Embraced by swirls of ether. Atmospheric imagination and the representation of assimilation and effect

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Abstract. Atmospheres have a diffuse, ungraspable nature that make them problematic to represent. Diverse artistic manifestations have relentlessly tried to grasp air infused with properties. Ether is the concept chosen to test the way the history of atmospheric representation was initiated; a cultural artefact whose representation permeates our present imaginary. Such substance has been the image of sensual assimilation, of psychological life and complex ambient effects. Before ambient was subject to technical representation, images of air within can be called ‘a state of animation’ opened up the ways of seeing and producing ambients. Several case studies are analysed as a useful vehicle for atmospheric representation. Two main strategies have been identified. The first one is the representation of chance, ambiguity and openness, the creation of conditions to let atmospheres leave its accidental traces. The second consists in the precise distribution in space of particles or discrete elements whose initial position is irritated by diverse agents. Both are still recognisable in our days.

1 Introduction

Ether is a cultural artefact whose representation permeates our present imaginary. Diverse artistic manifestations have relentlessly searched for the representation of air infused with properties. Before it was subject to technical representation, images of air in a ‘state of animation’ opened up new ways of not only seeing but producing ambients. As this article will develop, such substance has been the image of sensual assimilation, of psychological life and complex ambient effects. Therefore, it is a useful vehicle for the exploration of the representation of ambients, of which several examples will be analysed.

The first two will open up two main ways for visualising ether. *Jupiter e Io* (1531-32) by Antonio da Correggio (fig. 1) shows the god, in the shape of a perfumed cloud, embracing Io to possess her. Among the branches of trees, a blurry cloud, translucent and slightly anthropomorphic, cuddles a naked feminine figure. The aqueous body of the cloud-god and that of the woman dissolve in a single medium. This is a representation of the erotic assimilation, where water vapour comes to life and turns into a vivified and active entity.

Likewise, this painting is a literal definition of ambient: this term, stemming from Latin ‘ambire,’ stands originally for ‘both arms’, an immersion-producing embrace [1].

Thus, from the conceptual point of view, we are beholding an unequivocal representation of an atmosphere. It is also an ambiguous one. Our gaze stops at the vague shape, recognizing alternatively the shape of a human body and something informal and cloud-like.

Dario Gamboni coined the term ‘Potential Images’ for those depictions infused with ambiguity which “depend on the onlooker state of mind and come fully into being, in conformity with the artist’s intentions, only through the participation of the onlooker” [2]. Jupiter’s body is partially hidden in a cloud, or in reverse, the cloud is hidden when mingled with the man’s figure. This oscillating condition is also a quality of such images.

Fig. 1, 2. Antonio da Correggio. *Jupiter e Io* (1531-32), Kunst Historisches Museum Wien. Jan Gossaert, *Danae* (1527), Alte Pinakothek, Monaco di Baviera.

They are indeterminate, polysemic, and challenge the notion of representation in its usual forms. Thus, the creation of potential images is one of the first pictorial strategies used in the representation of atmospheres.

The next key representational strategy can be found in a painting realised barely in the same years. Again, a Greek mythology character possessed by an atmospherically transfigured god is shown. *Danae* (1527) by Jan Gossaert (fig. 2), depicts a scene where the daughter of king Acrisio receives Zeus, who descends upon her in the shape of golden rain, and the future hero Perseus is conceived. The feminine body sits on the floor and is surrounded by an architectural structure built in blood-red marble. She is only wearing an indigo robe, revealing one of her breasts. The legs, half open, are crossed at her feet. Like a profane annunciation, golden luminous particles are directed towards her in an inverted cone whose vortex points to her lap.

Again, Correggio’s painting is the image of assimilation and erotic impregnation. But the scenario is different this time. A classic peristyle surrounds the inverted cone of rain, whose base relates concentrically to the dome. This atomised shape is composed by golden motes

acting within space, embodying it in sharp contrast with the solid stone columns. Here the graphic strategy is opposed to that of Correggio's painting. The representation is solved through geometrically precise particles distributed in space. Of the many examples of art history where sensuality and fecundity – in direct relationship with spiritual life – have included an ethereal materiality, the former two are especially relevant in terms of figuration. Both show with precision the mediating nature of atmospheres and the transition between environment and affect which finally expands into a subjective and psychological notion of atmosphere. Both embody the act of erotic conjugation of the body with its medium in a mystical experience. In short, both show ether, vivified air infused with properties. It can be said that both strategies, representing the duality between fields of ambiguity and the distribution of discrete elements, summarise the way atmospheres will be depicted from this moment on.

2 Danae's way. Particles and vectors in the etheric field

The history of ether has found many ups and downs. From essential scientific model, it soon was doomed to the realm of discarded theories. Nonetheless, its dismissal as scientific model gave way to a means of metaphysical speculation and aesthetic production. Although it has known many definitions in time, ether traditionally has been defined as a continuous transmitting medium which fills the void and penetrates matter. This scientific figuration of continuity, which died with the irruption of Einstein's relativity theories, tried to fill the voids which stopped science from giving a satisfactory explanation for certain natural phenomena. Paradoxically, it was Albert Einstein who manifested its coming cultural impact: "[with etheric models] space gave up its passive role as a mere stage for [physical events] The ether was invented, penetrating everything, filling the whole of space, and was admitted as a new kind of matter. Thus, it was overlooked that by this procedure space itself had been brought to life." [3]

The first two paintings presented here are brilliantly intuitive in the way this fuzzy medium is represented artistically. Nonetheless, putting the scientific models of ether on paper was problematic by its own nature. How to capture the invisible, or the fleetingly visible and ephemeral at most? How to grasp the fluid and dynamic? A task like this needs precision and imagination hand in hand.

Fig. 3, 4. Maxwell's lines of magnetic force. Source: J. M. Maxwell, *Treatise on Electricity and Magnetism*, 2 vols. vol. 2, fig. xvii, Oxford, 1873. Faraday's lines of magnetic force. Source: M. Faraday, *Experimental Researches in Electricity*, 3 vols. vol. 3, plate IV, fig. 3, London, 1839-55.

Scientific representations of models of ether usually revolve around *Danae's* strategy, or the distribution of discrete elements. It does so in two ways. The first one works on the idea of the field, a set of elements ordered in space. In close up, they are only tiny motes. When the whole picture is revealed, they show relational forces entangling them. It is the case of

Faraday's (fig. 3) or Maxwell's (fig. 4) lines of magnetic force, where vectors of energy and activity order space. Magnets and electric currents are the field activators around them.

Fig. 5, 6, 7. Maxwell's vortex ether model. (Source: J. C. Maxwell, "On physical lines of force", *Philosophical Magazine*, plate I, 1862). FitzGerald's wheel-and-band ether model. (Source: B. J. Hunt, "Lines of Force, Swirls of Ether"; in Clarke, Bruce and Dalrymple Henderson, Linda; *From Energy to Information*, Stanford University Press, Stanford, California, p. 104-105, 2002). Lodge's cogwheel ether model (Source: O. J. Lodge, *Modern Views of Electricity*, London, p. 187, 1889).

The second graphic paradigm consists in a mechanical infrastructure linking together everything else. A grill of vortexes or 'gears' allow for the transmission of motion and energy in space. It is the case of Maxwell's vortex ether model (fig. 5). When something happens in a certain point of the network, changes will necessarily be transmitted to the rest. Other models, like FitzGerald's, show wheel-and-band images (fig. 6) where the vortexes are connected by 'elastic bands'. Electrical phenomena distort the structure by means of the bands' elasticity, thus representing the effect of opposing charges. Other models replace this elastic bands by cogwheels crossed by a longitudinal gear, like Lodge's cogwheel ether model (fig. 7).

Whether a field or a mechanical infrastructure, ether is shown as a precise distribution of particles in space, activated by diverse generators, a kind of infrastructure that sustains a new spatial materiality [4].

3 Io's way. Archeiropoietic images

Soon at the beginning of the 19th century, the transference from scientific ether models to para-scientific and cultural speculations took place. While dismissed by science, ether quickly entered the realm of the subjective and the irrational, linking scientific theories with psychological ones. When trying to represent such substance, many experiments ambitioned to give a glimpse of the transitions between the aerial and mental worlds. In doing so, the results obtained were fictitious or simply failed, but many of them did succeed in contributing to a fertile atmospheric imaginary. In nineteenth-century bourgeois living rooms, spiritist sessions were often celebrated. All kinds of manifestations took place in the form of what we can call *psycho-aerial phenomena*: misplaced cold drafts, the flickering of a flame, unexpected perfumes diffused in the air, ectoplasms or spontaneous spatial densifications emerging from the medium's body... Etheric theories were embraced by theosophists and occultists alike. With them, another strategy of atmospheric representation emerged.

When grasping the invisible and the unknown, the strategy of the archeiropoietic – from medieval Greek *a-cheiro-poiētos*, 'made without hands' – is recurrent. The classic example is a privileged or miraculous image in the Christian tradition, an instrument of heavenly intervention imprinted in a cloth or in a wall without human intervention. The origin of the unpainted image can be celestial or due to the direct contact of the body, like in the cloth of Veronica – *vera icon* – or the Christ's shroud [5]. This image self-generates by means of the

physical laws governing the material's behaviour, laws that usually remain hidden and invisible. It is proto photographic in the sense of the 'authenticity' of the image itself, because the image and what it represents converge.

August Strindberg (1849-1912) was a Swedish playwright, novelist, poet and essayist, but for the purpose of this article we will focus in his important activity as painter. After having an active artistic and social life in Paris and Berlin, Strindberg settled in Dornach, Austria. He soon devised an innovative pictorial process based on chance and not in the permanent intervention of the artist. In 1894, he summarised his experiences on automatic art in the text "On chance in artistic creation," in the French magazine *Revue des Reves* [6]. Here he briefly described different material processes and personal experiences in which artistic creation is co-produced by the randomness of invisible natural forces:

"I've been told that the Malays drill holes in the bamboo stalks that grow in their forests. When the wind blows, they lie on the ground to listen to the symphonies produced by these gigantic Aeolian harps. The strange thing is that each listener hears a unique tune and a unique harmony, all according to the whim of the wind. It is a fact that weavers use a kaleidoscope to discover new patterns, leaving it to chance to arrange the bits of coloured glass" [7].

Strindberg recognises the perceptive value of modern art as a search for intelligibility, where initially a chaos of shapes and color opens up a subjective recognition of the pictorial matter, where the image finally presents itself to the viewer. The aim of the work of art would be to inhabit this pareidolic recurrence.

The text closes with the following conclusion: "The art of the future: [...] Imitate nature in an approximate way; imitate in particular nature's way of creating!" [8] The artistic practice understood as the creation of material conditions in order to reveal the intervention of nature is also reminiscent of photography pioneer William Fox Talbot (1800-1877). Talbot was the inventor of the *Photogenic Drawings*, a process where photographic images were obtained by direct contact of the photographic plaque over the represented object. Photogenic images were produced, in his words, by the "pencil of nature" acting upon the sensitive photographic surface [9]. Fox Talbot describes such images in archeiropoietic terms, done "without any aid whatever from the artist's pencil", only by "nature's hand; and what they want as yet of delicacy and finish of execution arises chiefly from our want of sufficient knowledge of her laws" [10]. Thus, here the role of chance is the foundation of this artistic practice in order to let nature reveal itself.

Fig. 8. August Strindberg. *Celestograph* n. XII, 1893-94. Source: National Library of Sweden, Collection of Manuscripts, Strindbergssrummet.

Strindberg experimented with photography in analogous terms, with the purpose of capturing ethereal images of the firmament, drawn by scientific and poetic drives. “Celestographies” were realised in Dornach between 1883 and 1894 with the only aim of letting nature depict itself, capturing for example the true nature of the celestial dome (fig. 8) or the presence of the sun. For him, photography was a means of capturing what the eye alone could not see [11]. He rejected the use of lens and camera in favour of a more archaic and unmediated technique: he simply soaked the photographic plate in developing solution and exposed it to the environment. For him, the accidental images obtained were the true imprint of heavens, a *non manufactum* of the ungraspable forces of nature. The result is also a *Potential Image* as described before. In its modest dimensions of 9x12cm, although the result of dirt, dust and random chemical reactions, it shows with pareidolic latency the indeterminacy of the celestial atmospheres.

Strindberg’s interest in occultism and alchemy grew in the following years, later described in his autobiographical novel *Inferno* [12]. He read the work of theosophists like fellow countryman Swedenborg and other authors who experimented with photography.

Two years after the last Celestography was made, French physician and spiritualist Hippolite Baraduc combined Strindberg’s and Fox Talbots’ techniques in order to grasp images of his own states of mind. In 1896, he published *L’âme humaine: ses mouvements, ses lumières et l’iconographie de l’invisible fluidique* where he included several pictures of images of the spirit [13] or ‘psychicones’.

He affirmed that he could grasp the fluid of conscience by simply applying the sensitive photographic plaque onto his subject’s foreheads or other parts of their body. The images again are merely accidental, but effectively join the iconography of the swirls of etheric *humours* within a dark empty space. Psychions, then, were interpreted at the time as *vera icons* of the photographer’s mind. The cloth applied onto the saint’s face is replaced by the sensitive and revelatory photographic plaque (fig. 9).

Fig. 9. Hippolite Baraduc. “XXIII. Projection of special state of soul”. Source: *L’âme humaine: ses mouvements, ses lumières et l’iconographie de l’invisible fluidique*, 1896.

Other psycho-aereal ‘states of the soul’ were interpreted and carefully designed in 1901 by British theosophists Annie Besant and Charles Webster Leadbeater in their work *Thought Forms* [14]. The book depicted a series of graphic correspondences of auras according to the personality or the mood of the subject (“love,” “devotion,” “intellect,” “wrath,” etc.) and experiences of various kinds (“meeting a friend,” “in a funeral,” etc.). They gave graphic body (an obviously subjective one) to the emotions related by specific situations, thus literally representing atmospheres.

For German philosopher Gernot Böhme (1937-), the production of atmospheres consists in the creation of conditions for a phenomenon to happen, not the fabrication of a particular object. To define such assemblages, Böhme uses two expressions, ‘generators’ and ‘condensators’, which seem very appropriate in light of the former experiences described so far. Such producers of atmospheres emit everything we experience without us initially being aware and ignoring where they come from. Böhme uses the term *ecstasy* to designate such presence, the series of sensitive traits, or in a word its atmospheric qualities [15]. Ecstasies are able to ‘dye’ space and announce the presence of something independent from the conditions they proceed [16]. This concept stresses the interdependence among a series of basic components of an atmospheric architecture: the cosmetic emission, the situation of the receptor and finally the relationship between the ecstatic assemblage and the former two.

American critic Jeffrey Kipnis approximated the ‘ecstasies of things’ when he used the term ‘cosmetic explosion’ when describing the capacity of architecture to infuse space with qualities beyond superficial ornamentation [17]. This “erotic camouflage” is a transubstantiation of the skin’s surface where the superficial and the purely ornamental is sublimated. It transcends the structure it adheres and gain a separate identity, an atmosphere that is able to destabilise the structure it comes from. He writes: “where ornaments retain its identity as entities, cosmetics work as fields, like a blush, a shadow, the air or auras” [18]. It is a field of effects which dissolves into pure affect. Like Odysseus’s sirens, although they do not explicitly say or promise anything, they produce an irresistible attraction.

The main innovation in ‘Thought Forms’ consists in the inclusion of plastic representations of musical works in the context of the architectural containers where they take place. Music provokes temporal cosmetic diffusions, or in the author’s words, structures “radiating in all directions its characteristic vibrations” [19]. Two of these documents summarise the graphic strategies analysed so far. In Mendelssohn’s *Songs without words, Book 2, n. 3*, (fig. 10) large concentric halos and semicircular traces in vertical succession emerge upwards from the architectural container. *Faust*’s “Soldier Chorus” by Richard Wagner is devised as a set of formidable multicolour auras in vertical convulsions, almost protruding the terrestrial atmosphere. Hovering over a stable object, built with stone, fleeting luminous structures hover. The tiny silhouette of a cathedral is the synesthetic witness who stands under some ambiguous shape that can be apprehended in different ways: maybe similar to a gigantic atomic mushroom cloud, maybe to the concentric waves in water. Such architectonic representation is subjective as it is original and unheard of at the moment. Historically, architecture has been represented as something stable and permanent, walls and roofs immutable forever. Now for the first time the staging of an activated space is depicted, with ephemeral and aerial qualities engaging experience and the content of space itself, full of complex effects.

The duality between object and atmosphere is emphasised. To do so, some scientific graphic resources are used: some reminiscent of weather map isobars, concentric waves as in magnetic fields, sets of particles in different colours... Above the old church stone walls the trees and the green meadows, fleeting etheric light structures swirl.

Different means of atmospheric representation, which begun with the pictorial representation of natural forces and the substance of space, begin to integrate the two main strategies defined so far, Io's strategy or the ambiguity of the abstract accidental form and Danae's strategy or the precise representation of particles in an activated field.

Fig. 10. Annie Besant and C.W. Leadbeater, “Songs without words, book 2, n° 3” by Felix Mendelssohn. Source: Thought Forms, Percy Lund, Humphries & Co Ltd, The Country Press, Bradford, 1901.

Conclusions

Atmospheres have a diffuse, ungraspable nature that makes them particularly difficult to represent and manipulate. Ether is the concept chosen in this article to test the way the history of atmospheric representation was initiated. It represents the problematisation of the will to grasp the invisible in different ways. The representation of ether has shifted from scientific to cultural artefact and finally to a vehicle to bring forward our desire for spatial emotion. Historic etheric representations have permeated the way atmospheres are represented and conceived in our days. Although subject to different interpretations in time, the representation of ether is always that of activated atmospheric space, of its aerial qualities related to personal experience and composed by all kinds of ambient effects. The aforementioned case studies of ‘animated air,’ are Potential Images embodying the transition between the rational to the irrational, from a conceptual model of continuity to a tool for precise ambience creation.

Two images of etheric immersion, close in time and content, have been chosen to bring forward two main graphic strategies. Images which open two main directions when visualising atmospheres. The first one is the representation of chance, ambiguity and openness, the creation of conditions to let atmospheres leave its accidental traces, such in archeiopoietic images. The second consists in the precise distribution in space of particles or discrete elements whose initial position is irritated by certain objects or generators of atmospheres.

Both strategies are not mutually exclusive, but encompass two opposing modalities that are recognisable today in the representation of atmospheric architecture. Frequently both are

combined to keep the two conditions present in the eyes of the beholder, in a balance that depends on every singular atmosphere.

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