

META-CURATING: ONLINE EXHIBITIONS QUESTIONING CURATORIAL PRACTICES IN THE POSTDIGITAL AGE

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ABSTRACT | Curatorial activities provide (infra)structure and meaning to artworks through the selection and combination of different pieces and their public display. Therefore the way context is added shapes people's perspective towards art. (Post-) digital art and online exhibitions come with specific constraints concerning curation and have a potential to overcome the hierarchies between curators, artists and visitors. In discussing selected digital exhibition formats from the 1990s until today, the article illustrates how the genre has evolved in response to technological changes and concepts of democratization as well as user involvement. Looking at the online exhibition "UN/NATURAL SURROGATES" (2019) the article opens up a perspective towards meta-curating that allows to conceive (online) exhibitions as a means of reflecting on curatorial processes in the postdigital era.

KEYWORDS | curating, postdigital, exhibition/presentation, digital art, metadata

"Literacy seems to be slipping away, yet it is critical to our future."¹

Introduction

Digital technologies and the Internet have created completely new possibilities for artistically as well as curatorially exploring a topic. Regardless of the curation's purpose, be it the display of a genuinely digital artwork or a digital framework for art, digital exhibiting expands the curatorial work with regard to its modes of production, presentation and reception. Curatorial practices in a broader sense are geared towards creating structures in fields where artifacts or content require interpretation. This has traditionally applied to the arts, but nowadays it is relevant wherever a large amount of information aggregates. Curating is a decisively privileged work, selecting and arranging objects, adding interpretative layers, and thus mediating topics or artworks to the public. A curator's position is that of a gatekeeper. One of the most

important values of curatorial work therefore can be seen in placing artworks in a cultural-scientific, art-historical or philosophical context – shaping their relation to the world, so to speak. Contextualizing an artwork in terms of its interpretation requires more than just affixing a label to a nearby wall. The very location of the exhibition already adds meaning to an artwork and affects how it is experienced and understood. Using the Internet to display exhibitions involves at least one more "actor"², apart from the users, curators and artists involved in the process: the digital technologies and the experts able to operate them. The constant change the Internet is undergoing in this context keeps forcing the curatorial practices facilitated by it to continuously adapt, reacting to and questioning its conditions. But how can curatorial practices address these transformations? Taking a look at postdigital art might be helpful here, as the genre shows how the constant transformation of digital technologies has become an indispensable thematic part of the artworks. Comparable to so-called postdigital art practices, which are generated through digital methods, but not necessarily

mediated digitally³, postdigital curating allows the subjects involved to critically reflect on processes of digitization by applying curatorial strategies. Furthermore, the reflective impetus of postdigital art can also be turned upon the practice of curating. In this paper, we suggest using the term *meta-curating* to describe a curatorial practice deconstructing itself in order to understand the manifold ways in which curation shapes artworks and meaning, and produces hierarchies. The term was introduced in 2010 by the curator Paul O'Neill⁴, but has not been widely used since then. This paper traces the history of selected online exhibitions to understand how the interaction and interdependence of users, curators and artists have evolved as a reaction to the development of digital technologies and the Internet. In addition, we hope to document the central turns and shifts in the curatorial activity with regard to power and sovereignty of meaning, and elaborate upon the concept of meta-curating by presenting the use case of a postdigital online exhibition.

From curating to postdigital curating

Writing about curation is challenged by the fact that the activity can take on very different forms and is subject to constant change. In addition, its meaning has expanded dramatically through time, and the contexts in which curating takes place have become highly diverse. Therefore four domains need to be clarified in order to deal with the topic: (1) Setting: *Where is curated?* Is it a museum, a gallery, the Internet, or a temporary exhibition space? (2) Purpose: *What does the curation try to do?* Is it committed to education, sale, or artistic presentation? (3) Application Field: *What is curated?* Programs, artistic, technical, or historical artifacts/objects? (4) Actors: *Who is curating?* Is it museum employees, freelance curators, artists, designers/computer scientists, or a machine? Despite the variety covered by these conditions (and combinations thereof), all forms of curation seem to share one feature, that is, their unidirectional structure – especially when the term *curare* is taken literally: a curatorial instance is *taking care of* an artistic object in order to present it to the public. This structure provides a hegemonic orientation, a long criticized problem which is again emerging as an object of concern. The power of adding meaning to an artwork via a certain exhibition display is vested in curators – who are often primarily responsible for an art exhibition – since the late 1960s, a period which pushed the relationship between artists and curators to one being continually fraught with conflicts.⁵ Since curators have not only assumed the professional role of preserving artworks

and researching their historical context, but have also begun to stage exhibitions and thereby create narrations for the works they present, the boundaries between curatorial and artistic production have become blurred. The issues in that conflict refer to the power of interpreting the artwork – including the many actors involved – on the one hand, and the (artistic) value of the exhibition as a whole compared to the individual pieces, on the other. Therefore, time and time again, artists have demanded that curators be dismissed from their role or took over the curatorial responsibility in exhibition work themselves, either to maintain sovereignty in contextualizing one's own work, or to pass over the gatekeeper(s). The artist Daniel Buren, for example, complained on the occasion of documenta 5 in 1972 that exhibitions no longer tended to exhibit artworks, but rather themselves.⁶ In 2003 Jens Hoffmann, an exhibition organizer, initiated the project "The Next Documenta Should be Curated by an Artist", supported by artists such as Marina Abramovic, Tino Sehgal, or Lawrence Weiner.⁷ In 2017 the critic, media and art scientist Stefan Heidenreich declared the curatorial practice to be undemocratic, authoritarian and corrupt. While selecting an artist, artwork or an exhibition space, curators do not provide the public with reasons for their decisions, or elaborate on the numerous other actors involved. Heidenreich therefore demands for a more democratic exhibition practice by integrating the audience into curatorial procedures. In order to do so, Heidenreich reflects on radical measures such as having art viewers vote on exhibition programs via social media.⁸ All these reactions indicate various assumptions: Not only do they confirm the significant status curatorial work possesses within the art field, they also show that the practice is often carried out and understood in very distinct ways, probably depending on one's professional, institutional or sociocultural background. The artifact(s) to be displayed or the spatial conditions also determine these attitudes.

The spatial frame always defines the conditions under which artworks are to be read and opens up new perspectives on the pieces. Mostly, this is about architecture and time (conditions) linked to the institution that is part of the architecture. The Internet has completely changed the criteria for space and time in exhibiting. In the 1990s, when the Internet became accessible to private households and was commercialized, people hoped that a place of and for democratization would arise – including a space for which a high level of recognition for digital arts would be achieved.⁹ But the Internet was not able to fulfill those hopes, and did not replace classic art institutions as exhibition spaces – a fact that early net art protagonists had to acknowledge, as the curator Anika Meier points out in her curatorial introduc-

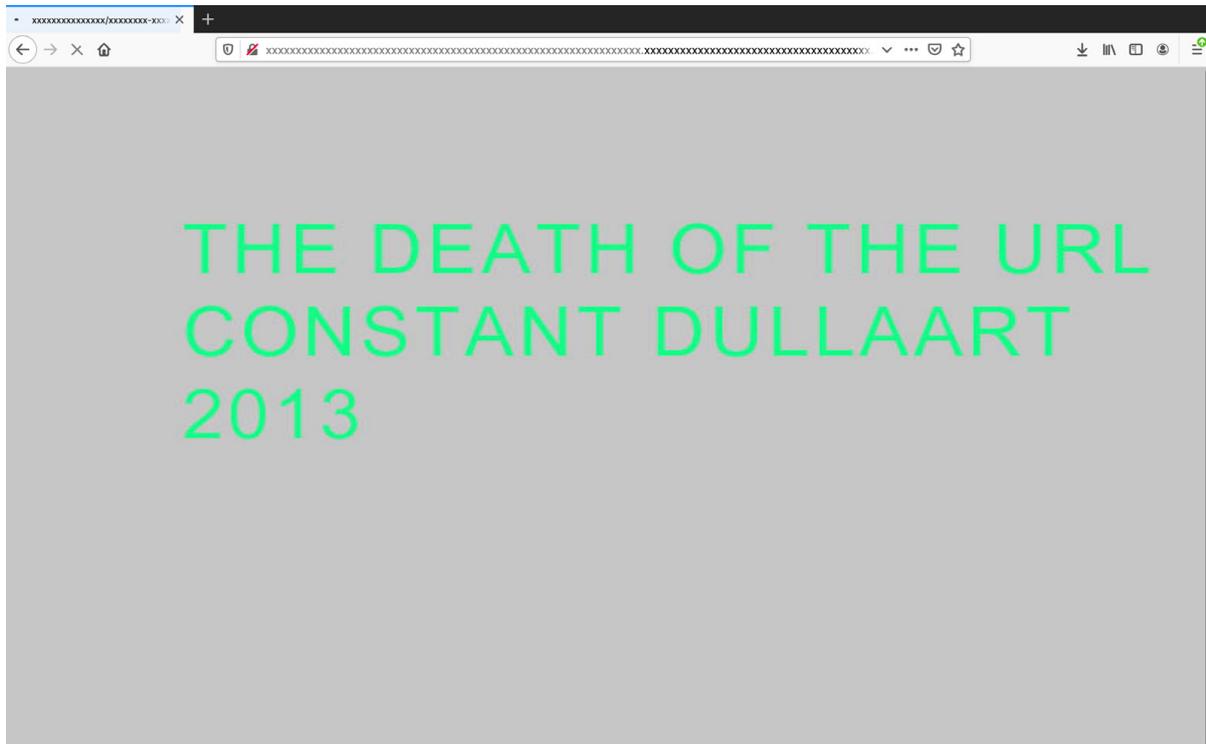


Figure 1, Constant Dullaart, "The Death of the URL", 2013, website (screenshot)

tion to the exhibition "Link in Bio" (Museum der bildenden Künste Leipzig, 2019–2020). Instead, a new generation of artists reacting to the Internet through their art emerged – inaugurating the genre of 'postinternet art'. Following Meier, this form of art was characterized by the fact that it had been created for physical exhibition spaces once again, rather than being displayable on browsers only – which was typical of early net art.¹⁰ This new generation of art, which portrayed an ongoing digital unease by examining digital pop culture as well as standards of commercial platforms and the web mainstream, is also described as "post Internet utopia art".¹¹ This leads to the question of whether, in a utopia of curating, the standards of digital platforms, which merely simulate participation and creative freedom, have already been deconstructed and have led to a new form of curatorial permeability.¹² According to the curator Domenico Quaranta, the web as a canvas to write on has disappeared "[w]ith the massive move to social networking services". Quaranta continues that setting up a homepage had been comparable to setting up a home: any decision you took to construct your house belonged to a process of appropriation. In presenting anything – be it art or your everyday life – through the modularised structure of blogs or social media channels – you own very little of the content you post and only have few design possibilities.¹³

The URL, originally signifying the uniqueness of a website, represents an anachronism because the Internet today is characterized by largely uniform aesthetics due to the power of a few large companies. Programs offering modularized website editors supply a network upon which one is immediately dependent. In constructing a website from scratch, the only connection to the net is the domain, represented by the URL. "[T]he URL is powerfully presented as a sentimental cipher, suggesting a freer Internet from the past, where software companies were less involved in mediating our search habits,"¹⁴ writes critic Louisa Elderton in an article on Constant Dullaart's work "The Death of the URL" (fig. 1). The piece – a URL consisting of 38 x's, followed by the porn domain name .xxx – addresses the nostalgic moment of typing in a website address. By exclusively using the same letter many times, it emphasizes the interchangeability of web content as well as the increasing meaninglessness of a concrete web address. The work comprises both: fragments of a past Internet culture as well as needs and usage behaviour towards contemporary net.

Reflecting on digital technologies does not mean that postdigital art practices portray a history of the digital. Instead, they become material in the form of resistance, out of a critical attitude towards the effects of the digital

on the way we live and interact. Postdigital curating can take up this momentum by considering the potentials and limitations, i.e. the affordances, of each interface at the same time. Returning to the example of the URL, exhibitions that are not embedded in or shown through social media channels but are displayed as autonomous websites may elude the mechanisms of commercial companies that coin and/or control digital infrastructure, along with its access and aesthetics. But at the same time, these exhibitions are more difficult to find and cost more effort and require expertise to create since they are often built from scratch. Discussing the Internet always requires a broader discussion of digital technologies. Therefore, postdigital curating always needs to include the perspectives on the hardware as well. Comparable to so-called postdigital art practices, which are generated through digital methods, a practice of postdigital curating in this vein can critically reflect on processes of digitization by applying curatorial strategies.

Postdigitality challenging the curatorial

The postdigital age is often understood as the phase following one or more upheavals evoked by processes of digitization as stated by Egger et al.¹⁵ Digital technologies, being an integral part of cultural transformations, do not only reconfigure the way in which curators approach exhibiting, they also produce constant changes to the artifacts being exhibited and thereby shed new light on the process of curating.¹⁶ Curating thus participates in an open process of negotiating cultural artifacts. From this perspective, the curatorial activities themselves, seeking to bring symbolic order into loose structures, prove to be a phenomenon that has to be perpetually aligned. This points to the postdigital aspect of curation considered by Cramer¹⁷ and Jandric et al.¹⁸ who describe the postdigital as chaotic and unpredictable. Any attempt to define the term addresses an increasing dissolution of previously precise and distinct categories, and it seems impossible to establish a new order. Taking computer technology as their starting point, postdigital art practice aesthetically renegotiate questions being conditioned by and beyond it.¹⁹ Just like these practices, postdigital curation is informed by and reflects upon digitization, which enables a receptive and creative examination of its socio-technical specificity.²⁰ Postinternet artist Marisa Olson describes her artistic work in terms of a media specificity that refers to the Internet in two ways: (1) it is characterized by always being in the (social) state of “shortly after” a certain Internet experience; (2) it is produced in the style of the Internet.²¹ Therefore we suggest that the prefix “post” in “postdigital” should be read in that sense of “after”.

Being in the (still) chaotic state after/of digitization, the curatorial is continuously challenged to act and transform. The practice has always been subject to constitutive changes: whereas curators were once commissioned as administrators of museum collections to organize, preserve and communicate museum artifacts, the practice has developed into an activity of setting topics,²² which brought with it the tension between artists and curators described above. The curator and theorist Irit Rogoff describes the process as twofold: first, the curatorial has expanded into a practice following a neoliberal idea of work by focusing on networking, influence and finances; second, it has migrated into other disciplines, forms of knowledge and research practices.²³ This process shows a self-reflexive development marked by the repetition of the known, which instead of renewing is to be seen as rather inflationary. Rogoff therefore pleads for throwing the discipline into an epistemological crisis in order to make these knowledge gaps visible. The curatorial in particular can function as a place where crisis can be practiced.²⁴ As Rogoff puts it in her paper *Turning*, there is a need for a turn in curation that “must result not only in new formats [...] but also in finding another way of recognising when and why something important is being said. [...]”²⁵ In this context “truth”²⁶ in the sense of embracing the world’s complexity can be seen as the drive to face the crisis of reconfiguring and transcending former categories in order to shape and analyse hybrid, fluid spheres where curation is employed. This notion of truth is “in no one’s particular interest”²⁷ but rather a transdimensional perspective of enduring the chaotic and thereby complex situation constitutive for the postdigital age. In short: truth seems to be at the core of postdigital art practices – it meets the crisis by taking up a meta perspective. Thereby it gives rise to conceptualizing postdigital curation as a variety of meta-curation.

The chaotic conditions accompanying the processes of digitization force curatorial activities to address them, since every such action – being digitally played out or not – is nowadays informed by the digital and thus embedded in those conditions. Therefore, it could be said that the crisis has long since arrived at the point where new forms of knowledge need to be produced. Through digitally created exhibitions and exhibitions based on postdigital curatorial strategies, producers have the chance to question the practice itself by opening up new spaces, autonomous time frames and hybrid constellations reinforcing exhibitional experiences. This is accompanied by an examination of the specific conditions that (post)digital artworks demand for. According to Caitlin Jones, it should be acknowledged that artists who produce through the net do not all belong to the same peer group and consequently have to be treated as

individuals.²⁸ This criterion also applies to online as well as digitally aided exhibitions in general: a website is not equal to *any* website, a screen is not equal to *any* screen, and an Internet connection (that has to load a set of data to display a website) is not equal to *any* Internet connection.

When online exhibitions first arose with the euphoria of early Internet in the 1990s, the community strove for collaborations of computer science, programming and the arts. Today we are paying for Internet access with our private data, facing exploitive industries of hardware production and ubiquitous surveillance through Internet connectivity: the many forms of desired democratization never came true. The same applies to the arts: access to artistic understanding and production is still exclusive, and art's meaning as well as (financial) success within the field is coined and controlled by few. The practice of exhibiting online could have undermined these dynamics of vertical distribution, and could have established new structures. But as we discovered during an interview study with postdigital artists and curators, the concept of the digital exhibition has not been able to prevail in the first place. The interviewees cite numerous reasons: such formats and their audiences are too often oriented towards niches (and niche topics); museums are still too conservative about artworks as auratic and sacrosanct artefacts; there is an overall lack of interest.

I believe that there is a certain scepticism [... about online exhibitions] among my management or colleagues. [... An online exhibition] is quite a lot of work to develop and supervise, to moderate. And then there is the fear that some racist, pornographic [...] content would be brought in. (Curator, Museum for Contemporary Art)

I personally have not yet seen any reason to deal with online exhibitions. (Director, Media Art Society)

[Online exhibitions] all fail because the audience is simply too small and too niche. (Director, Media Art Festival)²⁹

At the same time, these attitudes conceal the above-mentioned singularity of each exhibition (on the web), and show a tendency to generalize: the unique meaning of each exhibit is left out. All in all, this demonstrates an unbroken belief in the narrative of the original and its supposedly auratic charisma. The reasons given can be regarded as symptoms of the chaotic structures in the postdigital,

which in many cases seem to promote a withdrawal into safe, less complex spheres. Online exhibitions, however, have the chance to create symmetries between art and the Internet, to combine accessibility, horizontal sovereignty of interpretation and multiperspectivity in a transparent and experimental way, and to reveal their significance for culture. Online exhibitions would thus give meaning to the opaque nature of the postdigital insofar as they create moments of order.

A thesis-based insight into the history of online exhibitions followed by three statements

To understand the meta-curatorial potential of postdigital curation we discuss five prototypical cases of online exhibiting from the 1990s to today, supplemented by one recent example curated by us and our colleagues. The argumentation is guided by the aforementioned conditions of curating: *where, why, what and who?* If we go back to the beginnings of online exhibiting, we cannot avoid addressing Eva Grubinger's installation-based software work *C@C – Computer Aided Curating* (fig. 2). It may not be a decidedly Internet-based form of exhibiting, but it anticipated Internet structures in terms of aesthetics, production, and reception. Grubinger, who is an artist herself, designed a program that invited other artists to take over the role of the curator by visually linking their own work to those of other artists. *C@C* provides an infrastructure that connects artists and allows them to present their work without depending on institutional space and selection³⁰, and thus creates an innovative exhibition site. Furthermore, the emerging network of selected and chosen artists remains transparent and aims at bypassing the principle of individual authorship in an exhibition. A designated area allows the public to give feedback on the arrangements. The exhibition practice presented here opens curatorial production to a selected public and emancipates them from a hierarchical structure that bundles responsibility in one person. Another novelty was the editing function, which allowed artists to link and move images, sound and text in a variety of ways using editing tools. However, the network could not be accessed via the Internet – it was only accessible when a computer was equipped with the appropriate program.³¹ However, the exhibition arguably fulfilled comparable conditions to a web-based show: it was accessible via an interface from different – but not location-bound – places and had a network-like quality due to the participants' connectivity. The work has been exhibited several times, most recently as part of the exhibition "Berlin, Zentrum der Netzkunst – damals und heute" at panke.

gallery.³² Visitors could not add any new artifacts to the installation, but were able to experience the reconstructed work in a restricted format. In this context, *C@C* transforms from its original function as a network to an artistic object of its own functioning, thereby turning into a historical testimony, as well.

In 1999 the artist Cornelia Sollfrank commissioned four programmers to each develop a *net.art generator* (fig. 3). They wrote four programs, whose main differences lay in their being text-oriented or image-oriented, in the complexity of the images that were to be generated, and in the search engines that were involved. The only generator still running, *nag_5*³³, is a simple, rather old-fashioned website where users can choose an artist pseudonym, their artworks' title, the number of images to be composed from the Internet, and the pixel dimensions and file format of the final output. The resulting works are documented and exhibited in an online gallery as part of the website. While Grubinger's approach primarily aims at artists' participation, Sollfrank offers technically mediated access to creative practices to anyone, no matter what kind of background they have. With *nag_5*, any user can become part of the process of generating art. The users share their creative potential with various entities: the algorithm of the generator itself, the Internet (including its human and non-human components), and the coincidence of date and location of creation that determine the algorithmic composition. Sollfrank's and Grubinger's works can both be conceived as full-fledged works of art. At the same time, they both have the character of exhibitions, because artistic forms are created and presented as part of the framework. Any user, whether with an artistic background or not, can create these artworks. Both works open up to a process of shared decision-making, thus putting into question the once exclusively curatorial task of selecting. Here, the curator (or rather, the artist) initiates a process by providing an artistic-curatorial framework through the idea of a program. Both examples strikingly show that the approaches to questioning curatorial practices result from the field of art production rather than from the curatorial, but nonetheless open up room for reflection on postdigital curation.

The omnipresent accessibility of the Internet demands that online exhibitions stick out from the everyday experience of the Internet, on the one hand. On the other, it can also lead to the wish to please the audience, and therefore to adapt common Internet aesthetics, which are characterized by velocity and novelty. This carries the danger of incorporating economic and marketing strategies, which dominate the Internet today, into exhibitions. The (technical) interface usually forms the connection between the Internet and the user, the online exhibition and the audience. In addition to

classic screens, VR glasses can be another way to experience born-digital exhibitions, because they involve the whole body in other, often more intense ways than a single computer screen. Creating eventful moments through the exhibition setup can be a strategy to stand out against everyday browsing experiences on the Internet.³⁴ According to Martin Seel, an event ("Ereignis") is unexpected in its occurrence and bears the potential to change the meaning of a specific situation.³⁵ By opening up decision-making processes in a way that allows a potential audience to productively contribute to the exhibition, curators initiate the concept of eventfulness through participation. Nowadays it is worth discussing whether participation produces an appealingly distinctive experience, since postdigital Internet experiences are always structured by participation processes: "it needs to be questioned if the demand for participation [...] is only an affordance of the overall postdigital aesthetics, fulfilling its own demand, namely, to participate in an aesthetic rather than in a decisive manner."³⁶ Opportunities of participation used to be a stimulus for users to partake in the content design of websites (or exhibitions, respectively). Today, they are an overused feature, which is strongly prefigured by technical and design-related frames, and leaves hardly any freedom for actual participation. However, as stated above, chaotic structures often evolve in the wake of transformative processes, and are an essential characteristic of the postdigital. With the following example we present an exhibition format in which users are invited to bring meaningful structures into the seemingly unsorted content of a medium (like YouTube), in turn creating a meaningful moment. Since 1997, the curator Robert Sakrowski, who specializes in computer net-based art, has been operating the platform *CuratingYouTube.net* (fig. 4). Using the platform, one finds grid-based galleries and exhibitions as well as a curatorial tool, the Gridr, to collage YouTube videos and stage them in a design of squared tiles. The application allows users to select a name for their piece, show a YouTube video or accumulate up to nine of them by typing in a URL or search. The Gridr offers the opportunity to test one's own creative potential within a very limited framework, but only with the input of the users. It aims at translating the YouTube platform (with its own system of classification, which is largely opaque) into another very simple and conceivable structure. Involving the audience as active users in curating YouTube videos also mirrors the aesthetic of the algorithmically driven platform.³⁷ From this perspective, curatorial practices themselves get to be defined as acts that are being shaped by networks, while at the same time retroactively engaging them.

While *CuratingYouTube* can be read as a critical comment on a society that constantly produces content,³⁸ the platform *VVORK* (fig. 5), created in 2006, offered curated

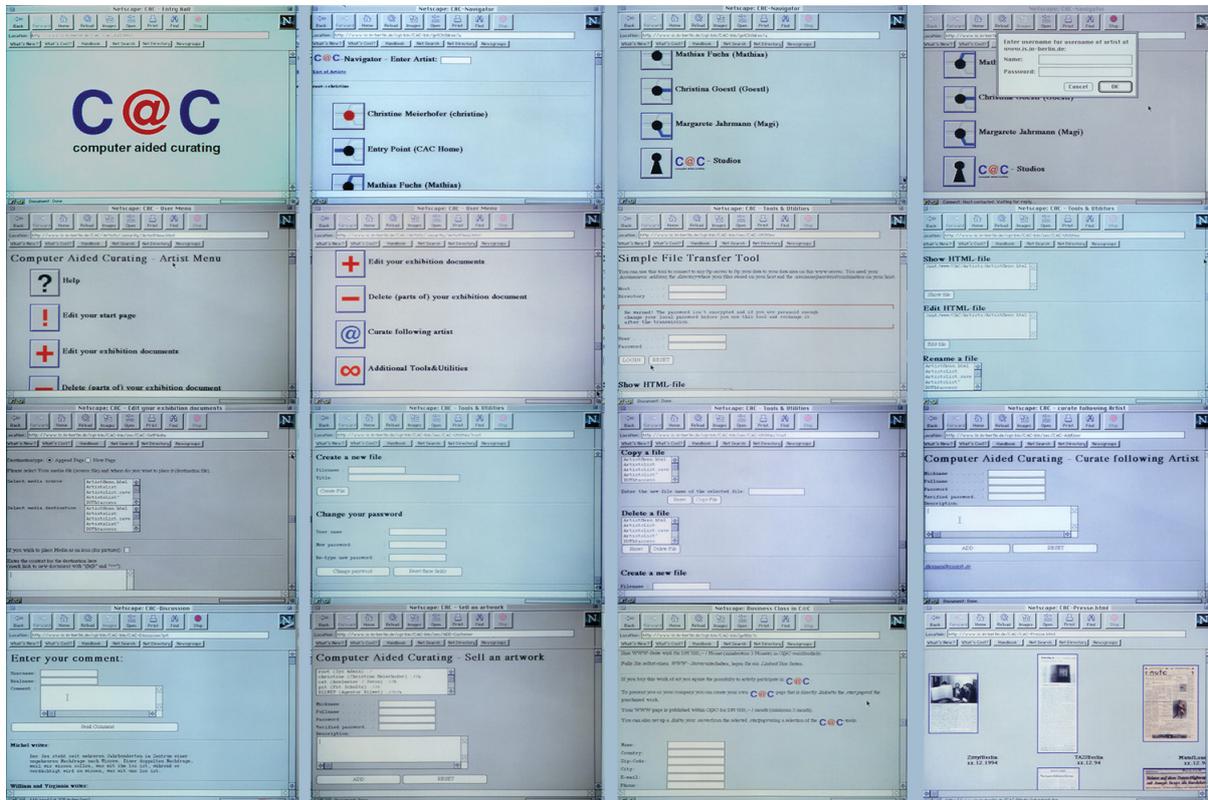


Figure 2, Eva Grubinger, "C@C – Computer Aided Curating", 1993, program (@ Eva Grubinger)

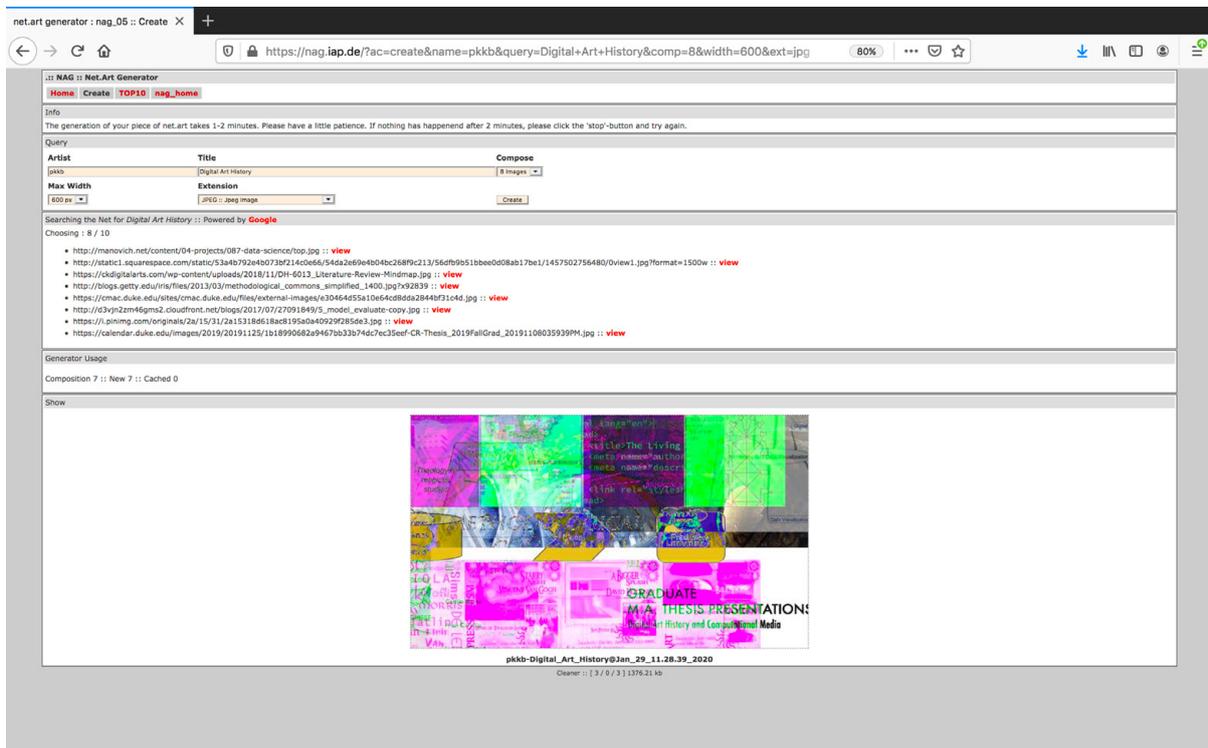


Figure 3, Cornelia Sollfrank, "net.art generator", since 1999, website [screenshot]

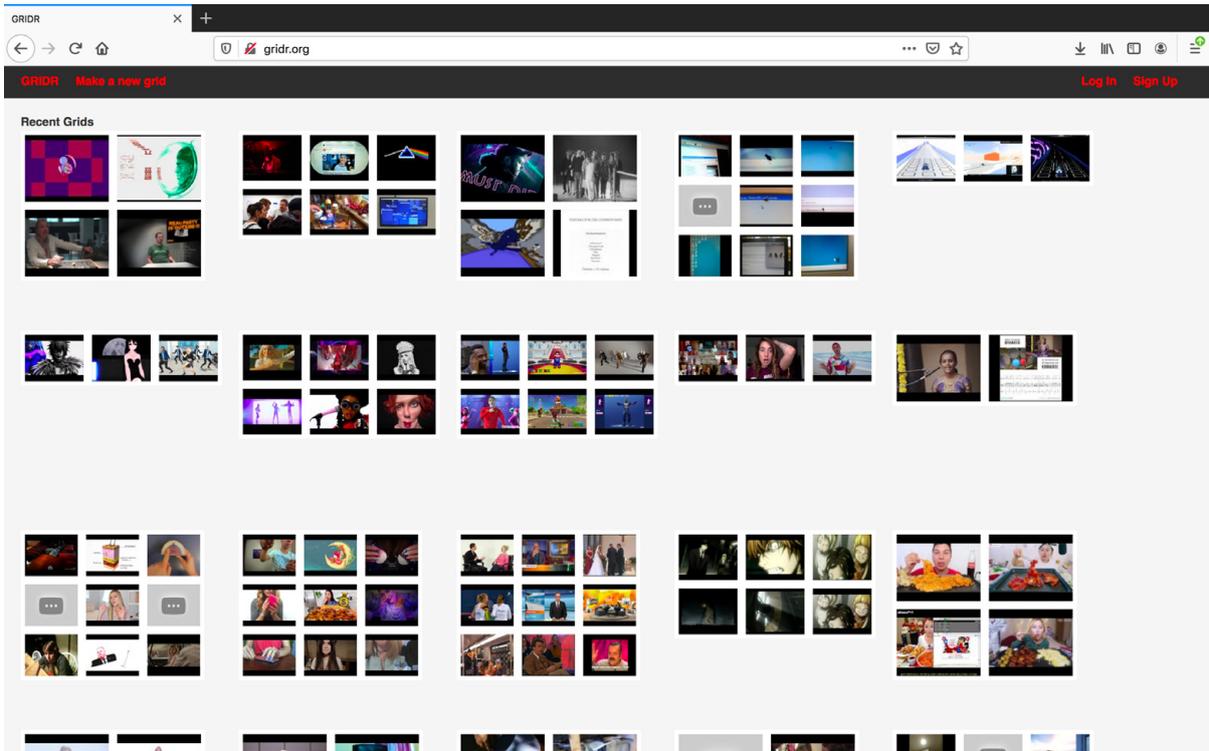


Figure 4, Robert Sakrowski, "Gridr" an open online platform by "CuratingYouTube.net", since 1997, exhibition website (screenshot)

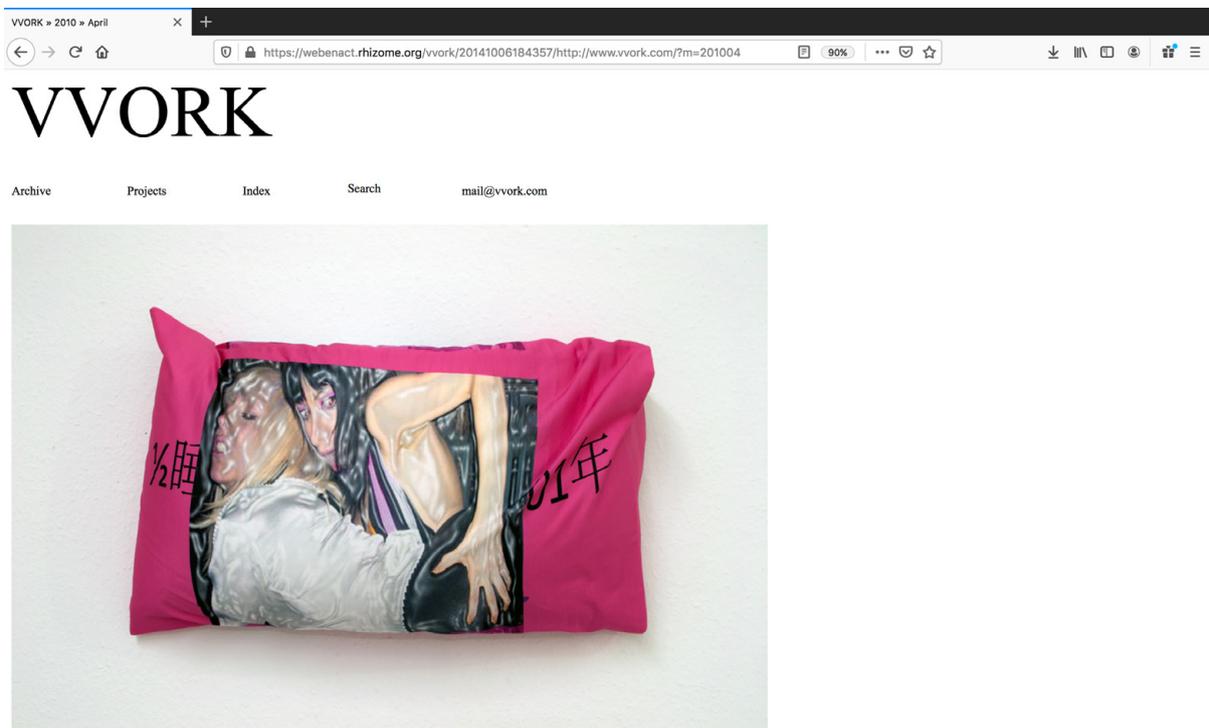


Figure 5, Yngve Hølen, "Half Asleep to the 2010 Hot One Thousand and One", 2012, artwork view on "VVORK", 2006–2012 (screenshot)

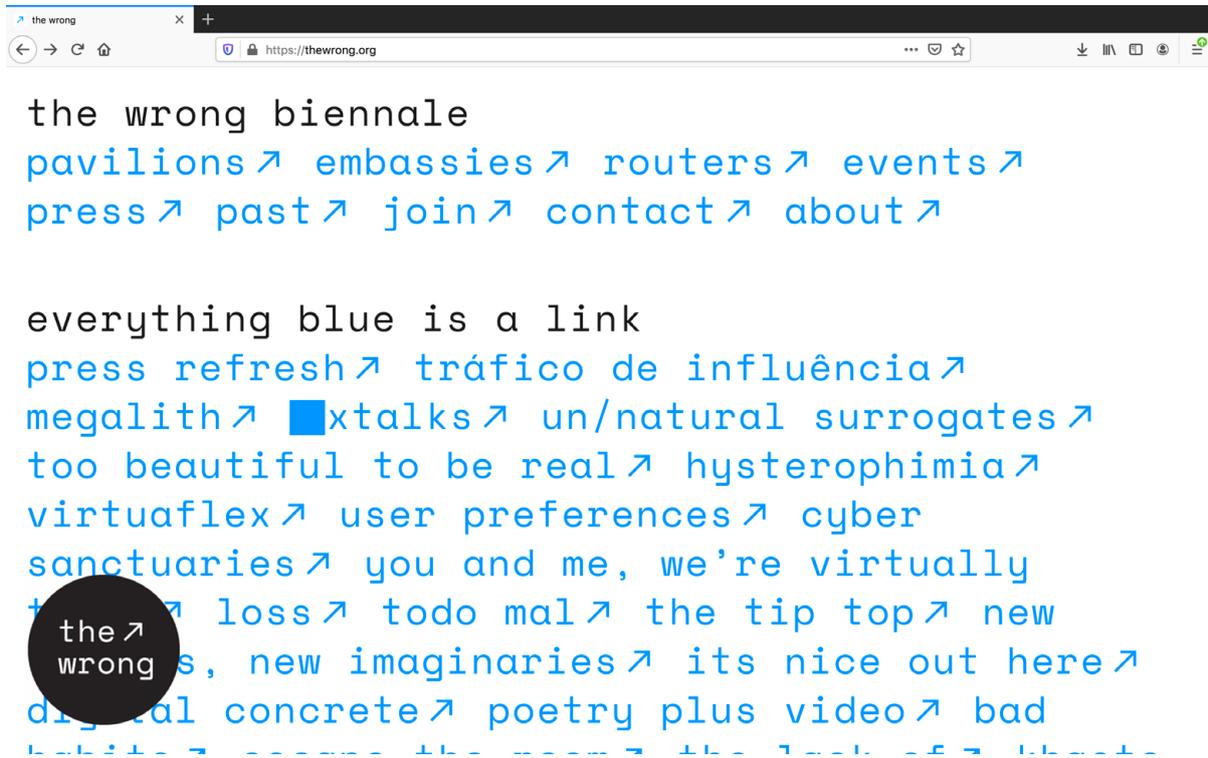


Figure 6, “the wrong”, since 2013, exhibition website (screenshot)

content to its users by means of permanent and constant editorial upkeep: the artists’ collective running the website posted images (mostly documenting physical artworks) on a daily basis, and provided them with tags to make the content filterable.³⁹ Marialaura Ghidini notes that the platform encourages a level of reflection negotiating an increasingly visual Internet and a culture of sharing and reposting.⁴⁰ Analogous to the speed at which content was produced for blogs in those times, the platform presents a curated “stream of consciousness”⁴¹ in the aesthetics of a blog itself. Thanks to the daily updated art news, it offered a practical repository of inspiration and research for curators, similar to Instagram today. Prominent artists such as Signe Pierce, Molly Soda or Andy Kassier use social media to discuss digital topics through their art and have become particularly well known through their presence on Instagram. At the same time, however, Instagram in particular is also used by a large number of artists – regardless of genre – to make their work accessible to the public, albeit documented. This includes limited curatorial actions. This, in turn, enables curators to detect international artists by browsing only one platform. Still, this cannot conceal the fact that the investigating curators are always bound to an output algorithmically tailored to

them and based on their own metadata. Incidentally, the fact that curatorial activities cannot take place without algorithmic implications does not reveal the meaning of what we call meta-curating. This is just another perspective of the postdigital showing that curators always have to reflect the constellations they are embedded in. However, while *VVORK* may have anticipated the aesthetics and functions Instagram fulfills for curators today, it is still rooted in a nostalgic sense of a past Internet culture: presenting its content to every user in the very same way. The blog has not been operated since 2012 but can be viewed as an archived version on Rhizome. Due to its current status as an exposed artifact freely accessible to everyone it becomes not only a historical testimony to itself, but also to the blog culture of those years and to the artworks posted in it.

The online biennial *the wrong* (fig. 6), a collaborative project begun in 2013, also bears the potential for becoming a repository for artworks, in a way quite similar to *VVORK* with its mass of condensed content. But it distinguishes itself by the fact that the content shown is submitted by curators and artists who contribute so-called pavilions, autonomous exhibition websites usually showing

web-based and digital art. As the audience is not informed about the selection criteria of the pavilions, this format is similar to traditional strategies of curating, which are outwardly largely nontransparent and exclusive. Nevertheless, the large number of pavilions presented and the absence of any reference to selection processes suggest a high degree of permeability. There is no doubt that this offer addresses a certain audience, namely people who are interested in art and have access to the knowledge or peers to build a website. *The wrong* clearly aims at providing a sustainable online infrastructure for artists and curators creating projects for the web, or with the help of digital technologies. As the format has gained a global reputation in this field, it represents an important address for digital exhibiting.

The wrong refrains from labelling each pavilion individually, taking up a retro-aesthetic that shows nothing but a list of linked exhibition titles. As a result, the website is very easy to use: each link in the list represents a pavilion, leading users to a subpage showing another list of the respective project participants. From there, the biennial links to the external website showing the individual project. The order of the pavilion links changes regularly, which minimizes hierarchical representations and presents the pavilions as equitably as possible. Considering this, the randomly displayed and ever-changing assemblage of the pavilions creates a fluid arrangement that enables contingent art experiences for any visitor, art expert or not.

To summarize the presented exhibition formats, we can identify three main aspects addressing questions of so-called meta-curating on different levels: the work *C@C - Computer Aided Curating* and the biennial *The Wrong* open up their curatorial processes to content constituting participation by an art-oriented audience. While Grubinger's piece makes curatorial traces visible by making the interlinked works transparent, selection processes at *The Wrong* remain opaque. The network resulting from the form of *The Wrong* binds together the exhibits sustainably into a loose assemblage with a global orientation. For the duration of the biennial this link becomes a dense infrastructure in the shape of the biennial website. While the platform *CuratingYouTube* and the net.art generator have the potential to more strongly bind an audience not necessarily having an affinity to art, the contents to be generated are already limited by preconfigured forms (YouTube videos, the generator itself), their algorithmic ploy, the arrangement in the *Gridr* and by aesthetically pre-defined random principles. Finally, *VWORK* offers to become a potential repository for people engaged in the cultural sector. They can use the platform to access content which is independent from algorithms and

individual ploy, and presented in much the same form to anybody accessing it. By tagging its content with keywords it has anticipated Instagram's structural aesthetics. The element combining the three categories is a perspective on curatorial processes setting the foundations for a kind of curating that emancipates itself from hierarchical structures between curators, artists and audience by loosening the intertwinement, taking multiperspectivity into account, integrating random principles into the design of displays, and offering transparency on diverse levels. They sometimes only trigger encounters and sometimes only produce content to be reconfigured, or forms to be filled in. But at the same time they always critically expose curating as a (cultural) technique, which is why we define these processes as meta-curatorial.

Scenario: meta-curating questioning curatorial processes

Since online exhibiting and curation strategies have quickly evolved and professionalized in the past decades, it is unsurprising that by entering the postdigital era, which comes along with a rise of hybrids between digital and physical spheres, exhibiting and curating need to identify ways of bridging these "barriers". This could, for example, be achieved by emulating physical elements in a digital environment and/or by transforming praxis into a tool for reflecting upon the curatorial potential of postdigital exhibitions. One way of understanding the actions of users during an online exhibition could be to trace their movements or the intensity and duration of their visit in a curated space. This includes highlighting the visibility of people's corporeality in the digital realm to generate a feeling of copresence, as well as illustrating their (digital) movement/behavior in a persistent way. One exhibition developed to experiment with visible user traces as part of an online exhibition space is the exhibition *UN/NATURAL SURROGATES* curated as part of the research project "Postdigital Art Practices in Cultural Education" at Potsdam University of Applied Sciences. The exhibition "explores the effectiveness of digital environments and their affective potential. It creates a place that, in the format of the garden, offers the opportunity of recovering in the face of art as a critically reflexive individual"⁴². The exhibition pursues scientific goals in order to identify potentials for cultural education by applying an experimental approach to research.

The scenography of the exhibition allows the users to immerse themselves in a digital garden atmosphere. This is emphasized by the aesthetics that show previews of the exhibited web-based art pieces in a black space, which

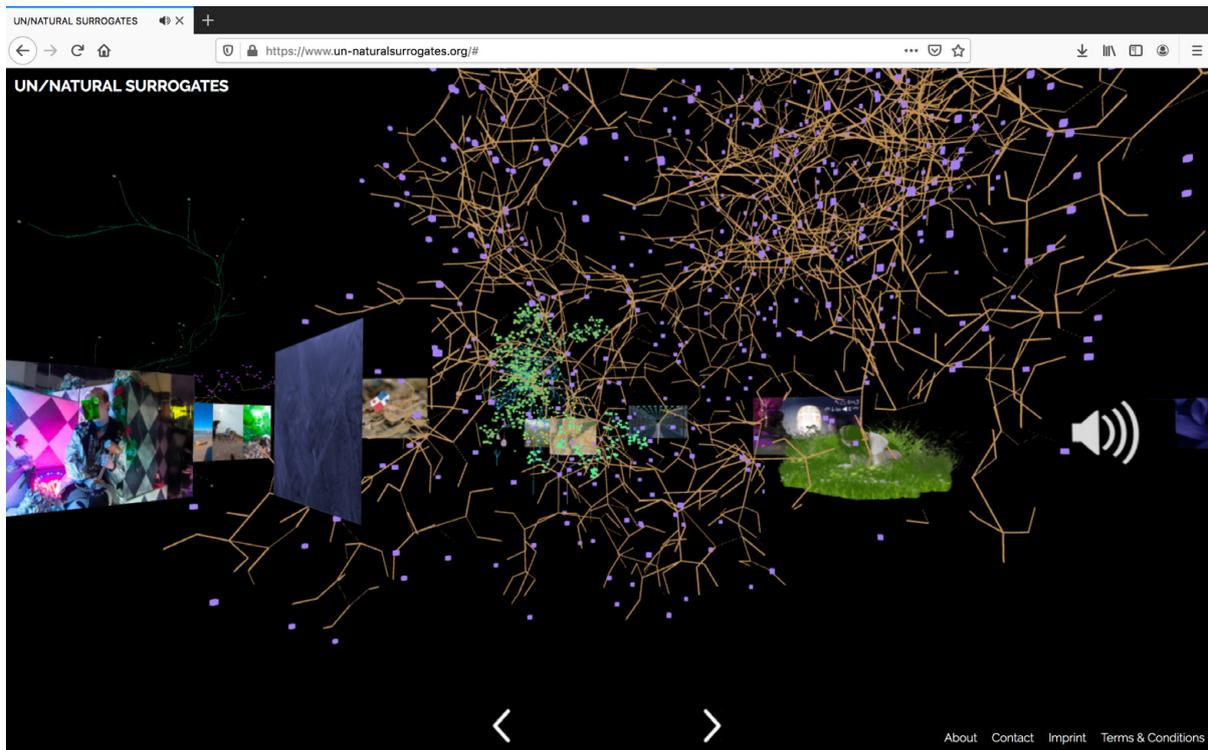


Figure 7, PKKB, "UN/NATURAL SURROGATES", 2019, exhibition (screenshot)

contrasts the idea of the white cube (well known from physical galleries and museums) with the dispositif of the cinema. The users' attention gets driven away from their own physicality, increasing the possibility of perceiving the shown pieces and the given infrastructure. This effect is intensified by the fact that users have to zoom into the previews in order to get to the subpages showing the actual exhibited works. The aesthetic approach is supported by the idea of transforming oneself into a part of the exhibition by generating a plant originating from a person's browser data.⁴³ This allows people to provide a unique element to the exhibition, telling others that they were or are present. The individual plants are meant to grow and develop according to the time spent in the exhibition and the paths a visitor has taken inside. It is a way of leaving a trace – for oneself and others – and thereby also of creating a sense of copresence.

Online exhibitions typically struggle with the fact that the visitors or audience can only be imagined by people, but don't become visible for them. Even though metadata from visitors' computers is collected by curators of such exhibitions, this information normally is not shared with the visitors: neither the person giving their data, nor others can gain such information. When thinking of pushing online curation to a meta level, the first step therefore should be

to highlight and share information about the collected metadata in a perceivable way. The aforementioned exhibition invites its visitors to donate their data to the exhibition – with the benefit of persistently participating in it.

To strengthen the individuality of the visit, the exhibition space allows for a high variety of user paths, organized in the manner of a Wunderkammer or Cabinets des Curieux⁴⁴. While the concept of the Wunderkammer reifies colonial hierarchies of power by arranging artifacts of different cultures as curiosities to be discovered in a conglomerate of (partially unstructured) objects, we decided to transfer this curatorial practice to postdigital art, which tends to be understood as inferior compared to other art genres and mirrors the described chaotic messiness of the postdigital age itself. Therefore the curatorial decision is meant to allow people to discover the various aspects of postdigital art as well as to find their individual way in making sense of (and structuring) the chaotic. The different paths are shown in the behavior of the digital plants generated by the visitors, making them not only a trace of people's presence but also a signifier of the manifold ways of addressing and experiencing the exhibition. People can follow the traces of others and also learn about their behavior's influence on the plant growth, thereby becoming able to exert intentional influence. In doing so, they become co-cura-

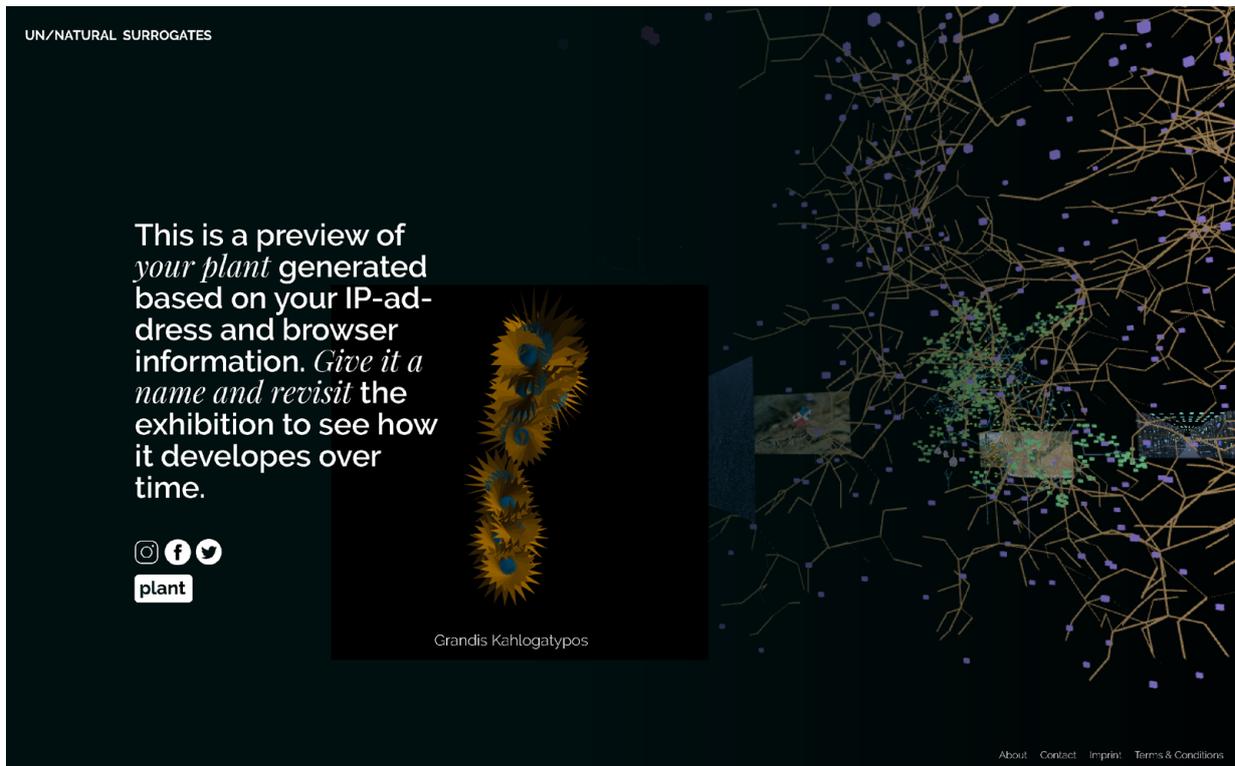
Be part of the online exhibition - *donate data* of your browsers specification and IP-address in order to *generate plants* for a virtual 3D garden. Over the course of the exhibition they will *grow, blossom, age and die*. All data is anonymous and exclusively used for the plants properties.

agree

Collecting data to generate new plant

IP-address	xjahj1nwkdsmk234n321
platform	MAC OSX 19
browser	Chrome
language	en
timecode	09:55pm CET

generate plant



Figures 8; 9; 10, PKKB, "UN/NATURAL SURROGATES", 2019, mockup views showing the participatory level of plant generation as (open curatorial) part of the exhibition (@ PKKB).

tors of the exhibition space and shape the appearance it has for later visitors. This functions as a low threshold experimental field for including visitors in curatorial activities – only marking a starting point leaving room for future interventions into the arrangement of art pieces and the artworks themselves by the users. This would also encourage users to visit the exhibition more than once. Every reflection about the curatorial process informs the subsequent activities, making the process more fluid and flexible, thereby allowing the user to reflect on curation itself from a multifaceted point of view. This in turn enables the idea of meta-curation.

Conclusion: desiderata and potentials of online exhibitions

Regarding the evolution of online exhibitions, it becomes clear that a technology like the Internet, often associated with full possibilities of user interaction and the leveling of hierarchies, does not necessarily support such ambitions when it comes to curatorial strategies. Even though the examples we have analysed do include participatory

moments for artists and visitors, these actions are enacted according to a given, often very strict set of rules and to a (compulsory) shared process involving (non-)human actors. Experimenting with the idea of meta-curation includes the visualization of visitors'/users' activities as part of an exhibition format in order to enable curators and artists to better understand visitors' motives and interests. This carries the potential to reduce the still widespread reticence against this kind of opening, so that other actors can adopt curatorial work as well. This reticence is often provoked by fear of inept content fed in by users, or of the potential extra work caused by necessary moderation. But only when this reticence is overcome, potentials arise to decentralize curation and to involve different actors.

This could support a new understanding and reconceptualization of the term meta-curating that has not yet become a popular concept in the artworld. If the term is mentioned at all, it usually refers to the readability of metadata. We, however, understand the concept in the same way as it was introduced by O'Neill, who in his interpretation also addresses the transformation of the curatorial practice.⁴⁵ Emphasizing its creative potential, he discusses the notion

of the curator as an artist, using the term “meta-artist”. Taking into account its dialectical counterpart, he argues that the concept of artist as meta-curator, and curator as meta-artist, is grounded in works closely linked to institutional critique. Those artists had been appropriating works and rights of works by other artists to negotiate them within their own practice (e.g. Group Material, Julie Ault, Louise Lawler). Since curators have begun to put their curatorial idea or goal over the artwork – such as in large-scale shows like the Documenta 9 – the creative scope within the curatorial has steadily expanded.⁴⁶ The transgression of artists and curators into each other’s fields underlying the concept of meta-artist/-curator recurs to the conflict between the disciplines, as described above and illustrated by Buren’s exhibition of an exhibition⁴⁷, and could also be interpreted as a transdisciplinary process *sui generis*.

Applying a meta-curatorial approach to exhibiting requires a de- and re-construction of the curatorial practice. This means, first of all, that the conceptual separation between meta-artists and meta-curators must be overcome in such a way that art and curation can face each other as dialectical fields of action. Secondly, we argue for recognizing the fact that curators do have a predominantly independent interest or idea guiding them in their work. But rehabilitating the curatorial idea does not mean that the levels of meaning within an exhibition shall run vertically from the domain of the curatorial to those of the artworks. A dialectic of curation, artworks and audience demands self-reflection built in on every level. This requires an updated understanding of meta-curating, which constantly questions and repositions curating as curating, the exhibition as exhibition, education

as education, and reception as reception. In this context, the process of selecting and staging is already part of this reformation, in that curators are requested to turn their gaze away from the obvious to the edges of their practice and beyond. The presented exhibitions or artworks bearing curatorial aspects have already made a decisive contribution to this, because they problematize the practice on various levels and introduce open concepts, as demanded by Heidenreich. At the same time, however, they also partially respond to virulent requests for transparency and multiperspectivity, such as in the important current debate on restituting artifacts of cultural heritage.⁴⁸ If only because online exhibiting takes place on a fragile, often overlooked ground that is being shaken constantly, it is already triggering an ethic of curating. The online exhibition is both desideratum and potential. It is undoubtedly far from being acknowledged as a format bearing an auratic promise; institutions tend to use it as documentation of their collections or physical exhibitions, rather than creating shows out of the medium itself. As long as the online exhibition takes place on the fringes of the mainstream, however, it can partially install meaningful moments of order in the playing field of chaos, or shed a different light on curatorial processes. This already describes a form of the epistemological crisis that Rogoff demands: exhibiting on the net is still in a mode of searching for recognition, and it is of all things this lack of recognition that calls the existence of online exhibitions and their curation into question. But at the same time this lack of visibility promotes playful approaches allowing online exhibitions to fruitfully experiment with the idea of meta-curation – something to be pursued even more in the future.

NOTES

- 1 Omar Kholeif, "Hello World, goodbye World, and hello again! Looking at Art after the Internet," in *Art in the age of the Internet. 1989 to today*, ed. Eva Respini (New Haven/London: Yale University Press, 2018), 103.
- 2 The term "actor" refers to actor-network theory and is used here to describe a thing or a person being involved in curatorial processes. Technologies or algorithms are only able to "act" when initiated by or in interdependence with human actions, and therefore we did not choose the term "actant" in differentiation to the "subject".
- 3 Judith Ackermann, Marian Dörk & Hanne Seitz, "PKKB: Postdigitale Kunstpraktiken. Ästhetische Begegnungen zwischen Aneignung, Produktion und Vermittlung [Postdigital art practices. Aesthetic encounters between appropriation, production and mediation]," in *Forschung zur Digitalisierung in der Kulturellen Bildung [Research on digitization in cultural education]*, ed. Benjamin Jörissen, Stephan Kröner, Lisa Unterberg (München: kopaed, 2019), 173.
- 4 Paul O'Neill, "The Curatorial Turn: From Practice to Discourse," in *The Bergen Biennial Conference: Held September 17–20, 2009 in Bergen, Norway*, ed. Elena Filipovic, Marieke van Hal, Solveig Øvstebø (Ostfildern: Hatje Cantz, 2010), 240–259.
- 5 See Beatrice von Bismarck, "Curating Curators," *Texte zur Kunst [Texts on art]*, no. 86 (2012), 43–61. See also: O'Neill 2010 See also: Fiona McGovern: "Über den Rollenwechsel hinaus [Beyond a change of role]. The artist as curator extended version," *KUNSTFORUM International 270* (Oktober 2020), 90. McGovern states that a change to artist as curator began in the 1990's connected with an institutional critique.
- 6 Daniel Buren, "Ausstellung einer Ausstellung [Exhibition of an exhibition]," in *Documenta 5: Befragung der Realität, Bildwelten heute [Documenta 5: Questioning reality, visual worlds today]* (Kassel: Museum Fridericianum/Neue Galerie, 1972), 29.
- 7 Jens Hoffmann, "The Next Documenta Should Be Curated By An Artist," *e-flux* (2003), accessed January 8, 2020, URL: <https://www.e-flux.com/announcements/42952/the-next-documenta-should-be-curated-by-an-artist/>
- 8 Stefan Heidenreich, "Schafft die Kuratoren ab! [Get rid of the curators!]," *Zeit Online* (2017), accessed January 8, 2020, URL: <https://www.zeit.de/2017/26/ausstellungen-kuratoren-kuenstler-macht/komplettansicht>
- 9 See Pau Waelder, "El mercado del arte en la era de acceso," in *Anuario AC/E 2016 de Cultura Digital: Cultura inteligente: Impacto de Internet en la creación artística. Focus: Uso de nuevas tecnologías digitales en festivales culturales*, ed. Javier Celaya (Madrid: Acción Cultural Española [AC/E], 2016), 38f.
- 10 Anika Meier, "Link in Bio," exhibition at *Museum der bildenden Künste Leipzig* (2019–2020).
- 11 Raffael Dörig, Domenico Quaranta, "Escaping the Digital Unease [introduction]," in *Escaping the Digital Unease*, ed. eidem, (Langenthal: Kunsthaus Langenthal; Basel: Christoph Merian Verlag, 2017), 17.
- 12 See Judith Ackermann, Benjamin Egger & Rebecca Scharlach, "Curation of Appropriation Processes in [Collaborative] Creative Coding Spaces," *Postdigit Sci Educ 2* (2020), 438.
- 13 See Domenico Quaranta, "Art and the Internet 1994 - 2014. Notes and Comments," in *AFK. Texts on Artists 2011-2016*, ed. id. (Brescia: LINK Editions, 2016), 17f, accessed January 15, 2020, URL: http://www.linkartcenter.eu/public/editions/Domenico_Quaranta_AFK_Link_Editions_2016_ebook.pdf
- 14 Louisa Elderton, "Constant Dullaart," *Frieze*, no. 159 (November – December 2013), accessed January 14, 2020, URL: <https://frieze.com/article/constant-dullaart>
- 15 Benjamin Egger, Judith Ackermann & Magdalena Kovarik, "Postdigitale Kunst ausstellen und erfahren. Gestaltung empathischer Feedbackschleifen als Ordnungsmoment für hybride Ausstellungskontexte [Exhibiting and experiencing postdigital art. Creating empathetic feedback loops as a structure for hybrid exhibition contexts]," in *Transdisziplinäre Begegnungen zwischen postdigitaler Kunst und Kultureller Bildung. Perspektiven aus Wissenschaft, Kunst und Vermittlung [Transdisciplinary encounters between postdigital art and cultural education. Perspectives from science, art and education]*, ed. Judith Ackermann & Benjamin Egger (Wiesbaden: Springer VS, 2021 in Print).
- 16 See *ibid.*
- 17 Florian Cramer, "What Is 'Post-digital'?", in *Postdigital Aesthetics. Art, Computation and Design*, ed. David M. Berry and Michael Dieter (London: Palgrave Macmillan, 2015), 19.
- 18 Petar Jandric, Jeremy Knox, Tina Besley, Thomas Ryberg, Juha Suoranta, Sarah Hayes, "Postdigital science and education," *Educational Philosophy and Theory 50*, no. 10 (2018), 895.
- 19 Ackermann et al. 2019, 183.
- 20 *Ibid.*
- 21 PKKB, *Postdigitale Kunst aus der Perspektive von Künstler*innen und Kurator*innen – eine qualitative Interviewstudie im Rahmen des BMBF-Projekts Postdigitale Kunstpraktiken in der Kulturellen Bildung (PKKB). Transkribiertes Interviewkorpus [Postdigital art from the perspective of artists and curators – a qualitative interview study as part of the BMBF-research project Postdigital Art Practices in Cultural Education (PKKB). Transcribed Corpus of Interviews]*, 2018 (unpublished) 122. See also: Marisa Olson, "Questionnaire," in *Art Post-Internet*, ed. Karen Archey, Robin Peckham (Beijing: Ullens Center for Contemporary Art, 2014), 95.
- 22 von Bismarck 2012, 47ff. See also: Beatrice von Bismarck, "Curating," in *Begrifflexikon zur zeitgenössischen Kunst [Dictionary of contemporary art]*, ed. Hubertus Butin (Köln: Snoeck, 2014), 58ff.
- 23 Irit Rogoff, "The expanded field," in *The curatorial: a philosophy of curating*, ed. Jean-Paul Martinon (London/New York: Bloomsbury Academic, 2013), 41.
- 24 *Ibid.*, 43 ff.
- 25 Irit Rogoff, "Turning," in *Curating and the educational turn*, ed. Paul O'Neill, Mick Wilson (London: Open Editions, 2010), 45.
- 26 *Ibid.*, 46.
- 27 *Ibid.*
- 28 Caitlin Jones, "It's a website: the enduring promise of art online," in *Art in the age of the Internet. 1989 to today*, ed. Eva Respini (New Haven/London: Yale University Press, 2018), 82f.
- 29 PKKB 2018, 74f; 101; 214. The quotations from the interview study were grammatically adapted for better readability and translated into English by the authors.
- 30 See McGovern 2020, 90ff.
- 31 Eva Grubinger, "C@C – Computer Aided Curating (1993-1995) revisited" (2005), accessed February 04, 2020, URL: <https://www.evagrubinger.com/texts/eva-grubinger>
- 32 panke.gallery, Berlin: "Berlin, Zentrum der Netzkunst – damals und heute [Berlin, Centre of Net Art – then and now]," 04 October – 23 November 2018.
- 33 "net.art generator," accessed October 12, 2020, URL: <https://nag.iap.de/>

- ³⁴ Egger et al. 2020.
- ³⁵ Martin Seel, "Ereignis. Eine kleine Phänomenologie [Event. A small phenomenology]," in *Ereignis. Eine fundamentale Kategorie der Zeiterfahrung. Anspruch und Aporien [Event. A fundamental category of time experience. claim and aporias]*, ed. Nikolaus Müller-Scholl (Bielefeld: Transcript, 2003), 37–47.
- ³⁶ Judith Ackermann, Benjamin Egger & Rebecca Scharlach, "Programming the Postdigital: Curation of Appropriation Processes in [Collaborative] Creative Coding Spaces," *Postdigit Sci Educ* 2 (2020), 438.
- ³⁷ Marialaura Ghidini, "Curating on the Web: The Evolution of Platforms as Spaces for Producing and Disseminating Web-Based Art," *Arts*, no. 8 (3), 78 (2019), 17.
- ³⁸ Ibid.
- ³⁹ Ibid, 15.
- ⁴⁰ Ibid.
- ⁴¹ Paul Slocum, "Catalog of Internet Artist Clubs. Rhizome Archive" (2016), accessed February 12, 2020, URL: <http://archive.rhizome.org/surfclubs/>
- ⁴² "UN/NATURAL SURROGATES: about," accessed February 10, 2020, URL: <https://www.un-naturalsurrogates.org/>
- ⁴³ The plant generator is a constitutive part of the ideal exhibition design but could not be realized which is why we present a prototypical version of the website here.
- ⁴⁴ Tony Bennett, "The Exhibitionary Complex," *new formations*, no. 4 (spring 1988), 86.
- ⁴⁵ O'Neill 2010, 240–259.
- ⁴⁶ Ibid, 21f.
- ⁴⁷ Buren 1972, 29.
- ⁴⁸ Felwine Sarr, Bénédicte Savoy, "Rapport sur la restitution du patrimoine culturel africain. Vers une nouvelle éthique relationnelle," (2018) accessed February 21, 2020, URL: <http://restitutionreport2018.com/>

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