5. The Digital Supernatural Media Virus and the Network Apocalypse in *Kairo* and *Pulse*

> "Do you have any idea of the amount of data that's floating out there? The amount of information we just beam into the air? We broadcast to everyone where we are and we think we're safe?"
> *Jim Sonzero, Pulse*

> "The infectious scenario is one wherein the body is besieged by a glut of information that threatens not only to overwhelm the immune system, but at the same time to transform the nature of what it means to be human. The virally infected and desecrated body thus becomes a metaphor for the fate of the human in the information age."
> *Stephen Dougherty, "The Biopolitics of the Killer Virus Novel"*

5.1 Media Anxiety in 21st Century Digital Gothic

Ghosts escape the realm of the dead and haunt the digital networks of the world of the living. Mysterious webcam feeds flood the Internet, displaying forlorn figures, some of whom commit suicide in front of the camera. Ghosts begin to materialize in the vicinity of cell phones and computers. Everybody who meets such a ghost has their will to live sucked from them: they eventually either kill themselves or simply dissolve into ash. What initially begins with a series of strange deaths and disappearances finally turns out to be a slow and quiet apocalypse.

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This is the story of *Kairo*, a Japanese film directed by Kiyoshi Kurosawa and released in 2001. *Kairo* received an American adaptation in 2006, directed by Jim Sonzero. Both films vary vastly in terms of aesthetics, storytelling, and even plot. *Pulse* transports the narrative into a university setting and most characters, including protagonist Mattie Webber, her boyfriend Josh Ockmann, and other friends, are young college students. The action is restricted to this confined setting, except for a few shots off campus which do not offer any real information on the location of the surrounding city. In comparison, *Kairo* is recognizably set in Tokyo; as in *Ringu*, the metropolis assumes a central function in the film. The city is the connecting point between the lives of the film's protagonists, who otherwise do not have much in common: Michi Kudo works at a plant shop; Ryosuke Kawashima is an economics student; Harue Karasawa is a computer specialist and lab assistant. The portrayal of the ghosts in each film also differs: *Kairo*'s spirits are barely discernible from humans in terms of appearance, whereas the ghosts in Sonzero's film are striking examples of computer-generated imagery (CGI), easily identifiable as monstrous and Other. The protagonists' motivations and intents are perhaps the most significant difference between these two films: *Kairo* provides a calm portrayal of the end of mankind, with the protagonists being onlookers struggling to survive. *Pulse*, conversely, presents the story as a race against time, infusing its protagonists with the will to save humanity from the growing infection – even though they fail in the end.

Despite all of these differences, the movies also have a lot in common. Most significantly, a depressing atmosphere already pervades both narratives before the supernatural media virus spreads: people appear detached from one another, going through the motions of their everyday lives without much passion. Furthermore, the films share digital media and their effects on society as the central theme. None of the narratives discussed in the previous chapters are grounded so firmly in the logic of digitality as *Kairo* and *Pulse*. The supernatural media virus exploits the key characteristics of digital media: connectivity, multiplicity, dynamic fluidity, and seeming omnipresence. As with *Ghostwatch*, these films portray media as a gateway to "the other

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side," a portal enabling spirits to haunt the living. However, it is not merely one ghost that intrudes upon the world of the living through one medium – a multitude of spirits invades this world, using every digitally connected device available to humankind. This dangerous confluence of the supernatural media virus with networked digital media lies at the heart of this chapter.

As in the previous chapter, this discussion takes Hutcheon's theory of adaptation as well as Felski's ANT-inspired approach to literature as its foundation. The analysis refrains from reading the films merely in terms of Japanese "original" and US "derivative." It is precisely their differences that make these narratives so valuable, revealing distinct perspectives on the network society, on digital media, and on how these aspects influence humankind. Therefore, this chapter moves repeatedly from one film to the other and back again, illuminating similarities and differences between these two texts, examining closely how the films portray the supernatural media virus and its intersection with its hosts, the network society, and viral vectors.

Both *Kairo* and *Pulse* are examples of the growing interest of Gothic fiction in digitality. Digital media and virtual spaces have become a popular means of telling Gothic stories in the 21st century, and they additionally provide the thematic focus of such narratives, giving rise to "digital Gothic" (Piatti-Farnell/Brien 2015: 2). As Lorna Piatti-Farnell and Donna Lee Brien write:

> In this liminal, digital space, technology – often in the form of the Internet and its cybernetic manifestations – acts as the connecting agent between perceived worlds and dimensions of existence, where identities become blurred and matters of life and death collide in the periphery of digital networks. (ibid)

The themes of such digital Gothic, as put forward by Piatti-Farnell and Brien, are only partially new; to a significant extent, digital technology instead offers a novel perspective on the centuries-old topics of Gothic fiction. In fact, the Gothic has always had a penchant for uncanny technologies. Today's technologies cast ghosts that are no longer revenants of the past, but rather messengers of the future: of how digitality, arti-

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ficial intelligence, and other technologies will affect human nature and society (Edwards 2015b: 6). Such ghosts give shape to the impression that humanity neither fully controls nor understands the technologies that it produces. Jackson regards these suspicions regarding the potential impact of digital media as a driving force behind 21st century horror:

> The situation of the mediatization of society in the horror genre suggests two things: (1) there is a collective suspicion that its impact may not be entirely positive, and (2) there may be hidden or repressed elements of our relation to media technology we have yet to reveal or figure out for ourselves. (2013: 6)

Technological potential surpasses the comprehension of these devices. Therefore, media comprise a dangerous connection to the unknown and the unexpected in such tales. Haunted digital media are imbued with agency and a will of their own in 21st century Gothic and horror.

In their introduction to *Digital Horror*, Linnie Blake and Xavier Aldana Reyes explicitly link the implications of digitality, as presented in horror, to surveillance and media violence. They define "digital horror" as "both an aesthetic and a narrative preoccupation":

> Digital horror [...] is more than vaguely connected to the digital techniques inherent to its production and the stylistics commanding its look. In fact, digital horror often exploits its own framing and stylistic devices to offer reflections on contemporary fears, especially those regarding digital technologies themselves. This makes for an exceptionally anxious cinema, preoccupied with the dangers of digital technology, specifically its proliferation of mediated images of real-world violence, its capacity to bring surveillance societies into being, its exposure of the user to the uninvited attentions of strangers 'from beyond' and its impact on human identity, which, being transient and mutable, is consistently counterpoised to the virtual immanence of the digital. (2016: 3)

All of the following anxieties are negotiated in *Kairo* and *Pulse*: how digital media not only allow us to connect to other people, but may also

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enable someone or something to stare back at us through our technologies; how humankind is changing for the worse, possibly even devolving under the influence of digitality; how digital technology erodes the borders between worlds. These movies critically question the belief that these media will inevitably improve and optimize all aspects of life – a trend which Evgeny Morozov terms technological "solutionism": "Silicon Valley's quest to fit us all into a digital straightjacket by promoting efficiency, transparency, certitude, and perfection – and, by extension, eliminating their evil twins of friction, opacity, ambiguity, and imperfection – will prove to be prohibitively expensive in the long run" (2013: xiii-xiv). The costs of such solutionist thinking are immense in *Kairo* and *Pulse*. In its attempt to improve every aspect of everyday life through digital technologies, it causes the disintegration of interpersonal relationships, human bodies, as well as society at large, and invites permanent surveillance.

Building on the virus metaphor's biological, social, and media-related connotations, the supernatural media virus evokes the disintegration of the human on all levels in both films: relationships fall apart; bodies are visibly affected until they finally dissolve into ashes; society crumbles, and the entire world is thrown into chaos as the networked systems it came to depend upon start to fail. It is the communication networks established by media technologies – the Internet first and foremost – that enables mankind's downfall. As Sprenger and Engemann write in their introduction to *Internet der Dinge* ("Internet of Things"), computing today has become "invisible, smart, miniaturized, spatially dispersed, and omnipresent" (2015: 7, my translation). Under these circumstances, a viral infection in such networked systems is inescapable. The terror of connectivity as well as the deep permeation of digital media and its consequences are already apparent in the titles of each of the films. In the anglophone context, the title of Kurosawa's film often is translated as "pulse." The Japanese term "kairo," however, bears multiple meanings, as Kurosawa explains in an interview:

> The literal translation of the original title *Kairo* would be "circuit" but in Japanese that would mean both an organic and an inorganic circuit,

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> whereas in English circuit tends to have a more inorganic nuance to it. So I was interested in getting a sense of life itself and the larger circuitry of life, that would include, of course, the beating of the heart and the pulse. (Alexander 2005: 33)

The Japanese title, therefore, deliberately plays with both the term's biological and technological connotations: circulation and circuitry. Kurosawa's film explores these trajectories through the theme of (dis-)connection. It becomes increasingly difficult to disentangle these diverse dimensions as biological bodies become infected by the supernatural media virus transmitted via digital devices. Thus, in *Kairo*, none of these (dis-)connections ever work exclusively on a technological, biological, or social trajectory.

As is apparent even in its title, the US adaptation concentrates more closely on the supernatural media virus' biological implications. Significantly, *Pulse* expands on the mininarration inscribed into the virus metaphor; this film adheres to the formula of the outbreak narrative from beginning to end, in terms of narrative structure as well as representational conventions. Victims affected by the virus already show strong bodily symptoms before they dissolve into nothingness. The infection's organic dimension is introduced as early as in the film's opening credits, which juxtapose images of diverse media technologies with interactive epidemiological maps displaying the growing spread of infection throughout the entire globe. These images suggest that digitally infected devices can dissolve both individual human bodies and societies at large.

These diverse portrayals of disconnection and disintegration are one of this chapter's focal points and are discussed in greater depth in the following subsection. I explore how the network society is changing the very essence of what it means to be human by building on Steen Christiansen's notion of the network subject and on Florian Sprenger's ontology of addressability. While each movie features disintegration on all levels – bodily, interpersonal, and social – they do so with different emphases. Kurosawa's narrative emphasizes the dissolution of the community. Set in a curiously deserted Tokyo, people are already ghost-

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like in their listlessness long before the supernatural media virus breaks loose. The virus amplifies and speeds up developments which seem to precede its existence and that are detrimental to both interpersonal relationships and the social body at large. The US adaptation, in contrast, foregrounds the bodily symptoms of infection with the supernatural media virus, thereby buying into the conventions of the outbreak narrative as described by Wald and Ostherr. In particular, the use of animated epidemiological maps in *Pulse* is revealing: these maps comprise a trope well-known from both factual and fictional tales about microbial infection.

I discuss the supernatural media virus' vectors in greater detail in this chapter's final section, using Neal Kirk's concept of networked spectrality as well as Ryan's analysis of digital media in particular as points of departure. Not only do the communication networks established by digital media affect human individuals and their interpersonal relationships, but they even transform the nature and appearance of the attacking ghosts, who bear characteristics of digital media in both films. To make matters worse, ubiquitous digital technologies allow these specters to appear anywhere and anytime, watching humanity's moves. Each film represents the danger of surveillance as enabled by digitality, expressing this fear on both the thematic and the aesthetic levels. In *Kairo* as well as *Pulse*, digital media not only allow human beings to come into contact with one another more easily, but they also allow somebody or something to look back at us through these technologies, all without our knowledge.

5.2 Disconnection, Disintegration, Disembodiment: The Human Individual in the Digitalized Network Society

Fragmentation and disconnection are central themes in both movies, and they are linked intricately to the conditions of the network society. In these texts, digital media erode the very essence of what it means to be human: communication media have had a severe impact on human identity, even before the supernatural media virus spreads through so-

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ciety. Both films conceive of the network society as endangering some of humanity's key values, most notably real-life relationships. The supernatural media virus merely tips the scales in this development, causing death and destruction. Each of these two films emphasizes the growing detachment's different causes and consequences, and they do so by means of varying discursive, aesthetic, and thematic strategies.

Any new technology or medium brings with it the suspicion that it might have a grave impact on human nature. As Jay David Bolter and Richard Grusin write, "we see ourselves today in and through our available media. [...] This is not to say that our identity is fully determined by media, but rather that we employ media as vehicles for defining both personal and cultural identity" (2000: 231). These available media affect the perception and, hence, understanding of ourselves and our surrounding world. Their impact even increased towards the end of the 20th century and alongside the emergence of ever more complex digital media:

> Where there was once the "real," there is now only the electronic generation and circulation of almost supernatural simulations. Where there was once stable human consciousness, there are now only the ghosts of fragmented, decentered, and increasingly schizophrenic subjectivities. (Sconce 2000: 170-1)

Kairo and *Pulse* portray these fragmented subjects and subjectivities; their nature and identity have been altered dramatically through media technologies. The presumed stability of human identity becomes unbalanced with digital media. The introduction of *networked* digital media significantly, reinforces and intensifies these tendencies. The result is what Christiansen terms the "network subject":

> As network technologies take on prominence, we find a transformation of contemporary subjectivity which challenges the sense of bodily unity we have often assumed we have. Instead, it becomes evident that our perception is distributed across network technologies rather than through a centred bodily perception. This distribution of sense

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> perceptions is what produces the network subject, a subject which is plural and heterogeneous. (2016: 42)

Everyday life is increasingly supported and shaped by technologies; the perception of the world and of human identity is structured around networked media as well.

The consequence is the generation of a new understanding of the self: "Network media create a subject who understands itself from without, through the perceptions of others, and regards this condition as a positive state" (ibid: 50). If this new type of subjectivity – the network subject – provokes detachment from a sense of bodily unity, then participation in the network presents a metaphorical disembodiment. The supernatural media virus induces these developments as a literal disembodiment in *Kairo* as well as *Pulse*: human beings and entire societies are fragmented to such an extent that they cease to exist.

One indication of this growing detachment is the listlessness of the characters in both films. People complete their everyday tasks with neither much joy nor reluctance. They are isolated from one another, unable to form deep connections. Digital technologies, the films suggest, have disconnected humans from one another instead of aiding their relationships. When the group of friends around *Pulse*'s protagonist Mattie spends an evening together at a dance club, they constantly have their cell phones in their hands. At some point, they even converse via text messages with each other – while sitting at the same table. Not only does this scene stress the apparent decrease of face-to-face communication – Mattie complains during the conversation that her relationship with her boyfriend "has been reduced to text messaging" (*Pulse* 2006) – but it also creates an uncanny doubling. Each and every member of the group is both a real and a virtual presence, communicating verbally as well as digitally. This scene plays with one of the most common conceptions regarding the network society, namely the idea that virtual communities will replace real communities at some point, thereby drawing people increasingly into the digital realm (van Dijk 2012: 46-47). Computers and mobile phones are repeatedly accused of depleting human relationships and of causing escapism from reality. Lives are structured

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increasingly around communication devices so that they themselves become distributed, plural, and virtual presences, as the everyday lives of people such as Mattie shows.

The virtual existence of human beings and the centrality of networked technologies to their lives are shaped by what Sprenger calls the "ontology of addressability" (2019: 89). He claims that the Internet of Things, equipped with means such as Radio Frequency Identification (RFID),[1] cellular triangulation, and other networked tracking technologies, introduces a new kind of ontology in which only those things that are part of a network exist:

> [E]xistence equals addressability. [...] [T]he position of every object is constantly registered and objects that do not have an address do not exist. The solution implemented in such technologies is to make objects relay their movement and to transform this information into a network in which the position of every object is constantly traced and tracked. Such networks, for which the surrounding cellular networks with their advanced addressing system are the dominant example, consist of relations between objects, whose position and movement are registered, rather than of coordinates in geographical space. (ibid: 79)

Sprenger's "ontology of addressability" implies not only the observation of the spatial position of objects, but also their temporal tracking. Features such as the route guidance system provided by Google Maps exemplify how closely space and time are tied to one another: by continuously tracking the spatial relation between units, their progression over time can be determined. Significantly, anybody wishing to use such services can only do so if they allow their own devices to be identified and tracked as well.

1 RFID chips, which can be as small as a grain of rice and as thin as a sheet of paper, are attached to most wares nowadays, making it possible to identify and track these objects. Many countries also equip passports and ID cards with such chips.

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While obviously hyperbolic, Sprenger's claim is nonetheless a recurring thought in theories about networks and the network society. It expresses the supposed importance of connectivity and networking, where any object's existence is defined predominantly in terms of its participation in a network. The ontology of addressability resembles van Dijk's law of network articulation, according to which the relations between objects within a network become increasingly important (2012: 37-38). Similarly, the ontology resonates with Castells' claims that "no place exists by itself, since the positions are defined by the exchanges of flows in the network. [...] [P]laces do not disappear, but their logic and meaning become absorbed in the network" (2010b: 442-443). In the era of the network society, the pressure to participate in these networks increases significantly. This pressure proves to be fatal in both *Kairo* and *Pulse*.

It is fruitful to read the ontology of addressability as a "hauntology", in the sense intended by Jacques Derrida, in relation to these two films. A French pun on "ontology," Derrida's concept of hauntology describes an ontological and historical disjunction. The concept is founded on Derrida's previous work on the deconstructive method; he advances "hauntology" in *Specters of Marx*, in which he discusses Karl Marx and Friedrich Engels' *The Communist Manifesto*. Derrida begins his analysis with a quote from Shakespeare's *Hamlet* – "The time is out of joint" (Shakespeare qtd. in Derrida 2006 [1993]: xxi). The figure of the ghost acts as a central element in his argument. It is its resistance to temporal linearity that makes the specter so significant: "A question of repetition: a specter is always a *revenant*. One cannot control its comings and goings because it *begins by coming back*" (Derrida 2006 [1993]: 11, original emphases). The ghost represents an intrusion of the past into the present, and it simultaneously inhabits a state of being and nonbeing. As such, Derrida's specters have the potential to deconstruct the ontology of addressability: they challenge the assumed stability of temporal progression, destabilize the distinction between past, present, and future, and disrupt the possibility of temporal and spatial tracing.

Derrida's hauntology has been discussed extensively in the field of Gothic studies. One example of this is Isabella van Elferen's concept of

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"sonic Gothic," which is built upon four dimensions of sound and music in Gothic: spectrality, hauntology, hauntography, and transgression (2014: 429). Van Elferen examines not only the sonic elements in audiovisual media, such as film or television, but also emphasizes the centrality of sound to other media: most literary instances of the Gothic feature creaking doors, howling winds, and similar unsettling noises. Novels such as Jackson's *The Haunting of Hill House* or Danielewski's *House of Leaves* even feature uncanny noises, whose source cannot be located and which cannot be heard by everyone. In such cases, embodiment becomes a central dimension of sonic Gothic: "disembodied sound renders audible the temporal dislodgement that is inherent to spectrality: it unlocks present sound from past origin, leaving that origin unheard, unsignified, non-existent" (van Elferen: 430).[2] Disembodied sound unsettles the linear, temporal progression of cause and effect, given that it does not have any origin from which sonic waves travel.

Kairo disrupts the uncanny relation between traceable technology and embodiment of the network subject through its cunning, hauntological use of sound. Kurosawa utilizes acousmatic voices and technology-related noises to a degree that is extreme (Brown 2018: 29; Schmitz 2020b: 347). The term "acousmatic" refers to sounds that can be heard without seeing their cause or source (Chion 1994 [1990]: 71). Common examples of acousmatic sounds in *Kairo* include phone calls in which the interlocutor remains unseen and in which only their electronically filtered, heavily distorted voice can be heard. Here, technology in the form of cell phones creates disembodiment by conveying voices over large distances, albeit in an altered form. The technologically distorted sound conveys an ambivalent perspective on placement and embodiment, tying these uncanny impressions directly to communication technology.

The sonic hauntology of addressability comes to the fore in *Kairo*, particularly through the use of acousmatic voices whose diegetic status remains unclear. As van Elferen explains, noises that apparently lack a specific physical origin are key elements of sonic Gothic (2014: 430).

2 For more information on the use of sound and music in Gothic, consult van Elferen (2012).

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Examples of these types of acousmatic voices in *Kairo* are the repeated cries for help ("*tasukete*") audible throughout the film – it is never revealed whether these cries stem from ghosts or the living. Uncannily, it is not only their origin, but also the diegetic status of these voices that remains unclear; it is impossible to determine whether the film's characters can hear these cries as well, or whether they belong to the extradiegetic level. When watched on a 5.1 surround audio system, these disembodied whispers at points move through the audio channels (Brown 2018: 46-7). As a result, the visual is detached from the auditive: the movement of sound does not correspond to what is seen on screen.

In contrast to *Kairo*'s sonic features, *Pulse* portrays spectrality and the hauntological aspect of addressability visually. The film's undead flicker into and out of existence, appearing to be in multiple places at the same time (see Fig. 5.1). The spirits are "technoghosts" as defined by Kevin J. Wetmore:

> Technoghosts are spirits that display the physical properties of electronic or technical media, in other words, their physical appearance involves static, appearing blurry, featuring interference, as if they are being broadcast, rather than haunting, and whose manifestation is both made possible by technology and mediated through it. (2009: 73)

It is impossible to trace or track these ghosts: no progression or linear movement can be established between their flickering appearances. They can exist in multiple places at the same time and disappear entirely within the blink of an eye. If their unique position and movement cannot be registered, then these technoghosts also deny the possibility of establishing relations between the objects on the net. Through this process, the ontology of addressability becomes a hauntology.

The issue of (dis-)connection in *Kairo* and *Pulse* resonates with this hauntology of addressability. Not only do the ghosts haunt the ideal of addressability, but they also force the few human survivors to evade addressability by dropping off the network. The only possibility of escaping the supernatural media virus is by fleeing to a "dead zone" without any digital devices – pun intended. Worrisomely, from the vantage

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Fig. 5.1 One (techno-)ghost occupying multiple locations simultaneously

Source: *Pulse* (2006)

point of the network society and digitality, "existence equals addressability" (Sprenger 2019: 79). Thus, regardless of whether they are killed by ghosts or move to a dead zone: metaphorically, humanity ceases to exist. While there may be human survivors, technological progression comes to a complete halt.

Christiansen's concept of the network subject as well as Sprenger's notion of the ontology of addressability express the centrality of networks and the importance of connectivity. *Kairo* and *Pulse* voice anxieties regarding this network paradigm: how the diverse networks surrounding us today at all times – communication networks, transport networks, media networks, financial networks, and so on – affect what it means to be human. Digital connectivity leads to social and/or bodily disintegration in both films. This developing disconnection already sets in before the ghosts invade the network society; the supernatural media virus amplifies and exploits a trend that predate its existence.

Kairo foregrounds the fragmentation of the community as the direct result of modernity and digital media technologies. Similar to *Ringu*, Kurosawa's film displays the loss of Japanese traditions and communal duties. The key issue portrayed in the movie is the failure of people

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to connect with one another; instead of forming strong, interpersonal bonds in real life, the characters of the film seek solace in their virtual lives. Posadas claims that encountering the spectral invaders in *Kairo* evokes "extreme ennui" (2014: 431); in truth, however, lethargy is an omnipresent, constant state well before the ghosts appear.

This alienation is ingrained in Kurosawa's portrayal of the network society in general, and of the metropolis of Tokyo in particular. As is the case with *Ring*, the metropolis serves a central function in the film: it is a tangible representation of the network society. However, whereas *Ring*'s and *Ringu*'s Tokyo is bustling and hectic, *Kairo*'s setting is eerily lifeless. The first scenes of the movie display a city that is remarkably empty and uncannily artificial. Michi works on a rooftop in Tokyo, overseeing the vastness of the metropolis. Ironically, it is on this rooftop of a modern high-rise building that a plant shop has been established. According to Wee, "*Kairo* shows an urban environment in which nature has been contained and diminished, hinting at an already existing disconnection and distance from the natural" (2014: 158). As the film progresses, shots of nature and plants become increasingly rare, thereby emphasizing the artificiality of the network society. Alienation is the inevitable consequence as network technology increasingly permeates society, creating an artificial environment in place of a real one. This sense of isolation – both from nature and from people – is transported visually through the portrayal of the metropolis:

> *Kairo*'s Tokyo differs from more stereotypical depictions of the city as a busy, teeming, overcrowded metropolis, bustling with energy and direction. Instead, Tokyo is predominantly represented by dark, dingy, empty spaces and abandoned industrial factories and buildings, and most of the film is dominated by stark images of solitude and loneliness. (ibid)[3]

3 Brown regards such "aesthetics of architectural decay" as typical of Kurosawa's work (2018: 49). As he claims, such depictions of the city "may serve as spatial metaphors for the decaying state of Japanese modernity following the collapse of the bubble economy, evoking double-edged connotations in the form of both a nostalgia for the past and an ambivalence over what has taken its place" (ibid).

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Fig. 5.2 Michi alone on the bus

Source: *Kairo* (2001)

Fig. 5.3 Michi, getting off the bus, is almost indiscernible

Source: *Kairo* (2001)

These portrayals of the metropolis and its inhabitants stylistically convey the isolation and alienation created by, and experienced within, the network society. *Kairo* makes extensive use of the "detached style" oftentimes found in Japanese horror cinema:

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Fig. 5.4 Geometrical patterns dominate Kurosawa's detached style

Source: *Kairo* (2001)

> It is a style that understates the dramatic, refrains from explanation, refuses to psychologize, and in general makes the viewer work hard to understand what is going on. [...] In addition, the detached style is defined in part through its rejection of the styles of dominant cinema and television, styles that take narrative clarity as their priority and thus make an extra effort to explain what is going on – even to the point of letting the audience know what the characters are thinking and feeling when that is narratively important. The detached style rejects the emphasis on explanation and thus creates a world that is, on the one hand, more opaque and uncertain and, on the other, populated with people who gain a certain freedom from their detachment from others. (Gerow 2002: 6)

The detached style does not direct the viewer's gaze in order to enforce a predetermined interpretation, something recognizable through its utilization of long shots, long takes, and obscure perspectives (Posadas 2014: 453-454). Indeed, as is visible in Fig. 5.2-5.4, *Kairo*'s shots are often unbalanced; the audience has to view these images carefully in order to identify their central features and to decode the goings-on. In this way,

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the film's visual style expresses the detachment and listlessness of the characters: "Kurosawa places his characters in small rooms, isolated in space and in the frame. The characters are always isolated, and though they fear being alone, they also seek it out, withdrawing socially until they become ash" (Wetmore, Jr. 2009: 74). Perhaps the most striking aspect of *Kairo* is its calm, drab atmosphere, in which the events are neither sufficiently explained nor resolved. The apocalypse in the movie is empty in that it is a growing nothingness, rather than a fulminant explosion. More importantly, the end of the world has already begun before the infection – the ghostly invasion merely seems to be the final nail in mankind's coffin.

The inability to form deep bonds with other human beings is an omnipresent issue throughout the film. Two conversations foreground this struggle particularly strongly. The first takes place early on in the film, shortly after Michi Kudo's coworker commits suicide. Michi and her remaining two colleagues process the events together during their lunch break. They appear detached and numb throughout the entire conversation. While it may be the case that they are just in shock, it seems as if this kind of detachment is more indicative of their everyday life, rather than a state brought about by grief. At the end of the conversation, Toshio Yabe claims that he has contemplated suicide several times already:

> Junko: "He never said anything, so what could we have done?"
> Toshio: "Maybe…he suddenly just wanted to die. I get that way sometimes. It's so easy to hang yourself." (*Kairo* 2001)

None of the other two characters react to Toshio's shocking statement – as if they had not heard him at all. Presumably, they all simply go back to their work after their break is over.

The second conversation takes place between computer science student Harue Karasawa and Ryosuke Kawashima. By this point of the narrative, the supernatural media virus has already taken a firm hold on society. Harue visits Ryosuke in his apartment to help him to identify a viral website targeting his computer – the mysterious webcam feed

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induced by the virus. While doing so, she inquires after his interest in the World Wide Web:

> Harue: "What got you started on the Internet?"
> Ryosuke: "Nothing in particular..."
> Harue: "You don't like computers, right?
> Ryosuke: "No."
> Harue: "Wanted to connect with other people?"
> Ryosuke: "Maybe...I don't know. Everybody else is into it."
> Harue: "People don't really connect, you know."
> [...]
> Harue: "We all live totally separately." (ibid)

Throughout this entire conversation, the two characters do not look at each other directly. Ryosuke roams about his apartment, cleaning away some personal items, and talks to Harue with his back to her. Furthermore, this dialogue also reveals a frightening lack of motivation: Ryosuke invested time and money to acquire the equipment necessary to set up the connection – yet, he can only explain his reasons for going to these lengths with the words "[e]verybody else is into it." His wish to become part of the virtual world is due to a form of peer pressure, as described by van Dijk's law of network externality: the more people are using the Internet, the more others are likely to join in (2012: 38). Thus, connecting to the Internet is not motivated by Ryosuke's own interests, but rather by his copying of other people's actions. This wish to partake in the virtual community ultimately turns out to be deadly.[4]

Both conversations feature characters that drift through their everyday lives, lacking any inherent drive and who are incapable of forming deep friendships. The Internet appears to be the solution to this lack, offering the possibility of building up relationships and of fighting off

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4 Elsewhere, I discuss *Kairo*'s fatal media trends by using the concept of the "contagious narrative" – stories, beliefs, and even jokes that spread virally and which affect the decisions we make as human beings. For more detail, see Schmitz (2020b).

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ennui. This, however, proves to be a false hope in *Kairo*. Instead of filling up the emptiness and melancholy of people such as Ryosuke, the Internet lets loose a deadly infection, only deepening their lethargy. It is almost impossible to distinguish the ghostlike living from the dead in *Kairo*.

The network society's digital technologies and conditions induce this ghostliness in the film. In this regard, *Kairo*'s supernatural media virus resonates with growing fears regarding such media, the Internet and its effect on human interaction in particular. Crawford reads the film's infection as "a literalised metaphor for the anxieties which have beset the users of online communication since its popularisation in the late 1990s" (Crawford 2019: 77). Ghosts and Internet users are interchangeable and indistinguishable in the film: alienated, isolated, (self-)destructive. Wetmore reads *Kairo* in the light of *hikikomori*, a concept coined by the Japanese psychologist Saitō Tamaki and describing the phenomenon of growing disconnection between people and their withdrawal from society:

> Those who suffer from *hikikomori* are, more often than not, young, middle class, and heavily involved in electronic media […]. The shrinking economy and rapidly changing society causes [sic] these individuals to withdraw from society, seeing no future for themselves. Locked away in their homes, communicating only through electronic means, these individuals become the ghosts on the screens in Kurosawa's film. (2009: 75)

Alluding to *hikikomori*, *Kairo* portrays virus hosts that fall into numb inactivity. In contrast to *House of Leaves* and *Ring*, the infected in Kurosawa's film neither facilitate nor halt the spread of the supernatural media virus. As more people connect to the Internet – many of whom possibly do it for the same peer pressure as Ryosuke – the virus can travel through these myriads of links. At this point, the infection does not depend on the behavior of its hosts for further dissemination, given that the channels through which it spreads have already been implemented.

The full degree of disconnection becomes apparent when comparing *Kairo*'s ghosts to that of more traditional *kaidan*. As Colette Balmain

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explains, debts or responsibilities to other people are a central theme in the conception of ghosts and haunting:

> [O]bligations do not end with death but continue afterwards, both in terms of people who have died without fulfilling their obligations or paying their debt, and those left behind who have an obligation to the departed. For the Japanese, the world of the living and the world of the dead are therefore intimately bound together. (2008: 48)

The traditional *kaidan* centers on the guilt of individuals and on how they provoke the haunting by vengeful spirits through their neglect of their social obligations. Haunting tends to be a private thing: ghosts visit the living in their own homes. More recent tales, such as *Ring*, have broadened this scope and focused on a guilty community: Sadako was not only failed by specific individuals, but by an entire society enabling certain types of abuse. This is why her viral curse haunts society at large. Nonetheless, Sadako is an individualized ghost, one that bears a discoverable backstory and a recognizable human identity. Retaining a sense of private haunting, victims of the curse in *Ring* oftentimes find their death in their supposedly safe homes. *Kairo*, in contrast, no longer features this type of individualized spirit, decodable backstory, and private haunting: these ghosts do not possess distinguished personalities and they frequently appear in public spaces. Their motivation for invading the world of the living is not tied to neglect, but has a far simpler reason, as an acquaintance of Harue explains to Ryosuke: their realm is full and overflowing (*Kairo* 2001). Even the connection established through communal responsibilities between the living and the dead has been torn apart. Human beings not only fail to connect with one another – they cannot even connect to their own ghosts anymore.

The narrative structure of *Kairo* conveys the theme of disconnection as well. Its storytelling resists being conceived of in terms of cause and effect. Instead, *Kairo* is a network fiction as described by Mousoutzanis (2014: 95, 223) and Bordwell (2006: 100), mirroring its thematic preoccupation with connectivity through its storytelling structure. Kurosawa's film consists of two disparate narrative strands that are only drawn together during the final third of the story: the first strand focuses on

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Michi Kudo, working at a rooftop plant shop in Tokyo, whereas the second storyline centers on Ryosuke Kawashima. For most of the movie, how and whether these two stories belong together remains unclear. Through this ambiguity, the film builds upon one of the most important strengths of the network as a narrative form: it rejects the rule of causality, instead concentrating on the links between individuals, events, and experiences. Only two aspects connect the narratives of Michi and Ryosuke: first, they both reside in Tokyo. This metropolis functions as a figuration of the network society in the film. Second, both are confronted with the infection that is creeping through that network. Michi and Ryosuke are constantly on the move, traveling through Tokyo in search of their friends. When they finally meet in a chance encounter, they flee the city and seek refuge on a large boat. Instead of presenting goal-oriented characters working together to stop the apocalypse, the film is a portrait of two previously unrelated metropolitans that only become connected once they are both affected by the crisis.

Disconnection in Kurosawa's film is predominantly communicated through its portrayal of Tokyo, the relationship between humans, ghosts, and nature, and the narrative structure in the film. However, *Kairo* does not restrict itself to immaterial aspects of disconnection, but also portrays the physical effects of the supernatural media virus. A case in point is the disintegration of infected biological bodies into black stains on walls.[5] Another example is the red construction tape, with which survivors establish safe zones into which ghosts cannot intrude. While it is never explained why this tape prevents ghosts from entering a room or how knowledge of this safety measure spreads, people throughout Tokyo begin to seal up their homes and rooms using it. The red tape is a feeble attempt to fortify the breached boundaries between

5 Several scholars interpret these black stains as a reminder of the nuclear warfare and the cultural influence of the atomic bomb in Japan: "the black stain […] evokes the trauma of the atomic bombs dropped on Hiroshima and Nagasaki and the intense thermal rays that literally burnt human shadows into stone, which could clearly be seen for ten years after the explosions" (Brown 2018: 47). Likewise, Wee refers to these human shadows as "images that explicitly recall (other cinematic) images of nuclear devastation" (2014: 167).

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realms. While the supernatural media virus exploits the immateriality of the information highway to spread throughout the physical world of the living, the ghostly invaders are uncannily tangible. In a moment that seals his fate, Ryosuke is forced to realize that these spirits *can* be touched. They have a corporeal body, infecting humans with the virus through mere touch. Furthermore, warnings of a "Forbidden Room" appear throughout the city, never clarifying whether this is a physical place or the virtual Internet chat room featuring the webcam feeds. Through such aspects, the film destabilizes the notions of materiality and spatiality.

In comparison, *Pulse* dwells much more heavily on the bodily disintegration of the victims infected with the supernatural media virus. While social disintegration is an important element of the US adaptation as well, the narrative pays much more attention to the messy desecration of the biological body. In Sonzero's movie, the viral infection is easily spotted, and healthy people can be differentiated clearly from affected carriers. Those who encounter ghosts bear visible symptoms of the infection, as the veins on their skin turn an inky black (see Fig. 5.5 and 5.6).

Fig. 5.5 The supernatural media virus leaves visible traces…

Source: *Pulse* (2006)

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Fig. 5.6 ...turning the skin of its victims an inky black color

Source: *Pulse* (2006)

Close-ups dwell on the debasement of their skin. Where *Kairo*'s style favors understatement, obscure perspectives and long, calm takes, *Pulse* employs graphic and visceral images to express the dramatic intrusion of the supernatural media virus. Fusing the technological with the biological, the digital supernatural media virus attacks one of the most vital networks of the human body: its blood vessels. The symptoms evoked are reminiscent of those of severe diseases such as the bubonic plague: chills, feverish sweating; severe pain; blackened skin resembling gangrene. In the film, these symptoms are absolute proof of fatal illness. In line with Dougherty's observations, *Pulse* focuses viscerally on "the loathsome disintegration of the organic body beset by infection" (2001: 4). Today's technologies offer a new perspective on the biological aspects of bodies and microbes alike:

> By focusing so obscenely on the materiality of the flesh and the blood, by lingering so perversely over the human experience of pain and suffering, and by insisting so unrelentingly on the reality of its embodiment, the killer virus novel promotes the organic frame of reference. But as soon as the virus arrives on the scene, it induces a perspectival shift that threatens to dissipate the organic frame and to force the reader instead to consider the body in the manner of cyberpunk: as a postorganic (postmetaphysical, posthuman) entity whose being is merely a function of the fetishized code. [...] The infectious scenario is

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> one wherein the body is besieged by a glut of information that threatens not only to overwhelm the immune system, but at the same time to transform the nature of what it means to be human. The virally infected and desecrated body thus becomes a metaphor for the fate of the human in the information age. (ibid: 10)

Significantly, in these narratives the body as "a function of the fetishized code" is not merely a metaphor: first and foremost, *Kairo*'s/*Pulse*'s supernatural media virus is a computer virus that can kill biological bodies. The deaths of Mattie's friends Izzie and Stone, whose infection with the virus is clearly visible, are examples of the horrifying (no-)thingness of the human body in the digital information age. One moment, Izzie is standing in Mattie's apartment; the next moment, she explodes in a cloud of ashen pieces, nothing but a chaotic flurry of bits that could have previously been assembled into one coherent body. Stone, in comparison, slowly merges with the wall that he is standing in front of. It becomes impossible to delineate his biological body from the artificial structure of the wall. In the end, there is nothing left but a dark stain.

Pulse closely adheres to the conventions of Dougherty's killer virus novel and Wald's outbreak narrative. The narrative structure of the film follows the formula, beginning with the identification of the goings-on as a diseaselike outbreak, followed by the presentation of the digital networks and social habits that enable the extremely fast spread of the supernatural media virus. The visceral depictions of how the supernatural media virus not only infects a person's mind, but also desecrates the integrity of their biological bodies is a significant part of these conventions. Enacting the third step of the formula, Mattie attempts to contain the epidemic with the help of the computer expert Dex. As true epidemiologists, they create a counteragent against the infection in the form of another computer virus. However, the antivirus is ineffective, and the two can only flee to save their own lives.

The film's opening credits play with the conventions of the outbreak narrative as well. The film's first few minutes consist of the visual juxtaposition of shots of digital technologies – cell phones, computer

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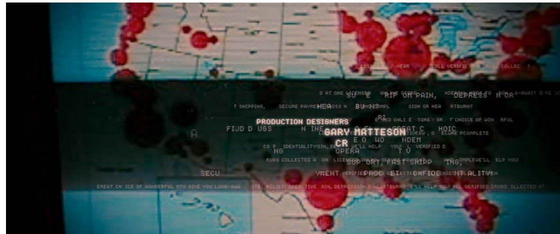
screens, chat rooms – with shots of animated epidemiological maps (see Fig. 5.7-5.9).

Fig. 5.7 The opening credits of "Pulse" juxtapose images...

Source: *Pulse* (2006)

Fig. 5.8 ...of animated epidemiological maps...



Source: *Pulse* (2006)

Since the second half of the 20th century, such maps have become a recognizable convention in cinematic representations of disease (Osterr 2005: 127). They perform a sleight of hand in order to visualize the invisible:

> On animated maps of the global spread of disease [...], the actual contaminant (whether bacterium or virus) remains invisible. What is made visible is not an indexical image of invisible contagions but,

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Fig. 5.9 ...and diverse digital technologies

Source: *Pulse* (2006)

> rather, a socially legible – albeit entirely artificial – collapse of the invisible onto alternate forms of representing disease. (ibid: 129)

Epidemiological maps represent the disease by focusing on infected bodies and regions. In this way, they suggest that the threat can be neutralized by tracing an outbreak and identifying unsanitary danger zones – an outbreak's "hotspots." According to Ostherr, this delimitation of sanitary and unsanitary zones is a central function of epidemiological maps. It is through the visual charting of the infected on a geographic representation that disease-ridden areas can be identified (ibid: 123). Usually, such a delineation is achieved through what Wald refers to as "thirdworldification" (2008: 45). Unsanitary zones are represented as primitive, poor, and predominantly nonwhite, whereas sanitary areas appear as modern, rich, civilized, and predominantly white (ibid; Ostherr 2005: 129). These principles are turned around in *Pulse*. Highly technologized and modernized areas are the first to succumb to the supernatural media virus, whereas so-called dead zones – areas in which signal transmission is impossible – are now safe, sanitary regions. The consequence: "Safety is bound to a technological regress, in which survivors can no longer depend on long-distance calls, but instead have to revert back to mouth-to-mouth communication" (Schmitz 2020a: 205). If they wish to survive the virus, humans need to escape the comforts of digital networks.

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The film's setting reflects the contagiousness of its unsanitary areas. Playing with the idea of biological infection, numerous scenes take place in dirty rooms and run-down buildings that look alarmingly unhygienic. As in *Kairo*, however, the sense of materiality and spatiality conveyed through these images is misleading. Visible, tangible dirt is not the true danger in *Pulse* – instead, it is the invisible contaminants floating through the digital information highway that endanger humanity. For the most part, *Pulse* is set on an unidentified university campus. This choice of location bears significance: first, it is a reminder of the initial development of the Internet, in which universities played a significant role. It is from this symbolic birthplace of the Internet that the supernatural media virus begins to spread, ultimately bringing the ideal of connectivity and digitality to an end.

Second, the campus is equipped with complex technological devices and the media-trained people to operate them. Reckless people such as Mattie's boyfriend, Josh, are responsible for setting off the fatal infection. Prior to his death, he had hacked into Ziegler's computer, thereby accidentally spreading the virus which Ziegler had been attempting to contain on his system. In *Pulse*, irresponsible individuals such as Josh, who unknowingly took an active role in facilitating the virus' spread, can cause the breakdown of the entire network society. While it cannot be said that the virus' hosts in *Pulse* are more active than those in *Kairo* – as in the Japanese film, the infected in Sonzero's movie fall into deep lethargy – the US version assigns a significant role to reckless behavior for letting the supernatural media virus loose in the first place. The 2006 film engages in what may be called "hacker demonization" (Parikka 2016: 147): some people may engage in hacking for fun; others do so because they cannot help themselves, and yet another set of people simply wish to harm the system through digital vandalism. In all cases, hackers like Josh pose a great danger to the functioning system. As early as the 1960s, hacker culture emerged at universities such as MIT (ibid: 145-146). The university campus becomes a symbol of this irresponsible hacker culture.

Third, by not specifying where this campus is set exactly, Sonzero's narrative becomes a fictional portrait of both Sprenger's ontology of

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addressability and the small world phenomenon: it is not their absolute geographic location, but rather the relative position of objects to each other within the same network that is of relevance. *Kairo* dwells on the decline of a recognizable metropolis, namely Tokyo. In contrast, *Pulse* foregrounds the fact that geographic positions become irrelevant in times of networked technologies. It does not matter whether the university is located in a large metropolis or in a rural area. With its advanced equipment and technologically apt students and staff, a campus will always be a large hub with a multitude of strong ties within the network.

By identifying safe and unsafe areas, epidemiological maps suggest that the disease can be contained and eventually neutralized. However, they are also a frightening reminder of the infection's spread:

> Maps of geographical areas, often dotted with pins or, in films, with colored lights, represent epidemiological work in progress […]. These maps evoke both fear and reassurance. Dots or lines signal a spreading infection, often following the routes of trains, planes, buses, cars, and trucks as they transport carriers and their viruses rapidly around the globe. But the maps also help the epidemiologists solve the puzzle of the disease and thus represent evidence of experts on the case, a materialization of the epidemiological work that generally gets the threat under control. (Wald 2008: 37)

On the one hand, epidemiological maps establish expertise and suggest that the outbreak can be contained eventually; on the other hand, they also visualize how quickly and how far the infection already has spread. Such attempts at medical cartography, according to Ostherr, always implicitly carry a dismal truth: "the impossibility of ascertaining the precise location of the virus until after the fact" (2005: 1). The existence of the epidemiological map itself confirms that the outbreak is already in full swing.

By depicting such animated epidemiological maps in its opening credits, *Pulse* not only positions itself within the tradition of the outbreak narrative and foreshadows the eventual scope of the infection, but also suggests that the struggle against the ghostly infection is already

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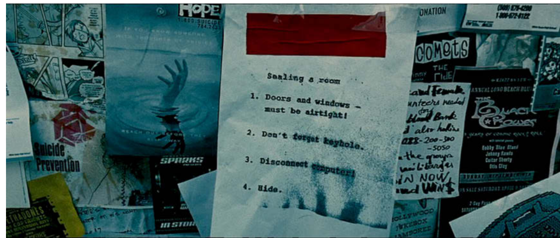
lost at this point in the narrative (Schmitz 2020a: 205). This is further emphasized by the underlying paradox of these maps: such complex animated epidemiological charts can only be created using the same digital, networked technologies that facilitate the spread of the supernatural media virus (ibid). Humanity, it appears, has become so dependent upon technology that, even when faced with the deadly dangers of these devices, it cannot do without digital media. Leaflets are passed around on campus, giving details on how to avoid being infected, first explaining how to seal off a physical room using red tape, and only afterwards advising people to disconnect any computers (see Fig. 5.10).

Fig. 5.10 Leaflet with safety instructions



Source: *Pulse* (2006)

Ironically, these flyers were obviously printed using a computer. Thus, even though it is established knowledge that digital devices are a gateway for the infection at this point, they are the last thing to be discarded in an attempt to counteract the growing spread in spite of this. The animated epidemiological maps are a visual reminder of this deadly dependency. For humanity, it has become impossible to grasp the goings-on without networked technology; yet this is the very same technology that seals its fate.

The desire to map and thereby visually trace the progression of a microbe adheres to the obsession with permanently monitoring objects, as dictated by the ontology of addressability. In addition to epidemio-

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logical charts, diverse types of maps are a recurring feature throughout *Pulse*. A news report on television covering the "suicide epidemic" is broadcast along with a map of Ohio (*Pulse* 2006); when Dex tracks down Ziegler's location, a street map displaying the route to his apartment is shown on Dex's screen (ibid). Viewers are repeatedly reminded that knowing the exact location of people, objects, and events is key to survival. However, this belief eventually proves to be misleading. While these maps underline the drama and scale of the apocalypse visually, they do not truly aid attempts to contain the supernatural media virus.

Kairo and *Pulse* both dwell on the network society's impact on human nature and identity, negotiating the nature and scope of the influence that the network might have on the individual person. Human beings are transformed into network subjects and are subsumed under the ontology of addressability. Kurosawa's narrative represents the supernatural media virus as an amplification of developments predating its existence. Similar to *House of Leaves*, *Pulse* conceives of the virus as an accident inherent to the network in the sense meant by Virilio (1993: 212): at the very moment of their inception, digital network technologies also brought with them the threat of a virus exploiting their capabilities.

5.3 Permanent Surveillance and Networked Ghosts: Digital Media as Viral Vectors

One of the most notable aspects of Sonzero's *Pulse* is the omnipresence of communication media throughout the film. Almost every shot features some sort of digital device – cell phones, computers, PDAs, and so on. Mattie might not be capable of advanced hacking, as Dex is, but the handling of these devices for their daily needs is natural to her and her friends; these digital technologies have become an extension of their biological bodies. Viewers cannot doubt even for a second that this is a world in which technology has become part and parcel of everyday life. *Kairo*, in contrast, displays a world in which such media have not yet reached their full potential. Ryosuke is everything but a tech-savvy

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protagonist. Not only does he depend on Harue to solve his computer issues for him, but even the usage of the computer keyboard appears to pose great difficulty for him. Nevertheless, the growing popularity of cell phones and Internet devices is already apparent here, indicating how digital media are about to change society and human identity drastically.

The main problem is that the pervasion of digital media throughout society – and the capacity and extent to which they are used – far outstrips the understanding of the technology. Again, Ryosuke's struggles with his computer are a strong indication: he wishes to use such devices, yet he can barely set up his systems by himself, let alone solve the problems that arise therefrom. In *Pulse*, this discrepancy between knowledge about and availability of technology is dramatically underlined when Ziegler explains the project that enabled the supernatural media virus to enter the world of the living:

> It was a telecom project! It was my baby. It was super-wide band. We found frequencies that we didn't even know existed, and they came through. [...] We didn't know what it was at first. We thought it was like a radio wave interference. Then, we realized that there was a pattern to it. Every time that we'd try to monitor them, they would stop, or they would change frequencies. I mean, they were smart. They were reacting to us, and then...we started seeing things around the lab. (*Pulse* 2006)

It is the desire for better and faster telecommunication that attracts the ghostly invaders. Neither Ziegler nor the technicians working with him truly comprehended their technology's full potential, nor were they able to identify the virus in a timely manner. Their only aim is to provide better, faster, and more efficient connectivity at all costs. Thus, they are outsmarted by the "super-wide band" project – or, more precisely, by what lurks within. Ziegler's concession is applicable to technology interaction throughout the film: everybody uses their cell phones and computers – even when it is known that these devices can have fatal influences – without understanding their full potential. Accordingly, *Pulse* closes with a voice-over by Mattie. She calmly states, as their car

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can be seen driving through the apocalyptic world, that: "We can never go back. The cities are theirs. Our lives are different now. What was meant to connect us to one another instead connected us to forces that we could have never imagined" (ibid).

It is precisely the supposed advantages of these communication technologies that the supernatural media virus exploits. Ryan discusses the qualities of digital networks, examining the intersection of digitality and narrativity. She claims that digital media can be delineated by means of five sets of properties: First, their reactivity and interactivity, which enable these media to react to changing conditions. Second, their multimediality, in that they may combine a wide range of semiotic channels. Third, their capacity for networking, which connects both machines and people across space. Fourth, digital media's use of volatile signs: these technologies appear to be highly fluid and dynamic, given that computer memory can be written and rewritten effortlessly. Finally, their use of modularity, as one digital work can involve the compilation of multiple autonomous objects (2004b: 338). It is these properties of new technologies that shape both films.

In terms of storytelling, the networked narrative structure of *Kairo* mirrors digitality's features of reactivity, connectivity, and modularity. While not nearly as complex as *House of Leaves*, Kurosawa's film nonetheless emulates the structure of the network to present its story. The film's narrative strands appear to be disparate and autonomous at first, but they do belong to the same web of events and eventually even influence each other as characters begin to work together. Thus, multiple characters and narratives are all affected by the same incidents to some degree. Significantly, of the fictions I examine here, *Kairo* comprises the most explicit realization of Mousoutzanis' network apocalypse. In *Kairo*, new media's all-embracing connectivity causes this apocalypse: since everything is connected via the Internet and cell phone signals, the supernatural media virus spreads everywhere once it has infiltrated the world of the living. The film's structural composition mirrors its thematic focus on the level of discourse.

While *Pulse* does not bear the structural properties of the network narrative, it does carry the idea of the network apocalypse considerably

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further than Kurosawa's film does. Sonzero's movie presents one clearly identifiable cause for the creeping apocalypse: the attempts by Ziegler and his coworker to develop better broadband technology. It only takes one careless hacker – Josh – to release the supernatural media virus from Ziegler's system and to ensure the unstoppable escalation of the infection. The epidemiological maps used in the film underline the significance of this comparably small, yet ultimately fatal event.

The specters in *Pulse* are faceless masses of technoghosts, visibly bearing the characteristics of those digital media they use to multiply and defying the ontology of addressability. Discussing the representation of such ghosts in 21st century digital horror films, Kirk coins the concept of "networked spectrality": "networked spectrality aims to account for representations of ghosts that are transitioning from the singular, linear, personal and analogue to ghosts that are digital, multiple, nodular and distributive" (2016: 55). These ghosts no longer have an individualized identity. The confluence of specters and networked technologies affects the notion of haunting as well:

> When ghosts are coupled with new media technologies, haunting is not merely a singular, personal, temporary occurrence of the supernatural but an endemic threat to an increasingly networked and globalised contemporary society. Today's phantoms take on the unbounded, multiple, distributive and participatory qualities of our digital networks. (ibid: 57)

New media are not merely the vector for the supernatural media virus; they imprint their properties upon these specters.

Both films feature networked spectralities in that their ghosts are not the revenants of individual, identifiable persons, but instead comprise a large collective. Haunting appears as a public invasion, rather than a private visitation. In comparison to *Kairo*, Sonzero's *Pulse* heavily dwells on the digital nature of its ghosts – possibly because the film, created five years after the Japanese original, portrays a society in which digital media have become much more ingrained. Their digitality is most obviously signified through their appearance. As technoghosts, the specters haunting Mattie and her friends bear the visual mark-

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ers of technical interference. These ghosts are even less individualized than those that appear in *Kairo*: their appearance is modified heavily through CGI effects and it becomes impossible to distinguish the ghosts from one another. Instead, Sonzero's film concentrates on portraying the large number of ghosts as one complex, yet coordinated, network. When Mattie is pulled into the realm of the dead, she is pinned down and held in place by numerous ghostly hands. The camera zooms out, revealing that, together, these hands form one giant face. Similarly, even though she has disconnected her computer, Mattie's printer prints page after page of sheets filled with unidentifiable smudges at one point. It is only when she arranges them in the correct order that Mattie, along with the film's audience, realizes that these smudges form a large, ghostly face spread across all those pages (see Fig. 5.11).

Fig. 5.11 Multiple pages forming a single image

Source: *Pulse* (2006)

Significantly, these printouts do not form the face of any recognizable or identifiable person – even at this moment, the film refrains from imbuing its specters with any individualized personality. Instead, these ghosts are multiple, modular, and networked, in accordance with the logic of digitality. Mattie and Dex realize that it is impossible to stop such digital ghosts once they have infected the Internet: "It's no system to shut down. They are the system" (*Pulse* 2006). Numerous small components drawn together form one large system; the whole is greater than the sum of its parts.

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Whereas the pervasion of digital media into all aspects of life causes the deterioration of personal relationships in both films, these technologies comprise the ideal viral vector for the supernatural media virus. They are extremely dynamic and, therefore, support the virus' continuous mutation. Furthermore, they function within widely established networks, which provide new channels of infection, and which have begun to dissolve the "immune system" that a society might have against this virus: real-life social interaction. Whereas digital media disconnect human beings from one another, they allow for the compilation of numerous autonomous specters into one incredibly powerful and complex invasive force.

Significantly, the dangerous omnipresence of digital communication media comes to the fore through the continuous feeling of surveillance pervading both films. Hantke identifies surveillance as a recurring theme in digital horror and traces its genealogy back to films from the 1950s (2016: 20). Networks' greatest threat lies in their reciprocity: "information is flowing in both directions at once. As observers [...] we are observed; someone is listening in on us. Acting upon others by way of the network, we are being acted upon" (ibid). Similarly, Jackson points out how 21st century horror is obsessed with the idea that all of the comforts and luxuries afforded by digital media might eventually forge a dangerous, bidirectional connection to an unknown world:

> Everything that makes such devices and signals so light and portable, so seemingly normal and insignificant, is shown to be a façade; all the time, something has been watching us through our TVs and computer screens, very near and waiting to be released, wanting to make contact, literally. (2013: 33)

Digital media's properties are not only advantageous for human beings; the supernatural media virus benefits from them as well by utilizing them as vectors for transmission.

The theme of surveillance presents itself in *Kairo* and *Pulse* through the fact that ghosts always know where another living soul is waiting to have its life force sucked from it. In Kurosawa's and Sonzero's films, ghosts attack people in the most banal places. Ghosts jump out of wash-

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ing machines, lurk in restroom stalls, and even search under sofas for their victims. It is precisely this mundanity that makes the supernatural media virus so terrifying: no place is safe simply because every victim is always carrying a tracking device in the form of cell phones and other portable media.[6] Mattie and Dex are warned of this danger by a stranger at a diner: "Do you have any idea of the amount of data that's floating out there? The amount of information we just beam into the air? We broadcast to everyone where we are and we think we're safe?" (*Pulse* 2006). Even though she is aware of the threat posed by digital devices, Mattie fails to throw away her cell phone after escaping the city with Dex. This almost proves to be their downfall, as they are suddenly attacked by ghosts while sleeping in their stolen car on an abandoned road. They barely survive the attack, throwing the fatal device out of the window and taking off to the nearest dead zone. The constant addressability of these devices, revealing the location of their users at all times, leads to humanity's demise.

Visually, both films convey the feeling of surveillance through unusual camera angles and suspicious image interferences. Many motion pictures attempt to make their medium and the techniques of film as invisible and natural as possible, simulating the gaze of an unseen observer. Kurosawa's and Sonzero's films, in contrast, deliberately draw attention to both the medium and to the filmmaking process. The beginnings of each film are particularly revealing in this regard. *Kairo* opens on a boat, where the few remaining survivors have fled after the supernatural media virus has spread. During a voice-over by Michi – "It all began one day without warning, like this..." – the camera switches from a medium shot of Michi's back as she leans against the ship's rail to a long shot of the boat from above (see Fig. 5.12).

6 Morozov strongly criticizes this omnipresence of ever smaller technologies. These "self-tracking devices" are camouflaged as powerful weapons against the fight against maladies such as obesity (2013: x). In the end, however, these technologies enable a permanent and potentially dangerous form of surveillance – of the own body, of peers, and of complete strangers.

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Fig. 5.12 A feeling of surveillance pervades "Kairo," evoked by long shots...

Source: *Kairo* (2001)

This shot conveys both utter loneliness, as the ship is a tiny speck in the vast ocean, and introduces the theme of surveillance, as the image resembles those created via satellite technology. The next shot is unrelated to the boat and instead functions as the initiation into the flashback of the slow apocalypse. A deserted, cramped room appears, with several computer screens visible through a transparent plastic curtain (see Fig. 5.13). The image is distorted and flickers several times (*Kairo* 2001). This kind of interference along with the obscured perspective, which obstructs a clear view of the room by means of the curtain, are reminiscent of videos created by surveillance cameras. Several scenes utilize such points of view throughout the film, in which large sections of the shot are occluded by screens, doors, and other obstacles (see Fig. 5.14). These images, which do not correspond to any person's point of view, all evoke the feeling of the characters being watched by someone or something without their knowledge.[7]

7 Such points of view are an established convention to create unease in a film's audience. Well-known examples are Hitchcock's *Psycho* (1960) or Stanley Kubrick's *The Shining* (1980). The popularity of such perspectives continues to grow in the 21st century. Now, horror video games utilize similar perspectives

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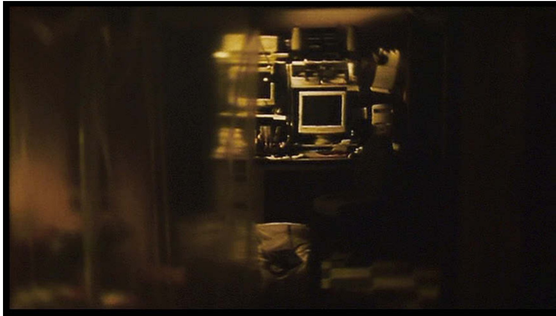
Fig. 5.13 ...and obstructed, distorted perspectives



Source: *Kairo* (2001)

Fig. 5.14 Obstructed perspectives remain a common feature throughout "Kairo"

Source: *Kairo* (2001)

to create an uncanny dissonance: in games such as *Until Dawn* (2015), *Man of Medan* (2019), or *Little Hope* (2020), players see and control their character from a third person perspective; oftentimes, they have to do so while viewing the

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Some of these scenes have been adapted almost directly in *Pulse*. In comparison, however, Sonzero's film features fewer shots in which other elements obstruct the action framed within the image. For its surveillance aesthetics, *Pulse* instead depends more heavily on the use of a bird's-eye view as well as telephoto lenses with extremely long focal lengths. Sonzero uses the former several times to portray the university campus, where fewer and fewer people are moving about in each shot. Uncannily, the camera is positioned slightly differently each time, suggesting that this surveillance lens is moving about the campus of its own volition (see Fig. 5.15 and 5.16).

Fig. 5.15 Bird's-eye view of the campus

Source: *Pulse* (2006)

The telephoto lens is especially significant in the film's first scene: Mattie's soon-to-be-dead boyfriend Josh walks to the library, looking around him nervously several times. In this shot, Josh almost vanishes in a crowd of people. Adding to the feeling of surveillance, he is out of focus every now and then, as if an unidentified observer has had to readjust their camera. Each element of this scene's composition draws attention to the camera itself and to how somebody – or something – is watching Josh.

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character from the unsettling, oftentimes obscure perspective of an unknown and potentially dangerous observer.

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Fig. 5.16 Camera position changes between such surveillance shots

Source: *Pulse* (2006)

The third and perhaps most important instance of surveillance in both films is the mysterious webcam feed. In *Kairo* and *Pulse*, this feed appears without any explanation; computer users suddenly find the words "Do you want to meet a ghost?" written on their screens (*Kairo* 2001; *Pulse* 2006). This question represents the doorway into the digital Forbidden Room, in which recordings of webcams – most of them only a few seconds long – appear to loop continuously. Gruesomely, many of these shots display figures, presumably human beings infected by the supernatural media virus, committing suicide in front of the camera.[8]

Ryan discusses the narrative potential of webcams by starting from the assumption that "[e]ach medium has particular affinities for certain themes and certain types of plot" (2004b: 356). Since these cameras are usually aimed at a specific setting and remain permanently in a fixed

8 The idea of dangerous individuals encouraging people to engage in self-harming behavior online is a recurring topic in discussions about the potential impact of the Internet, oftentimes resembling discussions of media violence in relation to television. A very recent example is the so-called "Momo challenge," which caused a considerable media stir in July 2018. Allegedly, an anonymous person instructed children via their smartphones to commit suicide. The Momo challenge, as well as the reports of suicides connected to it, were a hoax (Sugiura/Kirby 2019).

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position, the images that they provide differ vastly from other types of videos:

> Webcams do not tell stories, since all they do is place a location under surveillance, but they provide a constant stream of potentially narrative material. Their capture is the visual equivalent of what Hayden White calls a chronicle: a chronological list of events that presents neither the closure nor the causality nor the formal organization of a plot. It is up to the viewer to construct a story out of this material. (ibid: 353)

As she goes on to explain: "in this dramatically impoverished environment [...] the smallest change of state becomes a narrative event: a shadow stroking a linoleum floor, a car leaving the office parking lot, or a change of pattern in the sand of the cat box" (ibid). The narrative strength of the webcam medium lies in its networking capabilities and its utilization of volatile signs: they can be set up and accessed anywhere as long as there is an Internet connection, and by their very nature, provide an unedited stream of real time images; they do not require a long-term storage medium.

In the films, the webcam feed proves to be disorienting and disorganized, indeed a "stream of potentially narrative material." The protagonists struggle to identify the meaning behind the Forbidden Room. Is this truly a live feed, or is it prerecorded? Are the images looping, or is there variation to the recordings? Who are the people being depicted? Are they people at all, or are they ghosts? The meaning behind the question: "Do you want to meet a ghost?" is dangerously ambiguous. It suggests either that the portrayed figures are spirits or that will draw the ghosts' attention upon entering the chatroom. In the end, both interpretations turn out to be true, as the connection to the Forbidden Room is reciprocal. Not only are the infected ghostlike, but the connection to their webcams also reveals the position of the observer:

> Mattie: "How long have you been watching this?"
> Dex: "No, I think the question is how long they've been watching me."
> (*Pulse* 2006)

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Indeed, in both films, characters suddenly find themselves featured on the webcam feed, without ever being able to find out where the camera filming them is positioned. They have unwillingly become part of this virtual world. By entering the Forbidden Room, observers will eventually be found out by ghosts as well and will become part of the looping feed themselves.

The Forbidden Room foregrounds perhaps the most controversial aspect of webcam feeds: users become voyeurs, peeking into a set location from the outside. They watch silently as people commit suicide in front of the camera. However, such voyeurism is punished, given that this chatroom opens up a reciprocal link to the other side. The horrifying mediated images of violence presented on the webcam feed seep into the real world as the apocalypse develops; scenes well-known from the feed become part of real life for the characters. In front of their eyes, people jump off towers or walk in front of buses; a burning airplane crashes in the middle of the city.[9] The infected Harue even reenacts a section from the webcam feed: a man pulling a plastic bag from his head and subsequently shooting himself. When Ryosuke and Michi find Harue in an abandoned factory towards the end of the film, she wears a similar bag over her head at first. Like the man from the Forbidden Room, Harue shoots herself after removing the bag.

In many regards, *Kairo* and *Pulse* build a bridge to the concerns that were already being voiced in *Ghostwatch*. Technology opens the door to another world, not only allowing a human audience to watch this realm on their television sets or computers, but also enabling this other world to watch back at, and even enter, the realm of the living. In these more recent films, however, the supernatural media virus reaches truly apocalyptic potential; once these boundaries have been breached, the

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9 Building his argument on this portrayal of the crashing plane, Wetmore reads Sonzero's *Pulse* as an allusion to the attacks on the World Trade Center in New York City on September 11, 2001 (2009: 76). While this argument is somewhat problematic and highly focused on the American perspective – especially considering that Kurosawa's *Kairo* features a similar scene –, it is true that mediated images of such violent catastrophes have become a common practice in times of television and social media.

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infection can no longer be contained. Whereas Pipes could only travel through the channels established by network TV broadcast in the UK, the digital ghostly invaders can use every digital communication device as their viral vector, spreading throughout the entire world within an instant. *Kairo* and *Pulse* conceive of the network as a self-expanding, omnivorous entity that has reached such high degrees of complexity and connectivity that the entire world is affected once it becomes infected with the supernatural media virus. The result is disintegration, chaos, and death; both films do not specify the state of the world at their close. Instead, they conclude with their protagonists traveling the postapocalyptic world, not knowing what awaits them.

While Kurosawa's and Sonzero's films each negotiate anxieties arising with every new medium, as the fictions discussed in the previous chapters do – the fear of constant surveillance and of how (digital) media affect human nature – they go a step further by featuring a supernatural media virus that, without any doubt, has succeeded in bringing about the apocalypse. Whereas *Ghostwatch*, *House of Leaves*, and *Ring* all carry apocalyptic undertones to varying degrees, implying that their respective viruses could wreak havoc on society at large, if not even the entire world, they do not make the end of the world explicit. There are several reasons why the supernatural media virus is so powerful in *Kairo* and *Pulse*: first, digital technologies prove to be the best vector so far, having reached hitherto unknown degrees of pervasion and offering more efficient dissemination mechanisms than other media. Second – and more importantly – society is already suffering from a weakened "immune system" once the virus attacks, because the very same technologies have begun to disintegrate interpersonal relationships and social integrity. The supernatural media virus merely needs to exploit and amplify these trends in order to succeed.

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