

**The Sixth International Conference on
Transdisciplinary Imaging at the Intersections between
Art, Science and Culture**

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**A shadow zone, a spectral landscape, a cemetery, zombieland.
The debris of an old image culture, or compost for a new one?**

The cultural moment now dubbed “Contemporary” is defined by the networked saturation of images. By the diffusion, dissemination and inundation of frictionless image production. By image hacking, image consumption and image commerce on social media and in platform capitalism. By 24/7 crisis news, doom-scrolling and misinformation spread by web influencers. By CCTV and drone surveillance. By massive multiplayer online gaming. By “deepfake” hoaxes and simulations that augment reality and contribute to the relentlessly cynical campaigning of our 21st century political twitter “newspeak”. Is not this cornucopia and unprecedented availability of mediated imagery a kind of Eden? If so, it is a dark Eden. Metaphorically fertile as a forest that is so thick with its tentacular edicts that the light that penetrates cannot escape its web; or perhaps, and more likely, that its mutated growth is now dependent on a black rather than bright light. Its darkness might be that of the pall of ash-filled smoke shrouding a burning continent.

Conference papers addressed the general topic from any angle (direct or oblique), but were asked to consider at least one of the following areas:

- Expanded image
- Remediated image
- Hypermediacy
- Expanded film
- Imaging science
- Computer vision
- Networked image
- Immersion
- Speculative realism
- The invisible, the subliminal, the inaudible or subaudial
- Infraworld
- Enlightenment and the post-truth era
- Augmented reality
- Artificial intelligence, or intelligent systems



Living Images, Inert Humans:

Vitality of the Images Appearing in *Chromatophony* and *A Wave*

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Introduction

This paper examines two artworks, *Chromatophony* (2019) by Juppo Yokokawa and *A Wave* (2017) by The SINE WAVE ORCHESTRA (hereinafter, SWO, one of whose members is Kazuhiro Jo), to clarify their critical perspectives for the contemporary media ecologies. For this purpose, we refer to the idea of ‘living images’ proposed by theorists such as W.J.T. Mitchell and Hans Belting at the beginning of this century (1). This idea of images as living things independent from us, has become more interesting in this decade with the rise of bio-art concerning living things and biology, and the acceleration of online networks carrying innumerable images.

However, it is unclear to what extent their discussions of living images are applicable to recent artworks entailing nonhuman actors, for example, living beings and technological networks. Therefore, we examine the details of *Chromatophony*, which converts the skin of the squid into an audio-visual display, and *A Wave*, which displays a flood of abstract images collected from the Internet. Further, the encounter between the idea of living images and the contemporary media arts reveals the problems in Mitchell and Belting’s arguments, and makes their discussions relevant to the ongoing situations.

First, we confirm that Mitchell's characterization of images as co-evolutionary living things could be extended to the non-human actor by comparing with *Chromatophony*. Second, Belting’s theory will be examined with contemporary technologies, including the Internet or YouTube, exemplified by the SWO’s *A Wave*. Then, we clarify how these works could embody the idea of living images in the realm of media art and extend it to the critical perspective to reconsider our relationship with images in general.

Coevolution of animals and images

W.J.T. Mitchell, a visual culture theorist, has discussed the analogy between images and living organisms in his book *What Do the Pictures Want?*:

If images are like species, or (more generally) like coevolutionary life-forms on the order of viruses, then the artist or image-maker is merely a host carrying around a crowd of parasites that are merrily reproducing themselves, and occasionally manifesting themselves in those notable specimens we call ‘works of art.’ (2)

Mitchell treats the images as ‘coevolutionary life-forms’, such as the parasitical relationship between humans and viruses, since our interests and investments into images enable them to propagate and survive. This claim does not merely repeat metaphor formulated in the art history and sociological discourse, but is a critical response to their formulations of images that depends on anthropocentric suppositions. And this claim could also be applied to our daily lives, in which image-making is no longer limited to artists; it is something we all do by sharing or retouching multiple images using smartphones.

However, we cannot say that we control images. Since our activities and emotions are affected by the images, we become a convenient vehicle for the images that independently reproduce and propagate themselves. Of course, as Mitchell stated, some people might still be reluctant, claiming this idea could not escape from the metaphor. Therefore, we must consider examples from non-human species, because they developed skilful relationships with images long before humans did.

Human beings have certainly developed a long history with images; however, it could not be absolute and unique in natural history, considering several non-human species from cephalopods to reptiles like the chameleon, and insects such as butterflies and mantises. Particularly, we know that cephalopods such as squid and octopus can change their body colour to camouflage themselves or communicate with each other. Although these abilities are vital for them to survive, there is no reason to regard human manipulation of images and symbols as ‘higher’ than them, which otherwise falls into an anthropocentric attitude. Further, from an evolutionary scale of cephalopods having developed complex and alternative mode of minds from human beings, it is also reasonable to compare their faculties of images by two species (3).

Chromatophony, or the symbiotic relations with images

Mitchell’s model of the coevolution of living beings and images is appropriate to describe the squid’s behaviour. This fact is shown emblematically by *Chromatophony*, which integrates the squid’s ability to change its skin colour to an audio-visual display device. In this work, we see the appearance and disappearance or the expansion and contraction of colourful mosaic, similar to a pointillism of expressionism, realized on a microscopic scale, which beats rhythmically like a vital pulse of the images themselves (Fig. 1).

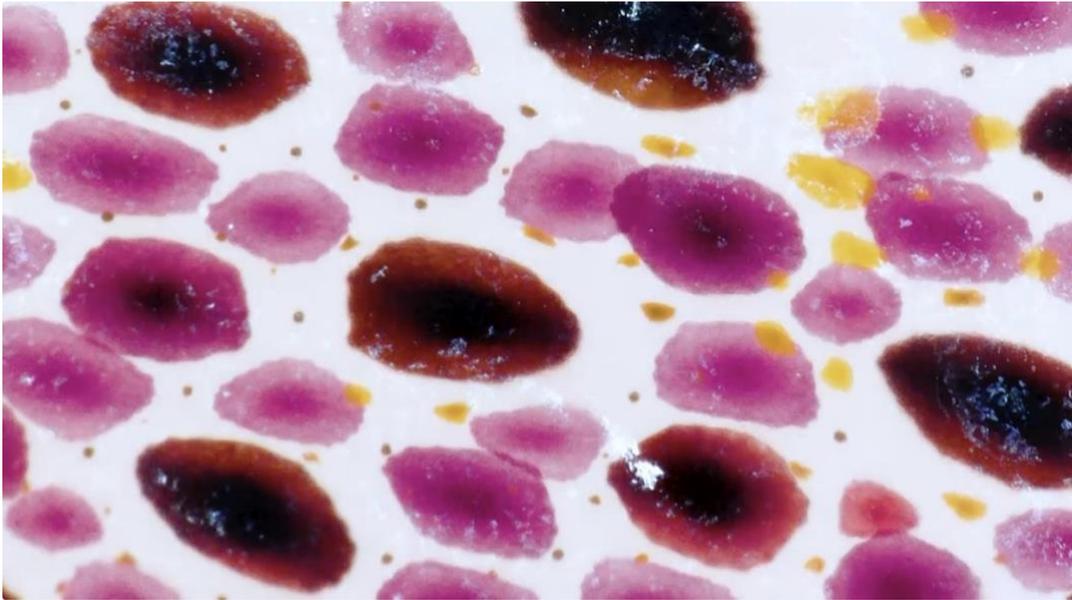


Fig.1 Juppo Yokokawa,
Chromatophony, 2019
 HD video
 2mins

Biologically, the colour changes in the squid are realized by chromatophores (Fig. 2). They are small bags on the body surface filled with pigment and surrounded by muscles; during nerve stimulation, the muscles shrink and the colour becomes visible. The colour of chromatophores is different for each squid species. The squid tested in this study has brown, purple, and yellow chromatophores, and different size and arrangement for each type. It is possible to stimulate them artificially using electrodes, and the results show that a sine wave of approximately 90 Hz makes the chromatophores vivid (Fig. 3).

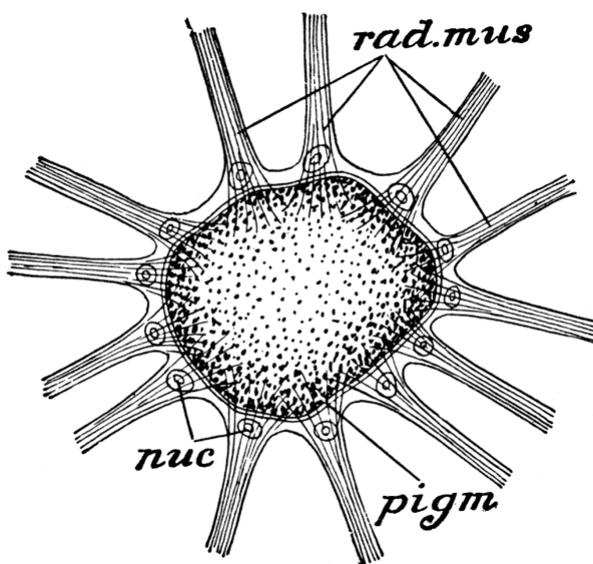


Fig.2 Illustration of Chromatophore (Parker, Thomas Jeffery, and William Aitcheson Haswell, *A Manual of Zoology*, Macmillan, 1905.)

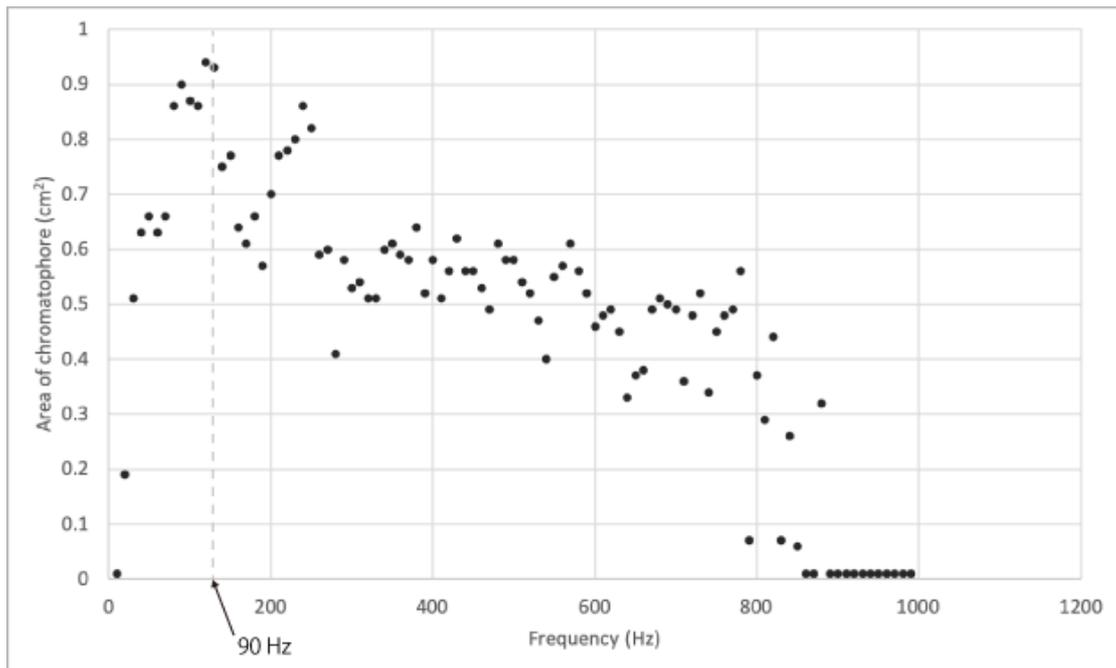


Fig.3 Maximum area of the chromatophore per frequency

As a similar attempt, Backyard Brains, a company that sells educational neuroscience laboratory kits, has developed previous example using existing music (4). In contrast, we composed pieces that would match and maximize the chromatophores' properties. In other words, we did not exploit squids' organs simply for human purpose but attempted to probe and balance the visible and audible thresholds of images as an aesthetic condition between human beings and other living things. Certainly, we need to slice muscle from a fresh squid which is going to die, but their chromatophore becomes vivid for a while, suggesting that the image is nothing but a parasite or 'co-evolutionary life-form' independent of individuals, whether humans or squids. In this respect, the author of this work is nothing but an 'artist or image-maker as a host carrying around a crowd of parasites', as pointed by Michell.

Extending this idea, *Chromatophony* makes us aware that it is possible to relativize our relationship with images among living things, just like their intelligence. Here, we can refer to some theorists who reconsider the concept of 'media' as an environment and infrastructure for living beings (5). For example, dolphins, an intelligent marine counterpart to human beings, have their sonar system for environmental scanning and engaging in complex social communications. The proximity and differences of intelligence between human beings and non-human species such as dolphin, octopus, and bat, have been controversial in the philosophical and ethological discourses, which cannot be examined here in detail (6). However, if the media as a site of symbiotic relationship with images could be treated as an infrastructure making their unique life-system possible, we can claim their techniques of images to be an adequate and necessary resource for us to speculate the post-anthropocentric relationship within media art/design. From this perspective, the mosaic images emerged on the squid's skins could be compared with the flickering images gathered from the Internet.

Image anthropology and digital technology

A similar discussion to the one led by Michell is provided by Hans Belting in *An Anthropology of Images*, in which he declares ‘we are not the masters of our images’ (7). His argument is described as ‘anthropological’ because its scope includes the variety of human practices, from ancient times to the digital age, concerning symbolic images related to life and death. Among his triangular formulation of image-body-media, what is essential is that the human skill or faculty for images is decentralized, and that images are regarded as a living entity on its own, whether situated within our body or externalized by technological media. In short, the images are regarded as living things waiting to be materialized by our body and media.

According to Belting, the human act of perceiving images and the accompanying imagination enable the corporealization of living images without bodies. He says, ‘[o]ne might say that images resemble nomads. They migrate across the boundaries that separate one culture from another, taking up residence in the media of one historical place and time and then moving on to the next, like desert wanderers setting up temporary camps’ (8). This passage explains the nomadic features of living images, while the following description could be also applied to the situation engendered within SWO’s *A Wave*:

Today, however, the much-lamented excess of image-production, while it stimulates us, at the same time anesthetizes us from the onslaught of images. They come at us at a rapid pace, but they disappear from our sight with equal speed, and so our body, “the Locus of images” puts forth its own defences. It endows some images with symbolic meaning and admits them to memory, others it consumes and forgets (9)

The spectators of *A Wave* are situated in front of a screen on which abstract images float and flicker so rapidly that their meanings cannot be identified (Fig. 4). This swarm of images is indeed ‘nomadic’ because they are gathered from the Internet according to a rule established by the artist. This situation can be described literally as an excess of living images that both stimulate and anesthetise our body and senses.



Fig.4

The SINE WAVE ORCHESTRA

A Wave, 2017

Video and Audio

Installation

Photo by Kazuomi Furuya and courtesy of Yamaguchi Center for Arts and Media [YCAM]

***A Wave*, or the nomadic images in the post-Internet age**

A Wave, premiered at the Vanishing Mesh exhibition held at Yamaguchi Center for Arts and Media, Japan in 2017, is a re-examination of what is becoming invisible in today's media ecologies. An indistinct image is projected onto a screen covering the entire surface of the space. It comprises a large number of moving images retrieved from the Internet, rearranged to form a sine curve based on the brightness of each frame. Technically, this work nests two screens such that a huge screen is placed in front of the display or projected screen. The display shows fragments of images retrieved from YouTube at a frequency of 60 frames per second. We calculate the average brightness of each frame and sort them according to brightness to draw a sine wave from black to white under the condition of using all frames only once. Then, the nested screens makes them blur and presented indirectly .

The audience reactions to this procedure are diverse and interesting, as exemplified by the following comment: 'This image is very similar to a memory. It's said that right before you die, you can have flashbacks of many things, but I wonder if it's like this ...' With flickering lights and colours, this work strips the memories of countless others belonging to different societies or histories. In contrast to the brutality of contem-

porary technologies to strip the memories of countless people worldwide, each visitor participating in this space voluntarily projects some meanings onto the images and enables their memories to be re-examined through the spectrum.

Can these features proper to the post-Internet age be applied to Belting’s characterization of a living image? To answer this, we rely on the concept of post-participation proposed by media artist, Varvara Guljajeva. She positioned post-participative artworks historically as succeeding the participative and interactive artworks, and as summarized in Fig. 5, defined it as an ‘open-process’ in which ‘the direct interaction of audience is no longer required’ and there is ‘no connection with the physical space in which it is displayed’ (10). Applying this to *A Wave*, it could be regarded as a re-appropriation of the images from YouTube to make the artworks potentially open-process. The living images from across the world can be integrated into this work and entangled with the memories supported by the audience’s bodies, ‘the locus of images’, as noted by Belting.

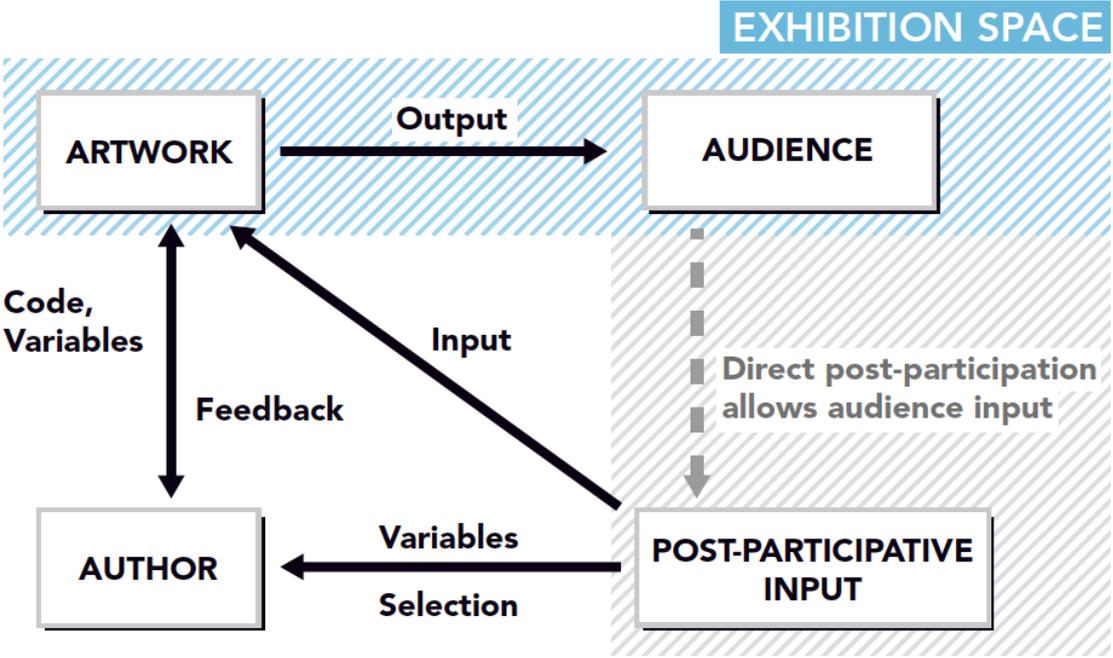


Fig.5 The relationships within a post-participative artwork (Varvara Guljajeva, ‘From Interaction to Post-Participation: The Disappearing Role of the Active Participant’, Doctoral thesis, Estonian Academy of Arts, 2018, p. 20.)

The swarm of images presented by this work has no direct connection with the physical space where the work is displayed. This is one of the key features for formulating ‘post-participation’, which simultaneously focuses on the limitation that Belting’s argument does not fully deal with. Reconsidering it within this context, Belting’s theory, originally presented at the beginning of this century, is also intended as a critical counterpoint to technological determinism, such as the division between the digital and analogue. However, sometimes adhering to the triangular schema, image-body-media, composed of abstract concepts, fails to consider the material transformation of technological conditions.

However, this does not mean that digital images supported and circulated by the Internet fall beyond the anthropological scope of image; rather, we claim the necessity of expanding it to include current situations where image, media, and body increasingly become entangled. The construction of an environment, in which the audience becomes a participant not subjected to the author's direct conduct, has been explored throughout the SWO's works, and *A Wave* attempts to develop this aim further and involve the user of the Internet as post-participant without their awareness. This also makes it possible to extend the intriguing schema of image-body-media into the fields of media art through a critical perspective to the technological conditions.

Conclusions

This paper presented two specific artworks to assess the idea of living images within the ongoing media ecologies that are complicated by non-human actors. First, we confirmed Mitchell's idea of treating images as coevolutionary life-forms through the work *Chromatophony* which attempts to make images embodied and sensible in a trans-species way. If this is an attempt to relativize histories of the living images which are not being exclusively occupied by human beings, then *A Wave* by SWO presents that the technological conditions such as the Internet could be integrated into the schema of image-body-media formulated by Belting. They also indicate that the possibility of image anthropology could be extended and updated into the non-human species and a mode of post-participation foregrounded in recent works of media art.

Lastly, we would like to note again that one of the significances shared by these works is that both present the material conditions for our relationships with the images themselves rather than their fragile and ephemeral features. Based on this, it will be possible to appropriately explore within the field of media art the idea of living images, whose original aim is to overcome the limitations of the anthropocentric frameworks. The discussion so far is proposed as one of the critical perspectives for the contemporary media ecologies, which are going to move into the supposed Anthropocene. Although it might be living images, rather than inert human beings, that play the central role at this stage, we believe that it provides an opportunity to further explore the possibilities of media art.

Notes

(1) W.J.T. Mitchell, *What Do the Pictures Want?: The Lives And Loves of Images*, University of Chicago Press, Chicago, 2004; Hans Belting, *An Anthropology of Images: Picture, Medium, Body*, trans. Thomas Dunlap, Princeton University Press, Princeton & Oxford, 2011.

(2) Mitchell, p. 89

- (3) Peter Godfrey-Smith, *Other Minds: The Octopus, the Sea, and the Deep Origins of Consciousness*, Farrar, Straus and Giroux, New York, 2016.
- (4) <https://blog.backyardbrains.com/2012/08/insane-in-the-chromatophores/>; accessed 1 March 2021.
- (5) John-Durham Peters, *The Marvelous Clouds: Toward a Philosophy of Elemental Media*, University of Chicago Press, Chicago, 2015; Robert E. Mitchell, *Bioart and the Vitality of Media*, University of Washington Press, Seattle & London, 2010. The latter develops critical and productive arguments on the evaluation of bioart by W.J.T. Mitchell.
- (6) As a leading example, see Thomas Nagel, 'What is it like to be a Bat?', *The Philosophical Review*, vol. 83 no. 4, 1974, pp. 435-450.
- (7) Belting, p. 9.
- (8) Belting, p. 21.
- (9) Belting, p. 21.
- (10) Varvara Guljajeva, 'From Interaction to Post-Participation: The Disappearing Role of the Active Participant', Doctoral thesis, Estonian Academy of Arts, 2018, <https://www.artun.ee/en/calendar/phd-thesis-defence-of-varvara-guljajeva/>; accessed 1 March 2021, p. 58, 68. For what 'participation' means in detail, see Claire Bishop, *Artificial Hells: Participatory Art and the Politics of Spectatorship*, Verso, London & New York, 2012.

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