



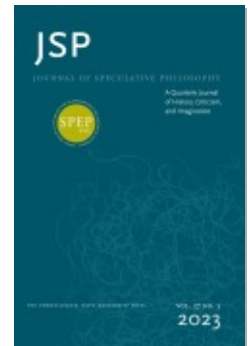
PROJECT MUSE®

*Thinking with Fire: Elemental Philosophy and Media
Technology*

Patricia Pisters

The Journal of Speculative Philosophy, Volume 37, Number 3, 2023, pp.
271-294 (Article)

Published by Penn State University Press



➔ For additional information about this article

<https://muse.jhu.edu/article/904114>

🔗 For content related to this article

https://muse.jhu.edu/related_content?type=article&id=904114



SPEP Plenary Address

Thinking with Fire: Elemental Philosophy and Media Technology

Patricia Pisters

UNIVERSITY OF AMSTERDAM

ABSTRACT: Humans have been thinking with fire since ancient times. In elemental philosophy, fire is considered as one of the most important elemental technologies. Fire has allowed the building of our world by reshaping matter, by making the earth less inhospitable, providing warm shelters and chasing and attracting animals. In the current elemental turn in media theory, the material dimensions of fire as medium have gained importance. Fire, however, also has important epistemological, psychological, and symbolic meaning, captured by Gaston Bachelard in a series of entangled “fire complexes.” This article focuses on these immaterial and subjective aspects of fire exemplified in a range of “matterphors” and combustive imagery of contemporary cinema to address its pyrotechnical dimensions and redefine media as affective fiery messages, interfaces, and environments.

KEYWORDS: Gaston Bachelard, elemental media studies, fire complexes, fire imagery, affective media

Elemental Media Philosophy and “Matterphors” of Fire

At this point in time of media saturation, planetary crises and climate change, elemental philosophy of media studies are on the rise.¹ As John Durham Peters argues in his seminal book *The Marvelous Clouds*, “the time is ripe for a philosophy of media. And a philosophy of media needs a philosophy of nature.”² One way of understanding this need for a philosophy of nature, is a growing consideration of the fact that media are industries that fundamentally depend upon natural resources and cannot just be seen as cultural phenomena. In this way, Pansy Duncan proposes a natural history of cinema.³ Jussi Parikka offers a geology of media that considers the material grounds of media such as the metals in our phones and other electronic devices.⁴ On a most basic level the elemental turn in media studies implies reconsidering the ancient natural elements: earth, water, air, and fire in Western philosophy, as described by David Macauley,⁵ or metal and wood, which are part of Asian elemental philosophy.⁶ Eva Horn reassesses our technical media as enabled by nature, such as the properties of air to transport sound.⁷

Different elements involve different ways of knowing, perceiving, imagining, and understanding the world and therefore invoking a range of philosophical questions. In *Wild Blue Media*, Melody Jue, for instance, demonstrates the cool and opaque epistemologies of seawater and considers seawater as a medium of nonhuman perception. Jue sees “diving as a method of cognitive estrangement” via the nonhabitual interface of water and lungs that opens up a fundamental reexamination of our usual biases and ways of speaking about and constructing our knowledge of the world.⁸ A reexamination seems to be increasingly important as Western philosophy (re)turns to less anthropocentric ways of seeing. These are just a few examples of elemental philosophical approaches to media; there are many more in this burgeoning field that I address with respect to the specificities of fire.

Before jumping into the fire, just two additional preliminary situating thoughts that simmer and smolder in the background of my arguments. First of all, it is important to note that the elemental turn in philosophy and media studies is adjacent to new materialism’s emphasis on the nonhierarchical relations between human and nonhuman forces. Deleuze and Guattari’s rhizomatic thinking across human and nonhuman forces and scales that they developed in *A Thousand Plateaus* are never far away,

and even if not addressed directly, it is important to acknowledge their continuing influence in elemental thinking.⁹ Another initial observation concerns the necessity for a decolonized perspective on Western thinking. This is another important development in (media) philosophy and cultural theory that needs more attention than I am able to develop here. But concerning elemental thinking in particular, doing justice to ancient wisdoms and practical knowledge of First Nations people and acknowledging the weight of colonial history is a necessity in order to transform our thinking toward a more equitable and sustainable future. We might need fire to do so.

Let me start thinking about the element of fire and its metaphysical, epistemic, and ethico-aesthetic qualities as a technology, and especially as a medium and media technology by sparks of association. An initial investigation of fire calls for a wide range of connotations: the sun as great ball of fire; life force/energy; electricity; yellow/orange/red; warmth/heat; seduction; passion; love; explosion; aggression; danger; unpredictability; playing with fire; prohibition; destruction; purification; rebirth; transformation; transience; domestication of fire (controlled); wildfire (uncontrollable); gods of Western Antiquity, such as Hestia/Vesta versus Hephaistos/Vulcan; Hermes/Mercurius; Prometheus; Icarus; Goddesses Sita and Radha in Hinduism; fire dragon in Chinese philosophy; mythological figures such as the Phoenix and Salamander in alchemical traditions. The list is far from complete, but it is a good indication of the directions into which an elemental reading of fire as a medium can guide our thoughts. What is immediately striking is the sliding scale between the material qualities of fire and its more immaterial, symbolic, or imaginative associations, to the point that sometimes the line between materiality and metaphor completely blurs. This is why Anne Harris proposes “matterphors” of fire.¹⁰ Moreover, fire seems to be a late comer of the elements (“There is no fire in Eden,” Harris notices¹¹) and so it seems intrinsically related to the making of humanity by its own doings. So how can we consider fire as a medium and why would this matter to us today?

Fire as Material and Sociopolitical Medium

I start by looking at a few different ways in which fire has been considered a material medium in contemporary media philosophy. Fire is a medium as it is a “conjunctural, durational and transformative’ biochemical reaction”

that under the right conjunction of different sources (gas, fuel, and ignition) sets things in motion. "It is a process rather than a substance."¹² Fire transforms materials into light, heat energy, carbon dioxide, water vapor, char, and more. Fire begins, has a duration (it ends), and transforms. As Peters in *The Marvelous Clouds* has argued, fire has actually allowed the building of our world by making the earth less inhospitable, by providing warm shelters, by chasing or attracting animals, cooking our food, providing energy, clearing ground for farming, forging tools, reshaping matter. He indicates that fire is a medium because it is "an enabling environment for ash and smoke, ink and metal, chemicals and ceramics. . . . Fire makes matter malleable." Furthermore, he indicates that "fire is the mother of tools as well as a tool itself, a medium as well as the precondition for almost all human-made media. Fire is a meta-medium."¹³ So one important way in which fire is revalued in contemporary media philosophy is by considering it as the tool of tools, the actual precondition of all other media.

If we consider fire as a medium in itself, another rudimentary and elemental starting point is earth's primordial fire: the sun. This is the premise of Nadia Bozak's investigation of the photographic and cinematographic image as fossilized energy. In *The Cinematic Footprint*, Bozak proposes to look at cinema as "resource image," understood as the embeddedness of every moving image in a complex set of environmental relations that starts with the sun: "the locus where geology, industrial civilization, and cinematic history intersect into an indelible fusion that is . . . traced back to the light (and energy) that comes from the sun."¹⁴ Bozak's aim is to locate the energy of fire in cinema and how cinema, thus energized, impacts upon earth. She considers both movie-making as an industry that uses geological resources and which in turn reconfigures our understanding the world via the cinematic. In fact, she traces a circular economy of energy, across different ecological scales: each (cinematic) image measures in one way or another "our civilization's control of the sun, in the form of the fossilized sun or carbon that we have captured, refined, and duly exploited."¹⁵

A third way in which we can begin to understand fire as a material medium is to look at the heat it produces. There are two ways in which we can consider the heat of fire as a medium: as environmental plasma and as thermal communication. Fire can be considered as environmental plasma according to David Macauley, who contends "heat and cold are thus elemental because they greatly condition the environmental 'plasma' in which we dwell and through which we evolve and move: the media of air, water,

and land constitute an ambient setting or stage for ecological change, geological processes, and cultural life.”¹⁶ Fire, as associated to the temperature of the climates we dwell in, equally operates on our bodies and minds. So temperature (hot/cold) mediates, as a sort of generalized mediation, our actions, thoughts, bodies, and minds.

In her book *Media Hot & Cold*, Nicole Starosielski looks at temperature more explicitly connected to modern technological media, and proposes a revision of Marshall McLuhan’s hot and cool media by looking at the sociopolitical dimensions of thermal media of communication. Instead of McLuhan’s more metaphoric take on heat and coolness,¹⁷ Starosielski addresses contemporary media culture as a thermal media ecology by considering the actual heating and cooling of digital infrastructures, as well as thermostats, air conditioners, and infrared cameras that are all fundamentally connected to the element of fire. She tracks the shifting thermal regimes that structure modern media. Starosielski calls for a “critical temperature studies” that can address the connections between thermal contexts, power relations (neocolonial geographies, capitalism, and big tech), media technologies, and climate change: “The circulation of images, sounds, videos, and texts will depend on a massive regime of heating and cooling. Data and networks, like the people they connect, will be ever more fragile. Too hot or too cold, and the platforms will collapse. Digital infrastructures—data centers, network exchanges, and fiber-optic cables—will drain the planet’s energy in order to create a stable thermal environment—not for people but for information.”¹⁸

As in Bozak’s account of the cinematic footprint of film as resource image, we see here again a scalar approach of entangled ecologies and a method of analysis that acknowledges power relations in considering climate control as a weapon (Starosielski’s chapter on the thermal violence of sweatboxes and iceboxes used for instance at the Mexico–US border is chillingly insightful in this respect). In sum, if we look at fire as a material medium, we can see how fire as tool of tools, as fossilized energy or as heat moves across different sociopolitical ecologies. To speak with Guattari, two of the three interconnected ecologies (material, sociopolitical, and mental) that he proposes as always entangled are well addressed in contemporary media theory.¹⁹ However, fire entails many immaterial properties as well and these “mental ecologies” of fire are less developed in relation to the elemental turn in media theory. This is where I want to turn to Bachelard’s work.

Fire as Immaterial Medium: Bachelard's Fire Complexes

In his famous studies on the poetic imagination of the elements, Gaston Bachelard considers fire as the most compelling, hard to control and ultra-living element full of contradictions that “shines in Paradise [and] burns in Hell.”²⁰ Bachelard investigates the subjective dimensions, imagination, and inner experiences of fire that he ties to archetypes and myths, metaphors and images, which he develops as a psychoanalysis of fire.²¹ Contrary to Freud, Bachelard is not interested in the unconscious and the symbolism of fire in our dreams. He wants to reach “the gentle realms of the soul” and does not want to feed “nightmare beings” of a “hellfire complex.”²² Rather he is interested in what he calls “the untutored mind,”²³ the mind that is lingering and drifting off while staring in a campfire, a mind in reverie that allows us to discover “a system of heterogeneous values, indirect but of undeniably affective nature.”²⁴ Bachelard elaborates what Anne Harris describes as “a ‘theory of fire immanent in matter’ that pertains to those inner fires that burn outside of physical reality but deep enough within the imagination to feel real.”²⁵ He wants to uncover the subjective, immaterial aspects of fire that are hidden within its material conditions and that form a fundamental part of human psychology, matterphors that capture diverse dimensions of human life. I highlight here some of Bachelard's mythic fire complexes that seem instructive for an understanding of the types of knowledge and affective understanding that fire carries within its flames and that might help to shed further light on the immanent qualities that fire mediates.

The Empedocles Complex: Respect and Nonhuman Forces

A first general principle of the psychology of the pyromaniac triggered by the reverie before a fire is evoked by both the volcano and the funeral pyre. Inspired by Empedocles, the Greek elemental philosopher who allegedly died by jumping into the crater at Mount Etna, Bachelard calls this the Empedocles complex. This complex signifies first and foremost that fire inspires a poetics of annihilation, but also of awe and respect. Fire provokes a desire for cosmic annihilation, to be swallowed by flames, elemental knowledge beyond human life but perhaps also a knowledge of how to work with fire in its restorative qualities and not only its destructive qualities.

A contemporary imagery of such fire complex is captured in the documentary film *Fire of Love* (Sara Dosa, 2022). The film tells a truly fiery love story, that of French volcanologists Katia and Maurice Krafft, who died on expedition in Japan in 1991 on Mount Unzen's eruption. We see Katia and Maurice in archival footage, most of it shot by themselves during breath-taking expeditions where they come incredibly close to the lava streams and ash rains, while their story is narrated by the warm and captivating voice of Miranda July. The film's seminal imagery shows the Kraffts in silver thermal suits, extremely close to the erupting lava flames (fig. 1). The image evokes an extraterrestrial expedition and is awe-inspiring for the close encounter with this nonhuman force of nature it transmits. The Kraffts quite literally embody Empedocles's elemental cosmology of fire. They personify the entanglement of human and nonhuman forces in their triangular love story between themselves and the volcano. Their lives were completely devoted to understanding volcanoes. Their speech is both metaphoric and material when they describe their own relation as "volcanic." Moreover, what is clear is that their relationship to the fire of the earth, volcanoes and eruptions, goes beyond scientific investigation; it is full of respect, love, and sacrifice. Like Empedocles, they are swallowed by the fiery eruption of the earth. But they also left behind a wealth of knowledge about volcanoes that subsequently has saved many lives.



FIGURE 1. Screenshot from *Fire of Love* (Sara Dosa, 2022)

The Kraffts wrote more than twenty books and always brought their cameras on expeditions. The director of this documentary, Sara Dosa, who reuses the footage they shot, argues that much of the power of their scientific investigations is related to their emphatic way of filming.

The way that they shot volcanoes, you can really see just how alive and how beautiful they are. You can feel Katia and Maurice's love behind the lens. . . . It was clear that they recognized the lifeforce in volcanoes and connected to that behind the cameras. That was something that they really hoped to communicate in their work, not just the scientific knowledge. The way that they lived their life and the way they shot their material also allowed others to enter into a relationship with volcanoes in their own way. Whether it's just through curiosity or by perceiving, it's the ontology of volcanoes, so to speak.²⁶

The film demonstrates several layers of affective mediation, using the camera (in itself also already materially constituted by natural resources, not in the last place, the sun), as a way to mediate the magnitude, monstrous and awe-inspiring beauty and power of nonhuman forces of the heat of the earth, its inner fire. It's the affective quality of the images that burns our own flesh and gives us a glimpse of the power of the nonhuman ontology of volcanoes.

At the same time, the volcanoes embody a nonhuman temporal dimension, or temporal scaling that is political as much as it is ontological. Sara Dosa comments: "Getting to think about . . . the fleetingness of human lives amid the enormity of volcanoes and geologic time pulled into focus some of the violence and the absurdity of how, especially through processes of colonialism and capitalism, these notions of time become constructed and the continual violence that they inflict upon the planet and people."²⁷ She does not specify what this continual violence of colonialism and capitalism entails, and neither do the volcanologists, but we see here that the magnitude of the inner earth's fire presents a confrontation with geological time that is embodied in the Empedocles complex that dwarfs and humbles anthropocentric conceptions of time.

The Empedocles complex can also be connected to another phenomenon of nature, namely wildfires. The film *Only the Brave* (Joseph Kosinski, 2017) represents the fact-based story of Californian firefighters, the Granite Mountain Hotshots, who tragically died on duty in 2013. One of the

remarkable accomplishments of these hotshots is that they saved one of Arizona's most iconic trees, a grand champion juniper tree in the Prescott National Forest. Fighting and controlling wildfires, Empedocles is never far away for the hotshots who fight fire with fire driven by respect and bravery, symbolized by the burning bear in one of the main character's dreams. But of course, the film also mediates the larger environmental issues that demand an increasing knowledge of and thinking with fire. *Only the Brave* can also be considered as an environmental record of fire and fuels management that becomes increasingly topical in times where wildfires continue to spread across larger areas of the planet, intensified as a consequence of climate change and mismanagement. Since the 1980s, wildfires have increased and continue to intensify.²⁸ The firefighters are Empedocleans that carry important combustive knowledge for our contemporary burning ecologies. But there are other lessons to learn.

In their article "An Eternal Flame: The Elemental Governance of Wildfire's Pasts, Presents and Futures," Timothy Neale and Alex Zahara analyze wildfire management in Australia, Canada, and the Philippines. Bringing together international fire politics and regional specificities, they identify the risks of bureaucratic rationalization, securing funding, colonization (for instance by deciding which types of knowledge are entered into fire prediction and prevention models), exploitation, economic stakeholders and political decisions as "an elemental process of relations and material exchanges" that lays bare a postcolonial dynamics that is in need of a decolonial perspective of governance of combustion to constrain risk and avert climate disaster.²⁹ An important development in this respect is that cultural burns, First Nations and indigenous fire practices of controlled gentle burnings, slow fires that are restorative rather than destructive, are gaining rehabilitation and acknowledgment in fighting the most destructive consequences of climate change and governance. Or rather, these are not practices of firefighting but of fire lighting, practices of thinking and living with (not against) fire.³⁰ Here too there is an Empedoclean love, awe, and respect for fire that mediates these practices. And perhaps here we can see the calm types of knowledge of the flames that Bachelard was looking for when he introduced his fire complexes.

From the fire imageries evoked under the sign of Empedocles, one can conclude that one way in which audio-visual media relate to Bachelard's fire complexes is by literally embodying and transferring, by aesthetic and

narrative means, the affective and temporal dimensions of elemental forces that remind us of the nonhierarchical position of humanity.

The Prometheus Complex: Prohibited Knowledge and Clever Disobedience

Because cultural burning was forbidden (or ignored) in colonial fire and fuel governance, they can also be considered as part of the Prometheus complex of fire. Bachelard identifies the Prometheus complex as a desire for hidden, transgressive, and secret types of knowledge embodied in the poetics of fire. Fire is “initially the object of a general prohibition; . . . what we first learn about fire is that we must not touch it.”³¹ Obtaining knowledge through fire, Bachelard argues, is a problem of clever disobedience. He evokes the child that steals matches from his father, and qualifies this fiery quest as risky knowledge. After Prometheus, who stole fire from the gods, Bachelard describes the Prometheus complex as “the Oedipus complex of the life of the intellect.”³² Knowledge of fire is not about sexual knowledge as symbolized in the Oedipal triangle between father, mother, and child. Rather, the Prometheus complex is about practical and intellectual knowledge about how to make and how to do things. So the type of knowledge that fire embodies in this sense is prohibited knowledge that calls for respect and caution but that can only be obtained by smart forms of transgression that are necessary to learn and to progress.

The Netflix series *Archive 81* (Rebecca Sonnenshine, 2022) presents the Prometheus complex personified by a film conservator who gains access to forbidden knowledge, hidden pasts, folds and loops in time, all mediated by restoring burned images in a hidden archive. *Archive 81* can be considered as a meta-reflection on the types of scorching knowledge and smoldering fires that are held in the crucible of our media archives. The main character Dan Turner (Mamoudou Athie) in *Archive 81* is a film conservator who, so to speak, burns his fingers in a restoration project of damaged Hi8 tapes that were rescued from an apartment building that had burned down (fig. 2). When he starts repairing the burned tapes, he finds himself reconstructing the work of documentary filmmaker Melody Pendras (Dina Shihabi). Her videos transport us back to 1994, when she sets out on her anthropological oral history investigation of the inhabitants of the building that would go up in flames during her inquiries. As Dan is drawn into Melody’s story, they start to communicate across screens, across time.



FIGURE 2. Screenshot from *Archive 81* (Rebecca Sonnenshine, 2022)

Obviously a work of poetic imagination, the questions about the power of pyrotechnics of film and video as Promethean portals to other dimensions and secret, hidden or buried knowledge are worth considering as part of an elemental epistemology of the interface of fire, where images (whether from film or other audio-visual media) can burn holes in time, allow time traveling of sorts. The most fiery questions here concern the political dimensions of archival knowledge and the problems of preservation of knowledge in so many undisclosed archives of the world. So the decolonial perspective here has to do with the mining of the mnemonic debts of our archives and archival, historical knowledge. To explain this, let me take a small sidestep. Elsewhere I have argued that in fact filmmakers (and, for that matter, archivists and conservators) can be considered as “metallurgists of our time” who form and express world-memory, who bend and shape the material images and sounds that contribute to our political consciousness.³³ Based on a Deleuze-Guattarian understanding of elemental media, in particular metal, I argue that the matter-movements and matter energy that are transformed by the artisan-metallurgist, produce objects and invent affects that can be both creative and destructive (tools and weapons, all mediated by fire). In comparing filmmakers and archivists to smiths, I argue that cinema is a world-making practice and that filmmaker-metallurgists know how to bend and sculpt time.

One of the metallurgic principles that filmmakers have at their disposal could be identified as the mining of the mnemonic depths of the archives.

Here artists such as Sarah Pierce and John Akomfrah can be mentioned as their metallurgic operations consist of addressing the radical contingency of what has been captured from the archives as official history at the expense of many untold or forgotten stories. Sarah Pierce, for instance, researched newsreels in the Irish Film Archive and what she found made her ask what it means to be “erased” from history.³⁴ She embarked on “resurrecting the dead” by bringing back those archival counter-images (for instance of black people in Ireland in the 1960s), putting them online and in her art works where she deals explicitly with the forgotten, the unseen, the left behinds, the not-officially accounted for in different kinds of archival materials, ranging from personal photographs to letters and 16mm film. She effectively constructs another past “where the colonized are no longer victims, innocents, oppressed, where language is not nation and where origin is not a reliable indicator of who is ‘of’ a place.”³⁵ John Akomfrah does something similar in his poetic archival film *The Nine Muses* (2010), where he digs up unseen images of migration in Britain and juxtaposes them with the poetic texts of the British canon. So decolonizing the archive means rekindling the ashes of what remained hidden and unseen in order to burn stereotypical images of the past and set new ones in motion. Important, again, is the affective dimension of this kind of archival knowledge, what Pierce calls, the fourth dimension (after Eisenstein): “an unpredictable, unexpected *rebellion* within film where things come together but *don’t synthesize*. . . . The fourth dimension is where affect emerges as collateral vibrations that can be *felt* but are impossible to identify, formulate or plan.”³⁶ It is a kind of rebellion that is not oppositional but addresses knowledge directly.

Back to *Archive 81*: This direct political epistemology of restoring and rescuing from the flames (or dust, for that matter) of the archive is absent in *Archive 81*. And perhaps that is one of the reasons why the show, in spite of its marvelous actors, quite favorable reviews, and interesting time-traveling plot, did not get a follow-up. After one season the show was cancelled. So we will never know if the show would have been able to give the story lines more weight in terms of restorative justice via the rekindling of archival knowledge. But media-ontologically, there is still something interesting in *Archive 81* as it puts a more secretive spin on its images, implying that tapes, films, and photography in themselves can capture things invisible to the human eye. Through spirit photography and ghostly film and video images, it is revealed that the building that the documentary maker in 1994 was investigating was the home of a secret cult that used media to

open portals to the past and to other dimensions. What the show therefore hints at is what Erik Davis has called “the alchemical fire” of technological mediation³⁷—not so much because of the fictionalized rituals of esoteric circles and cults that the series represents, but rather because of media’s secret connections to fire’s embodiment in modern electricity and media images that contain in themselves a secret, mystic, forbidden kind of knowledge.

In his book *Techgnosis*, Erik Davis demonstrates how technology in general, and communication technology in particular, has a magical undercurrent. Today’s advanced technologies derive from “their literal realization of the virtual projects willed by the wizards and alchemists of an earlier age.”³⁸ He argues that magic is technology’s unconscious that certainly has not disappeared with the advent of the rational scientific world view. And this is especially true for the element of fire: “Of all the forces crackling through the cosmos, electricity most embodies the spirit of modernity. . . . Electricity feeds modernity; it is our profane illumination.”³⁹ He adds that the transformation of electrical current (also called quintessential fire) into a communication medium somewhere mid-nineteenth century, represents perhaps its most remarkable alchemical transmutation: “from energy into information.”⁴⁰

Electricity, Davis posits, would carry three different aspects of the alchemical imagination into the modern world: the fascination of the vitality of bodies; the desire to spiritualize material form; and the drive to transmute energies of earth into the divine realization of human dreams.⁴¹ Mary Shelley’s *Frankenstein* is the archetypical tale of electro-Prometheanism of vitalizing bodies; nineteenth-century Spiritualism was inspired by photography (spirit photography) and telegraphy (the spiritual telegraph); and the animism of the telephonic uncanny led to the idea of technology expanding the boundaries of the self. Nikola Tesla was a real techno-alchemist who experimented with energies of the earth (electricity) to realize human dreams of global communication via the planet’s electrical vibrations. Davis points out that what is important to recognize is that these “new technologies of perception thus unfold a new world or at least new dimensions of universal nature.”⁴² Media technology in itself can thus be considered as a form of transgressive Promethean knowledge, sparking up new ideas and firing flashes of insights.

Continuing from these nineteenth-century examples of alchemical fires that transmute electricity into information and the opening of new

dimensions mediated by technology, there is the Promethean dimension of our contemporary media-saturated world, which is described by Steven Kotler and Jamie Wheal in their book *Stealing Fire*. Kotler and Wheal describe how Silicon Valley executives, members of the special forces, and maverick scientists and entrepreneurs (combining innovation with military and commercial interests) can be considered as modern day Prometheans. In this most recent cycle of fire robbers, it is interesting that the techniques of enlightenment and flashes of insight have gradually shifted to explicitly ecstatic techniques to alter consciousness and accelerate performance. In their research and interviews, Kotler and Wheal found many “famous tech founders visiting transformational festivals, and teams of engineers microdosing with psychedelics. In other words,” they conclude, “everywhere we went, someone was stealing the *kykeon*.”⁴³ Labeling Burning Man, the famous techno-festival in the Black Rock Desert, as the modern day Eleusian Mysteries, they demonstrate how Promethean the festival is as many high-tech inventions quite literally are tested and presented around the stakes of the Burning Man. The general point I want to make, however, is the profound connection between the imagination of “stealing fire,” modern media technologies and our contemporary high-tech society where the Prometheus complex still lingers in the back of our minds and influences not only our ideas about the past (rekindling archives, revising the past), but certainly also our futures (inventing new technologies, opening new worlds).

The Novalis Complex: Sexualized Fire of the Body Electric

Fire also has a profound connection to desire and the body. A third dimension of a poetics of fire is related to the “body electric” and sexuality, coined by Bachelard as the Novalis complex, after the romantic poet/novelist Novalis. The Novalis complex addresses fire and sexuality, and the intimate, bodily knowledge it entails. Again, Bachelard does not refer to the Oedipal sexual complex that refers to the desire for the mother and (symbolic) replacement of the father. Rather, Bachelard refers quite literally to the sexuality of fire that is primitively produced by rubbing two sticks, which in itself is an intimate experience; electrical fire is even more sexualized fire, a rhythmic increase of energy. The impulse toward fire that is brought about by friction, the need for a shared inner warmth, and penetrating heat all relate to the intimate and sexualized knowledge of fire. All the connotations

of inner warmth and sexuality constitute the Novalis complex, rekindling the sexualized dimensions of fire itself.

The Chilean Art House film *Ema* (Pablo Larrain, 2019) performs the pyromaniac drive mediated by its main character under the signs of the Novalis complex, full of burning and sizzling erotic encounters, combusive and transformative. *Ema* is as flammable and enigmatic as *Archive 81*, but Larrain's film is more governed by sexualized fire, related to intimacy, bodily knowledge, passion, and desire (including the desire for reproduction). It is a film that (to speak with Walt Whitman's equally romantic conception of fire) "sings the body electric" and that demonstrates that fire can burn inside the body as well as outside.⁴⁴

Bachelard argues that the invention of fire by rubbing sticks has everything to do with inscribing human warmth in the body. He argues that this primitive desire of sexualized fire and love has been picked up by Romantic writers such as Novalis, but he also makes a detour via alchemical traditions that were equally "penetrated by an immense sexual reverie, by a reverie of wealth and rejuvenation, by a reverie of power."⁴⁵ In alchemy there are always masculine (sun, hot, fire, air) and feminine (moon, cool, water, earth) principles at work that need to unite to obtain higher spirits in body and soul. Sexualized fire is preeminently the connecting link for all principles and symbols. It unites matter and spirit, vice and virtue. It idealizes materialistic knowledge, it materializes idealistic knowledge, Bachelard argues. Hence the difficulty in alchemical knowledge to separate matter



FIGURE 3. Screenshot from *Ema* (Pablo Larrain, 2019)

and symbolism. There is no duality between body and spirit, heaven and earth. Bachelard posits that Novalis rekindles these primitive and alchemical fires in this sexualized, intimate bodily sense.

The main character in *Ema* is “matterphorically” in flames, dancing the body electric, dancing life, vitality, erotics, and a desire for life. She is also a pyromaniac who likes to set fire to traffic lights, cars, and other public objects. Ema (Mariana Di Girólamo) is a young reggaeton dancer who wants to divorce from choreographer Gaston (Gael García Bernal) after they return a child they had adopted but fail to raise. The child (probably inspired by his foster mother) caused a fire accident and is no longer under their care. Ema feels guilty and tries to bring him back while she is also on a quest for sexual liberation and motherhood in an alternative family constellation.

Most striking here is the sexual rhythm of the reggaeton music and dance moves of the main character, exemplified by the bodies dancing in front of a giant burning sun (fig. 3). From these images the film creates a connection between the solar ecology of pyrosexual desire and ecologies of destruction and rebirth. Her dancing ignites a pansexual desire that flickers through the storyline, elliptic and enigmatic. Between the flames, we understand how Ema enters into sexual and love relationships with both the new foster parents of their adopted son, Polo, and how, in the end, they (somehow stunned, mesmerized—another electric matterphor—and glowing with sunlight) all together form a new nonnormative family, including her ex-husband. We see how they are all taking care of the new baby. In one of the last shots, Ema directly stares at us, right across the screen, inviting us to her transgressive, fiery world. In the very last image, she literally fuels up again at a gas station to continue her pyromaniac drives.

Fire mediates transformation. As Bachelard argues: “That which fire has caressed, loved, adored, has gained a store of memories and lost its innocence. . . . Through fire everything changes.”⁴⁶ Ema will make sure the flame will keep on burning and things will keep on changing. What the film transfers to us, through the dancing bodies of its characters and the pulsating rhythms of its music, is the electrifying current of the Novalis complex, the sexualized fire of life.

The Sita Complex: Purifying and Idealized Fire

I end by referring to a last Bachelard-inspired complex that relates to the purifying qualities of fire, and its relation to birth and rebirth. Bachelard

refers to this as the Idealized Fire of Purity. Inspired by Deepa Mehta's film *Fire* (1996), I propose to call these ideas and qualities of fire the Sita complex, after the Hindu goddess of courage and purity who survived a trial by fire.⁴⁷

Fire is the first of Deepa Mehta's elemental trilogy that also includes *Earth* (1998) and *Water* (2005). The film deals with the love story between two women, Radha (Shabana Azmi) and Sita (Nandita Das), who find each other in the same household of two brothers (their husbands) and their old, sick, and demanding mother-in-law. Both women are lonely, cold, and locked up in their marriage. Radha's husband has sworn abstinence from desire under the spell of a religious guru and his wife has to put his desires to the test to prove that he can resist by never touching her; Sita's uninterested husband has a mistress who he admittedly prefers to be with. In the course of the film the two women find compassion, warmth, and love in each other's company (fig. 4). When Radha's husband finds the women in embrace, he enflames in rage and, in a confrontation in the kitchen, Radha's sari catches fire on the stove. She is quite literally put to the ordeal of fire but both Radha and Sita remain unharmed. At the end of the film, Sita and Radha reunite outside the house, in the pouring rain. Radha and Sita are names of important Hindi goddesses, chosen by Deepa Mehta for their connections to a poetics of fire. Radha is the goddess of empathy, tenderness, and compassion; Sita the goddess of courage, purity, and fire.



FIGURE 4. Screenshot from *Fire* (Deepa Mehta, 1996)

Bachelard argues that “fire purifies everything.”⁴⁸ He lists the purifying qualities of fire, among which are the power of deodorization and overcoming putrefaction (think of food), the destruction of material imperfections (think of smelting and forging), and the purification of fields (as in cultural burns and traditional agriculture). He argues that fire itself is pure when it dematerializes and loses reality, when “it becomes pure spirit.”⁴⁹ When fire is transformed into light it enters a process of idealization that then is connected to purity and love; light “awaits the soul. It is then the basis for spiritual illumination. . . . My love has been transformed into flame, and this flame is gradually consuming all that is earthly within me.”⁵⁰ Bringing together again material and immaterial properties of fire, and transforming fire into an elemental psychoanalysis, illuminating our education, Bachelard concludes:

But how much more intense is this enjoyment when our objective knowledge is the objective knowledge of the *subjective*, when we discover in our own heart the human universal, when, after having honestly psychoanalyzed our study of self, we integrate the rules of morality with the laws of psychology! Then the fire which was consuming us suddenly enlightens us. The haphazard passion becomes deliberate passion. Love becomes family; fire becomes heart and home.⁵¹

Bachelard’s words about fire, love, purity, and morality according to the laws of psychology actually summarize the essence of *Fire*. The film shows how deeply unfortunate the women are and how they simply long for love and kindness that they find in each other. At the end of the film, Radha admits to her husband: “I desire Sita, I desire her warmth, her compassion, I desire to live again.” In fact, *Fire* was the first Indian film to openly show a love relationship between two women, but nevertheless the film passed all official censorship. The censors understood the laws of psychology and understood the references to the Hindu Goddesses in this spiritually enlightening way that is contained in fire’s Sita complex, carried through the light of the projector onto the screen.

However, not everybody was pleased with the portrayed images of love between the women. When the film came out in India, it caused fiery agitation. Instigated by the Shiv Sena Hindu Nationalist party, an

angry mob attacked the theaters in Mumbai in the first days of its screening. The Shiv Sena demanded censorship because “it would disturb the social fabric” and it would be “against Hindu culture.”⁵² They called the film a lesbian movie. And according to the Shiv Sena, there are no lesbians in India. And so an angry Shiv Sena mob of men and women tore down the posters of the film and expressed their rage in the streets of Mumbai. Deepa Mehta had to travel with bodyguards. At the same time there were demonstrations in the streets in front of the theater of men and women holding signs saying “I’m a lesbian.” These fiery responses to fiery imagery leads me to my last point, returning to the question of elemental mediations.

Fiery Imagery Mediating Entangled Fire Complexes

In her book *Fiery Cinema*, film scholar Weihong Bao develops not only an interesting historical analysis of early Chinese cinema, but also offers a theoretical perspective on the many facets of film as a medium in an encounter with fire. She starts the book by recounting another fiery response to a film, the protests of an enraged audience after the screening of *Mulan Joins the Army* in 1940 in Shanghai, a protest that later appeared to be scripted, politically motivated, and then soon became unmanageable. Bao argues: “Fire itself is an unstable medium, straddling a material, an image, and a technology with tremendous affective power. Animating, metamorphosing, and corroding, it moves across space and time as an agent of simultaneous assimilation and perpetual differentiation. The competition between cinema and fire hence suggests a more fundamental reconception of the medium. This is a notion of the medium as a mediating environment.”⁵³ She addresses both the “endured obsession with images of fire” and “physical destructions of film screens, prints, and sites of exhibition” as proofs that fire “has always been with us in international film history.”⁵⁴ She argues that cinema is always in conversation “with historical political discourses, institutions, and material practices in shaping public perception and experience. As an animating, metamorphosing, and manifold affective medium, fire serves as a linchpin.”⁵⁵

To see fire as a linchpin for cinema, Bao proposes three entangled models of media that I think are very useful to highlight and bring in

relation to Bachelard's matterphors and fire complexes discussed above. The first media model is a linear one, where the medium is the carrier of information or transmitter of a message. In this way, *Fire of Love* and *Archive 81* carry affective message of Empedoclean and Promethean value. The second is an intermediary model, considering film (and by extension other media) as an interface of exchange between subjective and objective worlds, immaterial dreams and material realities. It can be argued that *Ena*, under the spell of the Novalis complex of fire, can be seen as a film that mediates between dream and reality, inner fire and outer fire. And the third is a spherical model that constitutes a shared space of experience, a mediating environment.⁵⁶ Here we can obviously think of the responses to *Fire* and its reinterpretation of morality as psychological needs of the Sita complex. Obviously, the borders between these media models and complexes are permeable and not so strict as presented here. But if we relate these entangled media models to Bachelard's equally entangled fire complexes, it is possible to conclude that all these fire mediations present different kinds of combustive knowledge in which the element of fire, both as material phenomenon of nature and engine for modern life as well as an immaterial affective reverie of destruction, transgression, sexuality, and a desire for life are worthwhile exploring further in light of the deeper elemental media questions that wait to be rekindled in the different ecologies of flames that mediate our existence today.

NOTES

Thanks to Alan Schrift, Shannon Sullivan, and the Executive Committee of SPEP for inviting me to share my elemental thoughts as work in progress during the sixtieth SPEP conference at Texas A&M University in October 2022.

1. This article is based on and an elaboration of a very short piece in *Communication +1*, where I focus on the existing scholarship on the material dimensions of fire as medium. See Patricia Pisters, "Combustive Knowledge: Fire as Medium and Interface," *Communication +1* 9, no. 1 (2022): 1–6. <https://scholarworks.umass.edu/cpo/vol9/iss1/5/>.
2. John Durham Peters, *The Marvelous Clouds: Toward a Philosophy of Elemental Media* (Chicago: University of Chicago Press, 2015), 1.
3. Pansy Duncan, "Towards a Natural History of Film Form: Silver Salts and the Aesthetics of Early Studio-era Hollywood Cinema," *Screen* 63, no. 4 (2022): 411–26.

4. Jussi Parikka, *A Geology of Media* (Minneapolis: University of Minnesota Press, 2015).
5. David Macauley, *Elemental Philosophy: Earth, Air, Fire, and Water as Environmental Ideas* (Albany: State University of New York Press, 2010).
6. Yuriko Furuhashi, "Of Dragons and Geoengineering: Rethinking Elemental Media." *Media+ Environment* 1, no. 1 (2019): 1–9.
7. Eva Horn, "Air as Medium," *Grey Room* 73, no. 3 (2018): 6–25.
8. Melody Jue, *Wild Blue Media: Thinking Through Seawater* (Durham: Duke University Press, 2020), 163.
9. Gilles Deleuze and Felix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (London: The Athlone Press, 1988).
10. Anne Harris, "Pyromena: Fire's Doing," in *Elemental Ecocriticism: Thinking with Earth, Air, Water and Fire*, ed. Jeffrey Jerome Cohen and Lowell Duckert (Minneapolis: University of Minnesota Press, 2015), 38.
11. Harris, "Pyromena," 27.
12. Timothy Neale and Alex Zahara, "An Eternal Flame: The Elemental Governance of Wildfire's Pasts, Presents and Futures," *Cultural Studies Review* 25, no. 2 (2019): 116.
13. Peters, *The Marvelous Clouds*, 117.
14. Nadia Bozak, *The Cinematic Footprint: Lights, Camera, Natural Resources* (New Brunswick, NJ: Rutgers University Press, 2011), 18.
15. Bozak, *The Cinematic Footprint*, 29.
16. Macauley, *Elemental Philosophy*, 202.
17. Marshall McLuhan, *Understanding Media: The Extension of Man* (London: Routledge, 1964), 24–35.
18. Nicole Starosielski, *Media Hot & Cold* (Durham: Duke University Press, 2021), 1.
19. Félix Guattari, *The Three Ecologies*, trans. Ian Pindar and Paul Sutton (London: Continuum, 2008).
20. Gaston Bachelard, *The Psychoanalysis of Fire*, trans. Alan C. M. Ross (Boston: Beacon Press, 1964), 7.
21. Bachelard returned to fire in *The Flame of a Candle*, trans. Joni Caldwell (Dallas: The Dallas Institute of Humanities and Culture, 1988), and the posthumously published in Gaston Bachelard, *Fragments of a Poetics of Fire* (Dallas: The Dallas Institute of Humanities and Culture, 1990).
22. Bachelard, *The Flame of a Candle*, 7.
23. Bachelard, *The Psychoanalysis of Fire*, 2.
24. Bachelard, *The Psychoanalysis of Fire*, 6.
25. Harris, "Pyromena," 40.
26. Marshall Shaffer, "Interview: Sara Dosa on *Fire of Love*, Unrequited Love, and Indifferent Volcanoes," <https://www.slantmagazine.com/film/sara-dosa-interview-fire-of-love/>.

27. Shaffer, "Interview: Sara Dosa."
28. See <https://www.epa.gov/natural-disasters/wildfires>. The documentary *Paradise* (Alexander Abaturro, 2022) shows the fight of local inhabitants in Siberia against the massive wildfires (which they call "The Dragon") in the summer of 2021.
29. Neale and Zahara, "An Eternal Flame," 123.
30. See, for instance, <https://www.ucdavis.edu/news/cultural-burning-illuminated> and <https://culturalburning.org.au/>.
31. Bachelard, *The Psychoanalysis of Fire*, 11.
32. Bachelard, *The Psychoanalysis of Fire*, 12.
33. Patricia Pisters, "The Filmmaker as Metallurgist: Political Cinema and World Memory," *Film-Philosophy* 20, no. 1 (2016): 149–67.
34. Sarah Pierce, "The Archival Fourth Dimension," *Afterall* 23 (November 2009), <https://www.afterall.org/article/the.archival.fourth.dimension>.
35. Pierce, "The Archival Fourth Dimension."
36. Pierce, "The Archival Fourth Dimension."
37. Eric Davis, *Techgnosis: Myth, Magic & Mysticism in the Age of Information* (Berkeley, CA: North Atlantic Books, 2015).
38. Davis, *Techgnosis*, 32.
39. Davis, *Techgnosis*, 33.
40. Davis, *Techgnosis*, 35.
41. Davis, *Techgnosis*, 36.
42. Davis, *Techgnosis*, 72.
43. Steven Kotler and Jamie Wheal, *Stealing Fire* (New York: Harper Collins, 2017), 5. *Kykeon* refers to the sacred elixir that allegedly was used in the Eleusinian Mystery rituals in Ancient Greece.
44. See <https://www.poetryfoundation.org/poems/45472/i-sing-the-body-electric>.
45. Bachelard, *The Psychoanalysis of Fire*, 51.
46. Bachelard, *The Psychoanalysis of Fire*, 57.
47. The Goddess Sita was the wife of Rama who was abducted. At her return, to prove her fidelity to her husband, she threw herself into the fire and survived unharmed.
48. Bachelard, *The Psychoanalysis of Fire*, 103.
49. Bachelard, *The Psychoanalysis of Fire*, 104.
50. Bachelard, *The Psychoanalysis of Fire*, 107.
51. Bachelard, *The Psychoanalysis of Fire*, 101.
52. See https://www.youtube.com/watch?v=zSZSB4hE_3A and <https://www.youtube.com/watch?v=iNv6e4FPeu0>.
53. Weihong Bao, *Fiery Cinema: The Emergence of an Affective Medium in China 1915–1945* (Minneapolis: University of Minnesota Press, 2015), 5.
54. Bao, *Fiery Cinema*, 6.
55. Bao, *Fiery Cinema*, 7.
56. Bao, *Fiery Cinema*, 8.

WORKS CITED

- Bachelard, Gaston. 1990 [1988]. *Fragments of a Poetics of Fire*. Edited by Suzanne Bachelard. Translated by Kenneth Haltman. Dallas: The Dallas Institute of Humanities and Culture.
- . 1988 [1961]. *The Flame of a Candle*. Translated by Joni Caldwell. Dallas: The Dallas Institute of Humanities and Culture.
- . 1964 [1938]. *The Psychoanalysis of Fire*. Translated by Alan C. M. Ross. Boston: Beacon Press.
- Bao, Weihong. 2015. *Fiery Cinema: The Emergence of an Affective Medium in China, 1915–1945*. Minneapolis: University of Minnesota Press.
- Bozak, Nadia. 2011. *The Cinematic Footprint: Lights, Camera, Natural Resources*. New Brunswick: Rutgers University Press.
- Davis, Eric. 2015 [1998]. *Techgnosis: Myth, Magic & Mysticism in the Age of Information*. Berkeley, CA: North Atlantic Books.
- Deleuze, Gilles, and Félix Guattari. 1988 [1980]. *A Thousand Plateaus: Capitalism and Schizophrenia*. Translated by Brian Massumi. London: The Athlone Press.
- Duncan, Pansy. 2022. "Towards a Natural History of Film Form: Silver Salts and the Aesthetics of Early Studio-era Hollywood Cinema." *Screen* 63, no. 4: 411–26.
- Furuhata, Yuriko. 2019. "Of Dragons and Geoengineering: Rethinking Elemental Media." *Media+ Environment* 1, no. 1: 1–9.
- Guattari, Félix. 2008 [1989]. *The Three Ecologies*. Translated by Ian Pindar and Paul Sutton. London: Continuum.
- Harris, Anne. 2015. "Pyromena: Fire's Doing." In *Elemental Ecocriticism: Thinking with Earth, Air, Water, and Fire*, edited by Jeffrey Jerome Cohen and Lowell Duckert, 27–54. Minneapolis: Minnesota University Press.
- Horn, Eva. 2018. "Air as Medium." *Grey Room* 73, no. 3: 6–25.
- Jue, Melody. 2020. *Wild Blue Media. Thinking Through Seawater*. Durham: Duke University Press.
- Kotler, Steven, and Jamie Wheal. 2017. *Stealing Fire: How Silicon Valley, the Navy SEALs, and Maverick Scientists Are Revolutionizing the Way We Live and Work*. New York: Harper Collins.
- Macauley, David. 2010. *Elemental Philosophy: Earth, Air, Fire, and Water as Environmental Ideas*. Albany: State University of New York Press.
- McLuhan, Marshall. 1964. *Understanding Media: The Extension of Man*. London: Routledge.
- Neale, Timothy, and Alex Zahara. 2019. "An Eternal Flame: The Elemental Governance of Wildfire's Pasts, Presents and Futures." *Cultural Studies Review* 25, no. 2: 115–34.
- Parikka, Jussi. 2015. *A Geology of Media*. Minneapolis: University of Minnesota Press.

- Peters, John Durham. 2015. *The Marvelous Clouds: Toward a Philosophy of Elemental Media*. Chicago: University of Chicago Press.
- Pierce, Sarah. 2009. "The Archival Fourth Dimension." *Afterall* 23 November.
- Pisters, Patricia. 2022. "Combustive Knowledge: Fire as Medium and Interface." *Communication +1* 9, no. 1: 1–6. <https://scholarworks.umass.edu/cpo/vol9/iss1/5/>.
- . 2016. "The Filmmaker as Metallurgist: Political Cinema and World Memory." *Film-Philosophy* 20, no. 1: 149–67.
- Shaffer, Marshall. "Interview: Sara Dosa on *Fire of Love*, *Unrequited Love*, and *Indifferent Volcanoes*." <https://www.slantmagazine.com/film/sara-dosa-interview-fire-of-love/>.
- Starosielski, Nicole. 2021. *Media Hot & Cold*. Durham: Duke University Press.