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A Messy Affair

Audiovisual Performance and the Concept of the Post-Digital

This article is the result of an invitation I received from Andrew Knight-Hill some years ago to contribute to a publication on his audiovisual performance practice. He had realised that his way of combining digital technology with analogue media such as 16 mm film could be described as post-digital and was interested in including a text exploring the concept of the post-digital in relation to audiovisual performance, or, in his case, more specifically visual music. Due to developments linked to the pandemic, the planned publication could not be realised. But since a first version of the text already existed, I decided to finalise it, shifting its focus a little towards a more general perspective on audiovisual real-time performances. This article explores the simultaneous development of audiovisual real-time performances and the concept of the post-digital. It examines their points of intersection, asking if, and if so, how and when these performances could be described as post-digital.

First coined by Kim Cascone in 2000, the concept of the post-digital emerged around the same time as computers became fast enough to process images in real-time, enabling artists to perform on or with them in real-time.

When Cascone introduced the concept of the post-digital, he used it to describe a new type of aesthetic in computer-based music. According to him, "it is from the 'failure' of digital technology that this new work has emerged."[1] Most prominently from the glitch, but also from other forms of failure such as digital distortion or system crashes. This definition does not necessarily imply that the concept of the post-digital excludes analogue music production, nor any other forms of artistic production for that matter. Cascone is not entirely uninterested in the effect that the zeros and ones, more specifically "working in environments suffused with digital technology," can produce when delivered into material, analogue environments: In fact, he acknowledges that the various noises of those "environments suffused with digital technology"[2], from "computer fans whirring" to "the muffled noise of hard drives"[3], have also influenced the development of post-digital aesthetics.

1 Cascone 2000, p. 13.
2 Ibid., p. 12.
3 Ibid.

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Two years later, in his essay on "Post-digital Aesthetics and the Return to Modernism" (2002), Ian Andrews takes up this perspective and expands it by asking for the constituent elements of post-digital art in general. Although they have slightly different perspectives on the post-digital, both texts, according to Florian Cramer, share the same premises, since "the underlying context for both their papers was a culture of audio-visual production in which 'digital' had long been synonymous with 'progress.'"[4] The post-digital would then mainly refer "to works that reject the hype of the so-called digital revolution."[5] Andrews argues that, aesthetically speaking, this "reaction often takes the form of a (naïve) return to the purity of modernism."[6] But while the post-digital critical attitude towards the so-called digital revolution and its supposedly progressive effects remains at the core of the concept, the question of purity has become less central. Instead, the emphasis is now more laid on 'messiness'. Accordingly, Cramer sums up the brief history of the concept as follows: "'Post-digital', once understood as a critical reflection of 'digital' aesthetic immaterialism, now describes the messy condition of art and media after digital technology revolutions. 'Post-digital' neither recognizes the distinction of the one or the other."[7] But above and beyond highlighting the messy condition into which art and media have been plunged by the so-called digital technology revolutions, Cramer's definition opens up a broader horizon that stretches beyond the arts or creative contexts. From this viewpoint, the post-digital no longer describes a particular aesthetic phenomenon, but a general condition of the media environment in which we live. And very much in line with this shift in the definition, post-digital approaches have found their way into other academic disciplines as far removed from the concept's original context as, for example, political sciences or sociology.[8]

Now that we have outlined some of the main characteristics of the post-digital, it is time to shift the focus to our main topic and ask the central question: Where does audiovisual performance and the different forms it can take, from contemporary visual music to expanded cinema or live cinema, fit into this tableau of the post-digital?[9] There is, of course, more than one possible answer to this question, and, in the following, this paper will concentrate on the delineation of some answers that seem particularly relevant or illuminating.

Around 2000, increased computing capacities made real-time image processing easier and widely accessible. As a result, computer-based audiovisual performances experienced a major boom. VJs became prominent figures in clubs or at festivals where they accompanied the performances of DJs or musicians with their images. In most cases they were brought together by whoever was doing the booking,

4 Cramer, What Is Post-digital?, 2014, p. 14.
5 Andrews 2002, n.p.
6 Ibid.
7 Cramer, Post-digital Media, 2014, n.p.
8 See for example Fielitz' and Thurston's *Post-Digital Cultures of the Far Right* (2019) or Blommaert's article on "Political discourse in post-digital societies" (2020).
9 For a definition of contemporary visual music see C. Lund, Visual Music, 2015, especially pp. 35–39; for a definition of live cinema see G. Menotti, 2015.

with the exception of some audiovisual groups or bands formed by musicians and visual performers, such as Addictive TV or Rechenzentrum.[10] Looking back at the performances of the early 2000s, most of them explored the rapidly evolving technological possibilities of the hardware and newly customized software for real-time visual or audiovisual performances.[11] Visual performers in particular showed little or no interest in exploring post-digital aesthetics with its glitches and failures – perhaps because visual computing, unlike computed-based sounds, was so very new and exciting that being able to render real-time visuals without failure was still an achievement and a goal in itself.

There are, however, some examples of audiovisual performers who have developed a post-digital approach in the sense of Cascone already in the early 2000s. In their Automata Inak[12] series, for instance, the Austrian-Dutch duo reMI (Renate Oblak, Michael Pinter) pushed their computers to the limits of their processing capabilities by generating extremely rapid and overlapping cascades of images and sounds, thereby inducing the computer to generate glitches and other failures. In another, more deliberate approach, an 'aesthetic of failure' was created by pushing not hardware but software to its limits. reMI describe this approach and its aesthetically somewhat unforeseeable outcome as follows: "By allowing a particular version of Adobe Premiere to run in a windows environment the computer becomes irritated and itself produces images. Because the image is disturbed it flips out and begins to live a life of its own."[13] The author remembers a performance by reMI at the 18th Stuttgarter Filmwinter festival in 2004, where the glitches got so wild that they generated an audiovisual noise performance that drove away most of the audience. The audience was clearly not prepared for this kind of aesthetic approach in an audiovisual real-time performance, as it was so unlike most of the other performances at the time.

As Cascone had already noticed, the realm of the zeros and ones has never been really separated from materiality. And more recent discussions of the post-digital stress the fact that the concept shows the porous and permeable nature of the boundary between the analogue and the digital spheres.[14] Rather than marking a distinction, this boundary creates an area of intersection that facilitates transitions and the emergence of all sorts of hybrids.[15]

In the first half of the 2000s, some of these "strange hybrids" had already appeared in the real world as "analogital"[16] objects such as knitted iPhones or crocheted laptops. In the second half of the 2000s, this phenomenon gained momentum, combined

10 See https://www.addictive.tv/; for Rechenzentrum see e. g. the *Director's Cut* DVD published in 2003: https://www.youtube.com/watch?v=EcscLHMRawE – accessed: October 30, 2023.

11 This is not surprising, as visual music history shows that visual music artists always had a tendency to explore the latest developments in media technology. See Fox-Gieg, Keefer, Schedel 2012, p. 97; and implicitly Brougher 2005.

12 See reMI, *Automata Inak*. Musikprotokoll im Steirischen Herbst 2000. DVD, ORF 2000.

13 Quoted in Jarman, Gernhardt/semiconductor 2008, n.p.

14 Apprich 2016, p. 83.

15 See e. g. Thalmair 2016, pp. 39–43.

16 Kuni 2014, n.p. For the notion of "analogital" see Kuni 2015.

with a renewed interest in all kinds of 'analogue' objects, media, technologies and techniques. Or to phrase it differently: "digital felt normal,"[17] too normal, maybe, especially for those who grew up surrounded by digital technologies, while "simple stuff with objects look[ed] like magic."[18]

Since the post-digital was already dealing with the 'dirty' side of digital technology, stressing its failures as an aesthetic gain, the concept seemed to be an appropriate framework for these phenomena. It has particularly gained traction in the arts and design fields, where it is used to address all kinds of analogital combinations and hybrids.[19] For a short moment, the post-digital seemed to pop up everywhere in more or less well-defined ways, sometimes giving the impression of just being another buzzword or another short-lived hype. Consequently, sceptical voices dismissed the concept for its perceived lack of theoretical depth. But it also triggered a more serious discussion of how the concept could be used, remodelled, moulded, and expanded in a more meaningful way.[20]

Analogue technology has never been completely absent from audiovisual performances, even in the early 2000s. With the overhead projector, the Berlin based duo Mikomikona[21], for example, intentionally chose an outmoded technology that had already been made obsolete by digital presentation technologies in many classrooms and conference halls. Its intended didactical purpose was "replaced by an act of 'media misuse,'"[22] which transformed the overhead projector into an audiovisual instrument by means of an entirely analogue circuit. The resulting performances combine experimental artistic approaches with theoretical reflexion. Mikomikona investigate the "transformability of acoustic and visual signals and the effects of interference between them," by explicitly going back to the "older paradigm" of analogue vibration instead of experimenting with the "countless steps of transferal and transformation [that] are made between diverse digital media formats."[23] This choice, however, represents more than a "rhetorical dissociation from digital approaches,"[24] because "by using the possibilities offered by analogue technology, we open up a discussion on the potential of digital approaches and call these into question,"[25] as Birgit Schneider, one of the duo's founding members, puts it.

At the beginning of the 2000s, the choice of analogue media did not always indicate a critical stance toward so-called analogue and digital media. Certain

17 Nicholas 2010, p. 18.
18 Davies 2009, n.p.
19 For a more thorough analysis of the different kinds of hybrids and post-digital strategies see H. Lund 2017 and Ziegenhagen 2015.
20 For the critique of the post-digital as a buzzword see C. Lund, If the Future Is Software-defined, 2015; an important part of the serious discussion of the post-digital took place in the framework of the Transmediale festival in Berlin, starting in 2013.
21 For recorded performances see e. g. https://www.youtube.com/watch?v=SLTyXKX7gGI or https://www.youtube.com/watch?v=O1cdgQEf5IY&t=241s – accessed: October 30, 2023.
22 Schneider 2009, p. 252.
23 Ibid.
24 Ibid., p. 253.
25 Ibid., p. 252.

performers just continued to use the same equipment as before, such as the German artist Ulrike Flaig, who had been using different analogue video set-ups in her collaborations with musicians since the 1980s. Flaig is especially interested in the tension that arises from the possible failure when working exclusively with feedback, without pre-recorded material, in a live setting, as she explains in an interview. The different devices of her set-up, such as analogue video monitors and cameras, are tuned and adjusted to each other in a way that allows her to react subtly to their feedbacks and play them live, similar to a musical instrument.[26] This conscious play with the tension of failure, the willingness to take chances as to the outcome of the performances, and the engagement with the sometimes unpredictable workings of devices are elements that also characterize the discomfort with digital aesthetics. In other words, this is part of the post-digital critique of digital aesthetics that spurred the widespread trend towards re-analogization during the latter half of the 2000s. The digital realm's "perfectibility," "cleanliness," and perceived "immateriality" seemed to be "in denial of the human touch," thus provoking the reverse "need to re-introduce humanity,"[27] as Susan Hayward puts it in her seminal analysis of digital and post-digital cinema.

In audiovisual performances, this "need to reintroduce humanity" – together with the digital natives' fascination with the 'rediscovered' realm of analogue media – manifested itself in a keen interest in unplugging instruments as well as in analogue media such as celluloid film, electric video, or overhead and slide projectors. Very often, this resulted in a combined use of so-called analogue and digital technologies and blurred boundaries between the two domains. While the resurgence of analogue practices was greeted as a novel and refreshing departure from strictly computer-based performances, the resulting hybrid, post-digital approaches to audiovisual performances have now become an established practice and form a shared field with – historically analogue – expanded cinema practices such as projecting analogue film or manipulating film and/or projector in front of the audience.

Audiovisual performers were not just experimenting with a post-digital approach to devices and instruments. They also demonstrated an increasing interest in tangible objects, their materiality, the sounds they produce as well as bodily and spatial aspects of performances. The Berlin-based trio Transforma exemplifies this trend. The start of their collaboration as visual performers and video artists in the early 2000s was marked by a strong focus on exploring the potential of digital animation. However, their investigation into different forms of materiality expanded from digitally created surfaces and objects to analogue materiality, as they began to manipulate objects, costumes and masks – not only for their (performance) videos but also on stage.

26 Lund/Lund 2007, p. 89.
27 Hayward 2013, p. 106–107.

Asynthome (2010)[28], a collaboration with the French artist Yro, marks a decisive step towards an enhanced bodily and material performativity: All the performative audio and visual actions take place live on stage. In a lab-like stage setting, the performers engage with objects and matter such as earth and stones, investigating their haptic, optical, and sonic qualities. The sounds produced through the handling of materials, form a constituent element of the music. The performative actions are filmed, the images fed into a computer, manipulated in real-time and screened on-stage.[29] The audience thus witnesses a complex performative process, in which several layers of performance on stage become intertwined: the bodily presence and the interaction of the performers with different objects and matter is simultaneously presented as more or less abstract real-time investigations of surfaces, materiality, shadows, and lights through moving images, alluding to the early experimental cinema of the 1920s and 30s. In *Manufactory* (2018)[30], an analysis of the movements, rhythms and sounds of daily labour and production lines, the bodily performance becomes even more central: While only one member of Transforma handles the cameras on stage, the rest of the stage is left to dancers.

Transforma share this preoccupation with the live manipulation of objects and matter in the literal sense with many of their fellow performers. The same can be said for the work with live cameras, live sound, performers, and dancers. The challenge of identifying the elements of performativity in a laptop performance has been extensively discussed. Already in 2000, Ian Andrews dedicated a significant portion of his text on post-digital aesthetics to post-digital performance, which, in his case, was synonymous with a laptop performance. Andrews acknowledges that, in opposition to other forms of performance, the audience "can generally only guess as to how the performer is 'performing.'" Therefore, the audience is "unable to grasp whatever it is that is exclusively performative about the performance."[31]

There seemed to have been a "need to re-introduce humanity" not only to the sounds and visuals, but also to the performances and performers themselves. The manipulation of analogue equipment and instruments usually implies a more physical action than simply pressing laptop buttons or handling a touchpad. Many performers, however, opted to take it a step further and collaborate with dancers.[32] And even laptop performers become increasingly aware of questions of bodily performance and often meticulously curate their performative appearance. The Hamburg-based duo *incite*, for instance, have established a relatively intricate set-up of the screen with predetermined proportions that exactly define the spaces where the duo performs in front of the screen.

At the same time, the stronger presence of performers and performative acts implies a more pronounced utilization of the performative space. The latter is defined by the execution of the performative acts and inhabited by the audience, who shape

28 See http://transforma.de/projects/asynthome/ – accessed: October 30, 2023.
29 For a more detailed analysis of Transforma's post-digital development see H. Lund 2012.
30 See http://transforma.de/projects/manufactory/ – accessed: October 30, 2023.
31 Andrews, op. cit.
32 See C. Lund 2009, pp. 170–178.

the space through the way they relate to the performances. The significance of the relationship between performance and space along with performers and audience in that space is repeatedly discussed in the context of live cinema[33] as a form of audiovisual performance. An example here is the 2008 live cinema issue of *a mínima. new media art now.*

The co-presence of performers and the audience in time and space, which, according to Erika Fischer-Lichte[34] is one of the defining moments of performance, also plays a crucial role in the concept of the post-digital. In his "Post-digital Manifesto," Rasmus Fleischer stresses the importance of physical presence, which contrasts with the continuous flood of information provided by the Internet. Co-presence becomes a political gesture, not only at public demonstrations; the presence of people in one room or location is a deliberate decision against the "digital superabundance" and the first essential ingredient for the "production of memorable events."[35]

This is echoed by the approach developed by Kim Nelson and her collaborators to audiovisual performance as live interactive documentary. These live interactive documentaries are conceptualised as two-part events. In the first part, the team performs the documentary in front of the audience: a visual performer plays and arranges short film clips in real-time, accompanied by a live narrator and musicians. In the second part, the audience is invited to ask questions and comment on the performance. The performers' response can be verbal, but might also include additional film footage.[36]

Nelson explains the concept as follows: "Humans retake the role of the algorithm, transforming interactive media from a solitary, onanistic exercise comprised of binary, pre-programmed options, to a real, social space where comments and reactions are spontaneous and infinite."[37] The aim is not just to gather an audience for the performance, but also to encourage all present to join in discussing the performance and its historical proposition in the event's second part. The latter is dedicated to the production of a shared discursive common space rather than simply providing the traditional short Q&A session as a sort of addendum. It is a "place to congregate,"[38] geared toward the creation of history as a polyvocal process.[39] Setting the bodily presence of performers and audience against the "totalising grip of the Internet and streaming"[40] and encouraging multiple viewpoints, this approach

33 Live cinema is understood here as a practice developed in the field of audiovisual real-time performances at the beginning of the 2000s (see e. g. Menotti 2015). In 2018, Atkinson and Kennedy published a volume on *Live Cinema. Cultures, Economics, Aesthetics* (2018), which explores "live cinema" as a concept addressing a live element in cinema solely in relation to discourses within a narrow field of cinema studies, without ever referring to the concept of "live cinema" introduced in the field of audiovisual performance some years earlier.

34 Fischer-Lichte 2008, p. 32.

35 Fleischer 2013, n.p.

36 Nelson 2022, p. 291.

37 Nelson 2018, p. 371.

38 Ibid., p. 376.

39 See ibid., p. 375.

40 Ibid., p. 370.

seeks to counteract not only peoples' "refracted online identities," but also the monodimensional and often polemical political views dominating online discourses.

While the example of live interactive documentary is not typical of audiovisual performances, it shows the critical political potential of performative gatherings. They involve the re-appropriation of a discursive common space, much in the same way as Fleischer stresses the importance of occupying a performative space. According to him, "a post-digital sensibility of music comes with an inherent questioning of the ownership of the spaces where music takes place."[41] This is particularly relevant for audiovisual performances that take place in our neoliberal context where more and more (public) places and spaces are being confined, commodified and commons disappear. The conscious work on performative aspects such as place, space, and the relationship between performers and audience, as exhibited in Kim Nelson's work, is thus one method for audiovisual performances to unfold the critical potential of the concept of the post-digital. Additionally, the deliberate use of analogital combinations as described earlier bears also witness to a post-digital state of media critique, or to phrase it differently: "If post-digital aesthetics consists of digital and non-digital DIY practices in a media world ruled by big data, then it is easiest to think of it as criticism of semantic capitalism and its innovation ideology."[42]

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41 Fleischer, op. cit.

42 Cramer, op. cit. 2014.

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