory: Space, politics, affect*. Routledge.
- V** Van Tienhoven, M. A., & Smelik, A. (2021). The affect of fashion: An exploration of affective method. *Critical Studies in Fashion & Beauty*, 12(2), 163–183.
https://doi.org/10.1386/csfb_00026_1
- Verlie, B. (2019). ‘Climatic-affective atmospheres’: A conceptual tool for affective scholarship in a changing climate. *Emotion, Space and Society*, 33, 100623.
<https://doi.org/10.1016/j.emospa.2019.100623>
- W** Wehrle, M. (2019). Being a body and having a body: The twofold temporality of embodied intentionality. *Phenomenology and the Cognitive Sciences*, 19(3), 499–521.
<https://doi.org/10.1007/s11097-019-09610-z>

Giulia Ciola

Designer and researcher of and through materials, Giulia is a PhD student in the field of fashion and ecologies at Iuav University of Venice. She is currently carrying out a doctoral project - in partnership with Muse Museo delle Scienze di Trento - on atmospheric fashion practices for environmental attunement. In her practice-led work she observes the ecological entanglements between clothes and the world, drawing inspiration from the food system. Among the projects and residencies in which she has participated or curated are the collection of compostable garments titled “Soil-centered textile practices” (Milan, 2023), the Premio Stoccolma design residency with Houdini Sportswear on algae and hemp (Stockholm, 2024), the artistic collective project on agroecology with Organismo TBA21 (Córdoba, 2024), the soil workshops at *Waking Life festival* (Crato, 2024), the development of mycelium-based materials at Syla (Berlin, 2024), the Labverde art and science residency (Brazil, 2024), and the Nomadic School with OHT (Dolomites, 2025).

Diseñadora e investigadora de y a través de los materiales, Giulia es doctoranda en el ámbito de la moda y las ecologías en la Università Iuav di Venezia. Actualmente desarrolla un proyecto doctoral —en colaboración con MUSE - Museo delle Scienze— sobre prácticas de moda atmosférica para la sintonización ambiental. En su trabajo basado en la práctica, observa los entrelazamientos ecológicos entre la ropa y el mundo, inspirándose en el sistema alimentario. Entre los proyectos y residencias en los que ha participado o que ha comisariado se encuentran la colección de prendas compostables titulada *Soil-centered textile practices* (Milán, 2023), la residencia de diseño Premio Stoccolma con Houdini Sportswear sobre algas y cáñamo (Estocolmo, 2024), el proyecto colectivo artístico sobre agroecología con TBA21–Academy (Córdoba, 2024), los talleres sobre suelo en el festival *Waking Life* (Crato, 2024), el desarrollo de materiales basados en micelio en Syla (Berlín, 2024), la residencia de arte y ciencia Labverde (Brasil, 2024) y la Nomadic School con OHT (Dolomitas, 2025).

