Curating with the Internet

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For more than half the world's population, the Internet is a definitive shaping condition of everyday life. Yet despite its ubiquitous and still growing influence across virtually every sphere of activity in developed societies, its magnitude is still being processed by artists and curators. To be sure, in at least a basic sense, everyone who uses a smartphone or personal computer is now a curator and archivist of sorts. Today, a significant portion of everyday work, social and domestic activity is invested in the selection, organization and presentation of vast quantities of images, documents, data, links, audio and moving image media. Increasingly, these activities take place in networked relationships with remote servers popularly metaphorically abstracted as "the cloud". Significantly, much of this networked screen-based activity is centred around strategies of selection and display that seek to attract and direct attention as a form of currency. Bordering on an obsession for some, and accelerated by almost continuous access to the Internet and digital imaging technologies, this phenomenon is particularly evident in the way that social media services such as Facebook (or WeChat in China), Twitter and Instagram are used as vehicles for presenting carefully curated yet paradoxically generic representations of individuated expression, taste, and opinion. At the extreme end, these forms of presentational filtering become bankable brands. But before we go any further down this track, we should probably ask ourselves: in what contexts, and in what kinds of ways, do these kinds of activities meaningfully constitute a form of curatorial selection? Undeniably, using technology to engage with communities of interest is as much the domain of everyday life as it is art. Indeed, certain activities clearly seek to qualify in both realms. Yet, as is the case with any ontological doubling presented through art, certain mutually insufficient characteristics—such as concept and aesthetic (Osborne 2013)—are invariably required.

This chapter will explore Internet-based and Internet-activated approaches to curating art through both established and non-traditional exhibition circuits. In some cases, as we will see, curating with the Internet need not be categorically differentiated from curatorial practices more generally. Yet, as this chapter will also reveal, there are many significant ways in which the Internet—or, to be more precise in most instances, the World Wide Web—has given rise to significant shifts in curatorial thinking and practice. Today, new curatorial approaches are emerging in tandem with digitally-activated modes of presentation and dissemination distinguished by perpetual reproducibility, multiple intersecting temporalities and materializations, and the subsidence of physical space. Accordingly, this chapter will discuss networked, distributed, and modular approaches that variously disrupt, democratize, antagonize, institutionalize—and in some cases altogether bypass—the figure of the curator. Significantly, many of these approaches are no longer necessarily connected to singular events or spaces and are perhaps better understood as omnidirectional movements between modes of conception, production and dissemination connected through the screen as a communal space. This communal space might offer either access to new

works, illuminate the existence of works understood to be elsewhere in time and space, or offer multiple or alternative materializations, versions, attributions, interpretations and representations of existing works.

Novelty, banality or transformation?

As already indicated, anybody who actively uses the Internet is now a de facto curator of sorts—especially whenever a link or content is shared with a view to recontextualizing, reconfiguring, or translating meaning. For the serious observer, however, the question soon turns to whether or not this sharing of links has brokered a deeper critical or experiential engagement. Are such activities—like so many taking place across a present that is now as obese as history is deep—meaningfully differentiated through specialization or expertise? Or to put it another way, *if everyone is now a curator, do professional curators matter?* Or do we need other kinds of evaluative tools and strategies? (We will return to this second question later this chapter.)

The last two decades have seen a digitally driven transformation in cultural production and distribution commensurate with the emergence of mechanical and photomechanical reproduction. Across countless fields of activity, websites that enable content sharing have led to the formation of both popular and highly specialized user-populated and user-generated taxonomies. Just as established institutions have opened up the searchability of their collections, so too have lay enthusiasts created and maintained sharable worlds of content. So, to rephrase our earlier question, if anyone can potentially curate connections between materials found or placed online, what are the hallmarks of professional curatorial activity on the Internet? Do we simply retool the curatorial axiology of ethics, aesthetics and politics for the digital age?

Today, the Internet is increasingly seen as more a banality than a novelty. Artists and general web users alike (united in the form of a contemporary subject that at once produces and consumes) both routinely recycle online material and repurpose the context of transmission to generate new meanings or reveal hitherto invisible contradictions. As US-based British art historian Claire Bishop has noted, for many contemporary artists, the twentieth-century strategy of appropriation has mutated to become a default form of repurposing engaged with the perpetual "reformatting and transcoding […] of preexisting files" (Bishop 2012, 438). Faced with an informational world of ever-expanding "infobesity," art can often struggle to assert cultural significance. For many observers, this condition has been glaringly apparent for some time. As US critic James Westcott put it in 2008, how do "artists working with palettes like YouTube, Google Images or porn do more than just churn the overflowing archive of easily, almost boringly, available cultural knowledge?" (Westcott 2008).

Although the task of distinguishing art and non-art in an online context is not necessarily distinguishable from the broader philosophical problem of art and non-art, it is clearly difficult to exceed arbitrariness without resorting to empty spectacle in a realm in which it is possible to scroll through dozens of images in seconds by simply swiping a finger. How do artists and curators compete with this cacophony of competing distractions? For British philosopher Peter Osborne, this situation is inherently paradoxical, for "art distracts, as well as resisting distraction [yet] is received

in distraction" (Osborne 2013,186.) Consequently, for Osborne, the artistic implications of the Internet remain unclear:

> Today, with the digitally based convergence of audio-visual communication technologies, the training ground of distracted reception has moved again, from television to the multiplying sites and social functions of the interactive, liquid crystal-display screen: smartphones and tablet computers, in particular. We are experiencing a new, much more spatially diffuse 'cult of distraction' of the internet, the social and economic — but not yet the artistic — significance of which is clear. (Osborne 2013,185.)

It is unsurprising, given the nature of the Internet itself, that much Internet-based art both employs and reflects upon practices of copying, hyperlinking, sharing, tagging and filtering. Accordingly, the way in which the Internet now forms the subject, theme and method of much contemporary art has led to a proliferation of curatorial activities that variously reflect upon, take place within, or are organised online. Moreover, peer-to-peer technologies, though which users routinely modify and re-post media objects, have further problematized residual assumptions that artists create, whilst curators select and interpret. At any rate, the currency of the professional curator is potentially augmented in an online realm. Given that professional curators no longer simply organize and arrange exhibitions but also *create* events, texts, conferences and archives —all the while attending to respective online representations thereof— the relative prestige, visibility, and influence of the curator in relation to that of the artist (notwithstanding the blurring of these roles) can be disproportionate. In his reading of German critic Boris Groys, Osborne notes that the already established mediating role of the curator as "the performer of the image" (Groys 2008, p. 85), has through processes of digitalization enabled the "curator to usurp the role of the artist" (Osborne 2013, 130).

This ascension of the curator is however far from settled. Low-cost access to tools of production, selection and aggregation means that most in the "connected world" are – theoretically, at least – now both content producers and selectors. With content filtering, once the preserve of curators and editors, now a ubiquitous activity, curators need to further differentiate their professional roles. For curatorial theorists Beryl Graham and Sarah Cook, three metaphors usefully applicable to the curating of digitally-centred works are "curator as filter," "curator as editor," and "curator as context provider" (2010, 11). Although much curating of "net-art" emphasizes the role of curator as a filter, online curating can also be differentiated in relation to technology driven variations of participatory, collaborative and discursive activities such as naming, categorising, highlighting, list making, moderating and editing (Graham and Cook 2010, 11). Many of these activities simply constitute inviting audiences to experience data streams in new configurations or contexts. Others are more transformative. In any case, clear distinctions between editor, author, publicist, designer, producer, project manager and stylist are easily blurred in online realms in which curatorial activities might range from generative to managerial roles. Moreover, this blurring further problematizes already shaky distinctions between curators, artists, archivists and audiences.

A key characteristic of much Internet-based art is that it effectively employs the same technical means in circulation, storage, display, conservation and reproduction. In this sense, the broader problem of an inseparability of form and content in contemporary art is applicable. The Internet is not simply a tool or medium but rather a *world* within which to research, conceptualize, produce and distribute works. For Canadian theorist Caitlin Jones, the laptop "serves simultaneously as the tool, the space, the product and the frame" (Jones 2012). Digital technologies also facilitate the easy remediation and simulation of existing works. A website, for example, might simultaneously present elements otherwise presented in books, films, radio programming, television, and physical exhibition spaces. In this sense, the Internet effectively flattens a replication of all other reproducible media. Meanwhile, a vast array of other human activities, from communication to relaxation to conflict, are also seamlessly flattened in a generic activity of looking at a screen and inputting information. Online, invisible technologies can *appear* to dissolve boundaries and unify distributive systems into singularly identifiable yet multitudinous networked spaces. This convergence of activities is particularly interesting for some artists and curators. Slovenian artist Aleksandra Domanovic's curatorial work, for example, addresses ways in which we consume and research culture through the screen. Flattening was the subject of Domanovic's 2009 Biennale (Dictum Ac Factum)—which comprised of a website featuring embedded images, files and clips foregrounding a circular mayhem of dynamic cannibalistic becoming. Also, noteworthy here is the online curatorial collaboration VVork.com (with Oliver Laric, Christoph Priglinger and Georg Schnitze).

Today, although still on the beginning of a presumably long incoming tide, Internet-based curatorial activities are becoming relatively more common. One example of a more recent innovative online curatorial strategy is *#exstrange*. This live web-based project was initiated by Rebekah Modrak and Marialaura Ghidini between 15 January 2017 and 15 April 2017 and used the online marketplace eBay as an exhibition vehicle for a curatorial strategy explicitly exploring relationships between artistic production, commerce and cultural exchange. Comprising a series of "artworks-as-auctions" specifically created by artists and designers for eBay, the work effectively foregrounded the eBay listing—i.e. descriptive texts, images, pricing, and categories— as both artistic and curatorial medium. Presented in discrete categories (such as Business & Industry, Collectibles, Consumer Electronics, Health & Beauty, Real Estate, and Warranty Services), this was an exhibition strategy clearly designed to reach a diverse global audience. Significantly, 102 individual "artworks-as-auctions" were created and presented during the #exstrange exhibition, and the project received critical attention in North America, Europe, and India. Of particular interest here is the way in which the exhibition was effectively curatorially positioned, produced, and disseminated within the same online platform.

Like contemporary art more broadly, discussion surrounding Internet-based and Internet-activated art often emphasizes the languages of process, participation and audience. Some participation is synchronous. Most is however asynchronous. Although an extension of more generalized art world languages, the idiosyncrasies of digitally networked activity has bred focused variants, both dystopian and utopian in tone. For US critic Rachel Green, Internet art is critically and problematically "intertwined with issues of access to technology and decentralization, production and consumption"

(Green 2004, 8), whereas for Paul, it offers a "parallel, distributed, living information space that is open to interferences by artists, audiences, and curators—a space for exchange, collaborative creation, and presentation that is transparent and flexible" (Paul 2006, 81). Despite a frequently cursory lauding, institutional acceptance of Internet art has ebbed and flowed together with corresponding levels of excitement accompanying technologically-centred social habits more generally. Sometimes snubbed, and sometimes unsustainably overexposed (Graham and Cook, 39), it is nevertheless often lacking in reflective scholarship.

In emphasizing two-way communication, the socially ubiquitous use of the Internet has naturally inspired artists and curators alike to consider communication as subject and information as artistic material. Unlike the culture of passive reception that characterizes broadcast media culture, Internet culture promotes connectivity and invites active engagement.[vi] Internet art is not simply a subset of contemporary art more broadly but a radical spatialization and convergence of issues common to art and broader culture. Consequently, it is responsive to curatorial practices that stress connectivity and invite engagement.

Some histories

Once art escaped traditional medial categories, it became more conspicuously dependent upon host contexts. Internet-based and Internet-activated art have simply extended this tendency. For Green, the horizon of Internet art is historicized to the rise of graphical web browsing in 1993 (Green, 2004). From the early 1990s onwards, rapidly changing technologies have correspondingly problematized the consistency of categorical delineations and terminologies. By the late 1990s, critics such as US curator Steve Dietz declared *net.art* to be a suitable generic term for describing works for which the network is a necessary condition. Today, the terms *internet art*, *net-based art*, *net art*, *net.art* and *web art* are used interchangeably. Meanwhile, terms such as *cyberspace* and *web surfing*, once quintessential language on the early incoming tide of Internet culture, have fallen into quaint irrelevance. One unfortunate consequence of this may be an associated disappearance of still-relevant metaphors for spatial and temporal exploration, which these older terms perhaps more emphatically implied.

Despite the way in which the World Wide Web gives rise to highly specialized networks, disciplinary configurations, and atomic micro-genres, some broader historical generalizations are still potentially applicable. Like other art histories, the evolution of Internet art is punctuated with false beginnings and lost and recuperated forms. Here, loosely determined historical trajectories are further problematized by technology-driven hype cycles (Graham and Cook 2010). Given that Internet art is highly susceptible to perceptions of dating, hype can dissipate before fuller critical understandings are formed (Graham and Cook 2010). These conditions place new emphasis on the value of timely and considered curatorial frameworks. As Italian critic and curator Domenico Quaranta notes, many early attempts to introduce Internet art to an exhibition environment were curatorial rather than artist-driven. As an example, Quaranta points to Simon Lamuniere's curatorial selection in Documenta X in 1997, for which Lamuniere was also the curator of a parallel website (Lambert, McNeil and Quaranta 2013, 26).

A consistent feature in the development of Internet art are questions pertaining to distribution and access. It is unsurprising, given the legacies of strategies developed by artists before the Internet, that many net artists seek to enter, disrupt or take control of privately controlled distribution systems. These strategies are often quasi-curatorial in nature. One historical example that exemplifies this tendency is German artist Cornelia Sollfrank's response to a 1997 Hamburger Kunsthalle call for submissions for a "net art" competition. In forming her submission, Sollfrank used a program that collected random HTML materials from the web and automatically combined them to enter 289 fictional women artists in the competition. Sollfrank's *Female Extension* was effectively activated in the moment in which the unsuspecting museum announced how many women had entered, before somewhat predictably declaring an all-male list of winners. She later adapted her *net.art generator* to commission four artists to build programs to search the web for material to reassemble distinct HTML artworks, with each *net.art generator* producing surprisingly different results.

Adequate evaluation of Internet-based and Internet-activated art demands at least some awareness of concurrent technological histories, many of which are poorly understood. Compounding this situation, much art education still glosses over technological histories. Consequently, digital historical literacy functions in tiered communities, with interpretation routinely inflected with technological bedazzlement and Luddite suspicion. As Paul has put it, "understanding of its 'backend' will always remain a fringe culture (closed system) that won't be integrated into the mainstream of (perception-oriented) art criticism" (Paul 2006). Given that this lack of engagement can "lead to work that ages poorly because it is so deeply invested in a technological novelty," it is vital to "question the logics of progress, innovation, and novelty that undergird the way technology works in our culture" (Balsom and Kholeif 2015, 287).

One challenge for curators seeking to present Internet-based or Internet-activated art in traditional exhibition environments is the problem of how to appropriately present a dynamic and interactive experience within the temporal and spatial limitations of a physical gallery. Compounding this situation, traditional art institutions and audiences often expect online work to resemble video installation. Accordingly, curators must consider what makes accessing the Internet in a gallery context distinguishable from being at home, work, or on public transport—without resorting to anomalous spectacle. This challenge is only part a larger one: how does art made with digital media technologies distinguish itself from popular mass media? Digital media are everywhere, from social media to the digital shopfronts of corporations. Given that more people are familiar with how to use the Internet than fine art production techniques, audiences are already relatively familiar with certain aspects of the medium. What, therefore, differentiates digital media as art? The short answer is of course philosophical. Digital media presented as art (like contemporary art more generally) is fictionalised in a distinct ontological realm to that of digital media more generally. This kind of literally indiscernible difference, once articulated in US philosopher and art historian Arthur C Danto's description of an "art world", is problematized in Osborne's more recent articulation of the structural liberty of post-conceptual art's fictionalized participation in the transnational network of art institutions (Osborne 2013), and US theorist Pamela Lee's inverse articulation of "the *work* of art's world" (Lee 2012, 2 and 8).

Funding for curatorial projects is often dependent on a capacity to convincingly demonstrate wide-ranging community impact or relevance to prevailing socio-cultural agendas. Consequently, curators are routinely expected to negotiate complex relationships between established artistic classifications and ideas that reach out to wider cultural fields. As Osborne has noted, the development of new curatorial strategies since the 1960s, had by the 1990s, "developed in ways largely unrelated to the critical artistic meanings of individual works — 'themed' shows of varying kinds producing loosely linked aggregates of works, without specifically artistic unity" (Osborne 2013, 104). This shift has only been accelerated with the Internet as a subject, theme and method of artistic production. Here, specialized understandings of ways in which specific elements function within a network or system, together with a sensitivity to the complexities of remediating and presenting a vast array of often disparate ideas, materials and technologies and materials into a singularly identifiable format, is an imperative for critically engaged online curating. Clearly, any consideration of the physical properties of digitally-centred artworks that does not critically reflect upon their conventions and how they behave in relation to their host culture is potentially limiting—especially given the fact that the physical properties of digitally-centred artworks are inherently mutable, emerging and superseded (sometimes even within the course of exhibition planning and execution).

Will some art of the digital era last even a single lifetime? If the "cloud" fails, where will documentation be stored? One issue that exacerbates aforementioned inconsistencies in relationships between technologically driven fashions and lagging or lacking degrees of critical attention, is the problem of good archival practice. Here, curators wishing to return to even relatively recent works face the problem of technological obsolescence. As US journalist Melena Ryzik put it in 2013, "the 1s and 0s of digital art degrade far more rapidly than traditional visual art does, and the demands of upkeep are much higher" (Ryzik 2013). In one recent exhibition, this problem was integrated into the curatorial premise. In British curator Jim Boulton's 2017 exhibition *64 bits*, the tone of dial-up modems became a historical texture. Boulton, who is committed to conserving moments in the history of Internet culture that have not yet been archived or translated to later formats, even invited visitors to bring in obsolete media for experts to transfer to current formats.

There are now several initiatives devoted to promoting, archiving and historically contextualizing Internet-based works and collections. Only a handful, however, have been established since the early days of net art. Rhizome is a not-for-profit organization dedicated to supporting digitally based art forms. Founded by US artist and curator Mark Tribe in 1996 "as a kind of bottom-up alternative to the top-down hierarchies of the art world" (Laurel 2016) and dedicated to "the creation, presentation, preservation, and critique of emerging artistic practices that engage technology" (Rhizome), it had established a relatively comprehensive online archive of net related art forms called ArtBase by 1999. In addition to hosting archived works, Rhizome's work includes digital art conservation and the updating of obsolete code. Rhizome's programming has included a diverse array of online events and physical exhibitions, including physical exhibitions at the New Museum in New York and elsewhere. Significantly, *net.ephemera*, which curated by Mark Tribe in 2002 at the Moving Image Gallery in New York, was the first major attempt to stage an exhibition about Internet art without using computers. In 2005 at the New Museum, Rhizome presented an exhibition of selections from its online archive co-curated by Lauren Cornell and

Rachel Green that included significant net artists such as John F. Simon Jr., M. River and T. Whid Art Associates, 0100101110101101.org, Young-Hae Chang Heavy Industries, and Cory Arcangel. Marisa Olsen's appointment as Curator at Rhizome in 2005 saw a shift from supporting "not only internet-based art, but all art that engages with the internet" (Olsen 2011). In 2010, Cornell staged *Free* at The New Museum—an exhibition based on law professor Lawrence Lessig's argument that that digital information should be freely available to avoid corporate feudalism (Lessig 2004). For Cornell, *Free* featured artists that "borrow, and reframe digital images—not as a rebellious act of stealing or deconstructive act of critique—but as a way to participate thoughtfully and actively in a culture that is highly circulated, hybridized, internationalized—if unevenly" (Cornell 2010). Given the spirit of the exhibition, The New Museum relaxed its usual ban on photography, and the catalogue was offered as a freely downloadable document. In 2015, Rhizome archived its influential blog *VVORK* (marking the first time an entire website had been archived) and launched *oldweb.today* (which enabled users to view archived webpages in emulated historical web browsers (Dellinger 2015). By 2016, Rhizome's *Webrecorder* tool represents a first attempt to record a user browsing sites to capture interactive features.

Post-Internet curating

> We grew up with the internet and on the internet. […] The internet to us is not something external to reality but a part of it: an invisible yet constantly present layer intertwined with the physical environment. We do not use the internet, we live on the internet and along it
> (Lambert, McNeil and Quaranta 2013, 212).

Despite living through social and political changes which are radically paradigmatic, it is nevertheless challenging to gain sufficient historical distance to evaluate the impact of these changes on artistic and curatorial practices. Despite this lack of reflective distance, we are nevertheless well over a decade into the professional emergence of a generation of artists and curators who have grown up knowing only life *with* the Internet, and consequently tend to regard it is a given or banality. So-called "post-internet" art is popularly periodized as art produced *after* the social and cultural changes introduced by the Internet. Accordingly, post-internet artists are said to work critically as entrenched 'prosumers' within the mutualized functions of production and consumption. Today, much lived experience unfolds in concert online and offline. In this sense, the Internet is simply an extension of the real. Thus, any attempt to maintain a meaningful distinction online and offline is simply motivated by a romantic yearning for their former separation. Although some artists exclusively exhibit in an online context, it is more common for artists to develop on and offline versions or representations of a single work or project. A key characteristic of post-internet culture is that distinctions between the virtual and the physical are unnecessary. Many post-internet works do not necessarily exist online but function in response with the social impact of the digitally proliferating image. Even nostalgia driven bespoke artisanal production paradoxically evokes its rejection of digital culture in digitally connected communities. In any event, many artists and curators seek to represent and access realities that exist somewhere in-between online and offline realms:

> What changed […] is our understanding of this space […] turned out to be not a virtual, abstract 'cyberspace', but an augmented version of the old,

real world. So, you can now make paintings for the White Cube and be, nevertheless, a net artist. (Lambert, McNeil and Quaranta 2013, 25).

The already unfashionable term "post-internet art" was, at least popularly, coined by German artist and theorist Marisa Olson in 2008 (Debatty 2008), and further defined by New York-based art critic Gene McHugh in 2009 (McHugh 2009-10). Perhaps most succinctly, as New York-based artist Artie Vierkant has put it, post-internet art is "informed by ubiquitous authorship, the development of attention as currency, the collapse of physical space in networked culture, and the infinite reproducibility and mutability of digital materials" (Vierkant 2010). The fact that the term itself is a cliché is further evidence of the ubiquity of the conditions it seeks to encapsulate. Given that the World Wide Web is a common means of accessing the Internet, some have suggested that it should be more called post-web art (Balsom and Okholeif 2015). In any event, the ever-increasing speed and accessibility of the technologies involved, and the sheer girth of the worlds in which art is now produced and discussed, will ensure that much the content of this text will be dated by the time it goes to print.

It is only possible to assemble a snap shot of post-internet curatorial activities in this text. London-based artist-collective *LuckyPDF*, for example, have been collaborating with artists to produce events, videos and viral projects since 2008. Interestingly, they present e-flyers at the center—as opposed to paratextual periphery— of their exhibitions. *Connecting Cities* and the *Streaming Museum* are also good examples of Internet-centered curatorial models—in this case designed to operate through large, networked digital displays. Meanwhile, Dutch-Brazilian artist Rafael Rozendaal's produces and collects animations on a dedicated website, and once translated into a traditional exhibition space, uses broken mirrors to project works in multiple spatial configurations. In 2010 Rozendaal facilitated the first *Bring Your Own Beamer* (BYOB) as a one-night exhibition in Berlin, in which many artists were invited to project works upon any available space in a physical architecture. Also, in 2010, US-based curator Ruba Katrib staged the first retrospective of Cory Arcangel, and Brad Troemel and Lauren Christiansen of Brooklyn-based collective The Jogging. In 2010, The Jogging invited international artists to send images to be placed onto images of empty walls at Sullivan Galleries in Chicago—the result, *An Immaterial Survey of Our Peers* (2010), *was* a virtual installation of an exhibition that did not occur physically. Significantly, these exhibitions relied upon audience awareness of the existence of physical and online spaces. In this sense, something of the work is understood to exist elsewhere in space and time.

In a so-called post-internet climate, an exhibition can be understood to exist concurrently across both traditional objects and in versions or alternative materializations online. This is tricky curatorial terrain, for as British theorist Nick Lambert has put it "a work that has no final version and multiple iterations can make the curator's role problematic" (Lambert 2013,15). In in an era already described by US art historian Rosalind Krauss as beset by a "post- medium condition,"[vii] artists and curators operate under the premise that "anything can now effectively be anything else" and that something formed in one medium can be readily translated into another (Vierkant 2013). This situation is many ways simply a technologically augmented extension of post conceptual art's established "complex distribution of artistic materials, across a multiplicity of material forms and practices" nevertheless capable of being expressed through "singular, though internally multitudinous work[s]"

(Osborne 2013, 110). As Vierkant puts it, artists can now "create projects which move seamlessly from physical representation to Internet representation, either changing for each context, built with an intention of universality, or created with a deliberate irreverence for either venue of transmission" (Vierkant 2010). Given that artists and curators now routinely customize works and exhibitions to suit different contexts of production and reception, it is less important what the specifics of a medium might be and more important what a work *does*. With the arrival of mass digital audiences, the process of digital transmission itself naturally becomes an extension of the work. Or, as Osborne puts it, the mode and space of transmission determines the mode of mediation, and by extension, the spatialization of the work (Osborne 2007). Consequently, it is a network of relations between various discrete materializations that creates the space of a work or exhibition, irrespective of whether the primary point of entry is understood to be offline or online.

Staging online exhibitions and maintaining archives

The Internet has transformed how culture is created, documented, and archived. How have artists, curators, galleries, museums and archivists met this transformation? It is uncontroversial to assert that all art involves at least some form of mediation, translation or transmission. Digital art exemplifies "remediation" insofar as it assumes the form of a revision whilst foregrounding a new medium (Bolter and Grusin 2000). In simply extending modern, and then contemporary art and popular culture's tendencies toward self-referencing (i.e. paintings about paint or television about television etc.), Internet artists and curators naturally gravitate toward the production of websites about websites or mailing lists about mailing lists. Jonah Brucker-Cohen and Mike Bennett's *Bumplist* (2003), for example, was designed to only accommodate a finite number of subscribers—each new subscriber bumped off whoever who had been on the list the longest. In a basic sense, works, exhibitions, and curated collections presented as lists or series of links, simply double the way in which the Internet itself is a collection of linked computers. Surprisingly, the idea that a website can constitute the primary or only site for an exhibition are rare. Despite a wholesale increase in online curatorial activity, online art is still more likely to operate in an interpretative context rather than as a primary medium for exhibition. Here, a question that applies to contemporary art more generally is again pertinent: should collections be considered as "an archive of artistic materials or a work of art?" (Osborne 2013, 91).

There are several challenges facing those seeking to stage online exhibitions and create and maintain online archives. A key point worth stressing here is that the spatial and operational constraints of server-dependency are often inadequately addressed. Although fears of digital erasure are underscored by the ease with which digital gestures are deleted[viii] from view, it is at the same time apparent that virtually all online activity leaves traceable footprints. Either way, optimum presentation and adequate contextualization requires ongoing attention. The ethos of the globally connected *Franklin Collective* exemplifies a growing awareness of such considerations:

> …direct and indirect access to digital records now allow for past work, even those perhaps seen by an artist as 'failures', to become a matter of public record. Illusions of 21st century privacy aside, this does present us with a new kind of transparency for the art-viewing public (Franklin Collective 2016).

There are certainly moves at the upper end of the art world's[ix] food chain to create more comprehensive digital archives and public access. In 2016, for example, The Museum of Modern Art in New York released a comprehensive digital archive of exhibitions dating from its founding in 1929 up to the present. The Google Art Project—featuring a "walk-through" variation of Google's Street View technology—was launched in 2011 with a view to facilitating interactive access to works in cooperation with 17 international museums (including the Tate Gallery, London; the Metropolitan Museum of Art, New York City; and the Uffizi, Florence).

Although museums and galleries digitize representations of their physical collections, these activities are clearly far from specifically conceiving exhibitions for the web. Of more interest within the context of this chapter are examples of initiatives that move beyond using the Internet to simply promote and document existing works. The Wrong, for example, is an online digital art biennial that showcases selected works in virtual curated spaces. Another smaller-scale initiative, The Museum of Virtual Art, presents itself as a multiplayer initiative featuring the work of international artists. Meanwhile, Catalog@catalogproject is a selection of moving image works curated on Vimeo by @stemiraglia; NewHive is a platform that commissions curated and solo exhibitions by net artists; and MutualArt.com is a model established in 2008 for connecting databases of artists and members with curated information about art fairs, exhibitions and events.

Exacerbating a blurring of roles already manifest in contemporary art, it can be particularly difficult to meaningfully distinguish artistic and curatorial initiatives in an online context. Artist-curated projects have long problematized this precarious relationship by "sitting uncomfortably close to artistic work, and yet still evidently not quite qualifying as artworks" (Filipovic 2013). This is notoriously fuzzy terrain, for just as "the other of the artist as curator is the curator […] the other of the curator as artist is, the artist" (Noack 2012). There are certainly numerous examples that complicate distinctions between generative curatorial and artistic sensibilities in the history of net art. US artist Douglas Davis' *The World's First Collaborative Sentence* is an early piece of interactive net art in the form of a blog enabling users to add words to an initial sentence. It received over 200,000 contributions between 1994 and 2000. Today, due to technological obsolescence, projects such as these cannot be exhibited in their original form. At around the same time, artists such as Alexei Shulgin and Olia Lialina developed conceptual approaches to creating interactive stories and artist-run Internet groups. Shulgin, for example, founded *Moscow-WWW-Art-Lab* in 1994, whilst Lialina's *My Boyfriend Came Back From The War*, was a browser-based narrative that chronologically marked a relationship in recovery after war. Several years later, Olia Lialina and Dragan Espenschied's *Midnight* (2006) used the then new Google map interface to access animated icons from the early web. With numerous examples of novel artist-driven curatorial initiatives, a comprehensive account is well beyond the scope of this chapter. One recent example is *NARGIFSUS* (2015), which was an exhibition of animated GIF self-portraits featuring over 50 artists curated by Carla Gannis and Tina Sauerlaender. Other initiatives are more utopian in ambition. Seeking to address the social limitations of physical movement governing the physical exhibition circuit, Nicholas Zhu and Michael Bordlee's recent initiative MOVA (Museum of Virtual Art), for example, seeks to open audiences to a stake in curated collections without having to pay or travel to physical galleries. There are also many

examples of established curators moving the focus of their activities to an online context. After closing her East London gallery La Scatola in 2013, for example, British curator Valentina Fois used the gallery's website as a platform for digital residencies. Meanwhile, Brazilian curator Beatriz Lemos moved to specifically foreground relationships between art and digital networks. Many established institutions are also looking to establishing exclusively online exhibition content. At the time of writing, for example, Remai Modern was commissioning artists to realise projects exclusively for online viewing.

Many curators and institutions see the net as a platform for creating rich immersive experiences. To develop an online exhibition, particularly if there is financial accountability at stake, curators must consider the distributional nature of the web and technical characteristics such as variability and virality. They also need be prepared to continue promoting and updating the project. Looking beyond the exhibition, the task of documentation invariably involves issues of ephemerality and conservation. Also, at all stages in the lifespan of an online exhibition, curators navigate a fine line between providing sensitively appropriate information and providing all available paratextual material. With this challenge in mind, one richly immersive online exhibition still stands as an exemplar. *The Gallery of Lost Art* (2012-2013) was an exclusively online exhibition curated by Tate's head of collection research Jennifer Mundy and developed together with Tate's creative media director Jane Burton and Glasgow-based digital design agency ISO—led by Damien Smith and Mark Breslin. "[C]onceived and developed as a curatorial rather than a learning project" to create "an immersive experience (as opposed to a flat, image-plus-text presentation)," the team employed "curatorial values and practices" to present "surrogates" for lost artworks (Mundy and Burton 2013). The exhibition was launched in July 2012, with half of the forty case studies initially available. The remaining case studies were released slowly up to and through 2013. Repurposing richly spatial and televisual tropes from crime and forensic science programs, *The Gallery of Lost Art* cast exhibition visitors in the role of forensic investigator. A rich zoomable high resolution array of paratextual material presented on tables viewed from above illuminated the experience of "lost" works. Conspicuously absent was any direct photographic representation of the actual works:

> Controversially, we included examples of works that were never intended to survive for any length of time. The loss involved in no longer being able to see Christo and Jeanne-Claude's *Wrapped Reichstag, Berlin 1971– 1995* (1971–1995) or Keith Haring's *Berlin Wall Mural* (1986) was ultimately no different, we felt, from the loss involved in not being able to see, for example, sculptures discarded by their creators or canvases consumed in a fire (Mundy and Burton 2013).

Significantly, *The Gallery of Lost Art* was available online for only one year, and then pulled down permanently. Provocatively, especially given the total cost of £300,000, the decision to end the project after one year sought to emphasise the exhibition's "insights into loss" (Mundy and Burton 2013). From July 2013, *The Gallery of Lost Art* was "no longer be accessible from the web, a virtual space which is traditionally attributed the role of a perceptual archive" (Trocchianesi, Lupo, Parrino, Pedrazzini, and Spagnoli 2013). Information about the exhibition and supplementary essays are however still available.

The Gallery of Lost Art exemplifies a growing field of major online museum exhibitions, such as the National Museum of American Jewish History's *George Washington Letters*, the National Archives' *Digital Vaults*, and MoMA's online companion to *Century of the Child*. Significantly, the curatorial premise for *The Gallery of Lost Art* emphasized that artworks should to be understood in relation to "a broad ecology of ideas, influences, and connections, in which the material existence of the artworks was only one" (Mundy and Burton 2013). Of course, no artwork is ever completely "lost" if we maintain some cultural knowledge and evidence, no matter how meagre, of its existence. This of course brings us to the problem of *where* and *when* any work or exhibition actually exists.

Distribution and circulation

Describing the once imagined and now increasingly threatened utopian potential for open distribution on the Internet, Quaranta reminisces:

> …you could be everywhere and everybody at the same time, surfing on a space without physical boundaries playing out different identities, writing and subverting your own rules. […] You didn't need institutions because you could be the institution or the gallery, the curator, the art critic, all together. And, if you got bored of the traditional personas of the artworld, you could be everything else: a boy band; a terrorist cell; a corporation; a publisher; a spammer; a bot.(Q Lambert, McNeil and Quaranta 2013, 25).

So *where* exactly is Internet art? This question demands consideration of both the distributed nature of the Internet itself, and the distributed nature of multiple (hypothetically infinite) materialisations characteristic of post-conceptual art more generally (Osborne, 2013). Historically, some forms of conceptual art (such as mail art) demonstrated that specific locations were not necessary to present art. An artistic or curatorial gesture could point toward an artefact, event or gesture understood to be elsewhere in time and space. Today, the shape and nature of distribution remains an inherent concern in the production and curatorial dissemination of web-based art. Although artists are embedded in specific cultures and societies, the digital moves across and through spaces and borders, and like the forces of globalization more generally, both disperses and solidifies cultural specificities. Although art is often presented as a speculative form of exchange and engagement, its critical capacity is limited by its complicity with the global cosmopolitan territories it inhabits. In this sense, the everywhere-ness of an online artistic representation can be seen as much as a testament to democratic availability as it is to the exchange value of information as commodity. German artist, filmmaker and theorist Hito Steyerl understands the paradoxical nature of distributed media well:

> The history of conceptual art describes this dematerialization of the art object first as a resistant move against the fetish value of visibility. Then, however, the dematerialized art object turns out to be perfectly adapted to the semioticization of capital, and thus to the conceptual turn of capitalism. In a way, the poor image is subject to a similar tension. On the one hand, it operates against the fetish value of high resolution. On the other hand, this is precisely why it also ends up being perfectly integrated into an

information capitalism thriving on compressed attention spans, on impression rather than immersion, on intensity rather than contemplation, on previews rather than screening (Steyerl 2009).

Despite the fact that computability and connectivity are invisible, it is a fallacy to call Internet art "immaterial"—for Internet art still exists in accord with the laws of physics. Although the rise of the Internet led to a revival of interest in ideas related to dematerialization, the same problem facing conceptual artists in the late 1960s and 1970s prevails—dematerialization does not negate the need for a "vehicular medium" (Davies 2004, 59) to transmit an idea to an audience. Like art more generally, digital works of art exist somewhere in an indeterminate relationship between the necessary yet insufficient role of the materiality of media and the necessary yet insufficient role of a host context (Osborne 2010, 10-11). And, like art more generally, digital content can exist at once as a singular entity *and* as multitudinous materializations across a complex distribution of relationships and materializations (Osborne 2013, 110).

Although much artistic production remains directly or indirectly concerned with specific materialities, it is at the same time open to a "vast variety of methods of presentation and dissemination" (Vierkant 2010). Consequently, post-internet conditions have radically extended historical philosophical perplexities surrounding the "where," "what," and "when" of a work or exhibition. At a basic level, this question is encapsulated in the reproducibility of the photographic image. For Osborne, although "the whole question of *where* 'the photograph' is" was already "difficult to answer under the conditions of chemical-based analogue images" (Osborne 2013, 124), the digitally produced image "is a *visible* copy of an *invisible* original" (Osborne 2013, 129). Notwithstanding the aforementioned requisite presence of a vehicular form to articulate an idea, the objects/events that might avail audience access to a creative work are in some cases (at least hypothetically) endlessly interchangeable. As Vierkant puts it, a work might be accessed:

> …in the version of the object one would encounter at a gallery or museum, the images and other representations disseminated through the Internet and print publications, bootleg images of the object or its representations, and variations on any of these as edited and recontextualized by any other author (Vierkant 2010).

Broadly speaking, twenty-first century artists and curators are less concerned with authorship—at least in the sense that twentieth century avant-gardes used it as a vehicle for problematizing the "myth" of originality—and instead, focus upon questions of content attribution, ownership, and the control of informational flows of user-generated content. Herein lies an important distinction between appropriation and formal collectivism (such as open-source programming and deejaying). Here, for Steyerl, "circulationism" is an appropriate descriptor:

> What the Soviet avant-garde of the twentieth century called productivism —the claim that art should enter production and the factory—could now be replaced by circulationism. Circulationism is not about the art of making an image, but of postproducing, launching, and accelerating it (Steyerl 2013).

Steyerl's conception of circulationism offers a partial answer to the provocative

stance taken by Bishop in the pages of *Artforum* in 2012, in which she argued that there were almost no artists or curators critically responding to the paradigmatic social and political changes wrought by "the digitization of our existence" (Bishop 2012, 435.) One work that clearly explored the circulation of images in a quasi-curatorial manner is Austrian artist Oliver Laric's *Versions* (2009-2012). *Versions* manifested as a series of sculptures, images, a talk, text, a song, a dance, a film, and merchandise—and most notably as a series of moving image variations exploring the historical circulation of images. Similarly, US-based Israeli artist Seth Price's *Dispersion* is an open-ended essay presented as an artist's book, a physical sculpture, and a downloadable PDF. *Dispersion* takes net collectivity as a point of departure for a historical reconsideration of boundaries between art and non-art (Price 2008). For Price, the increasingly dispersed accessibility and reproducibility of media has enormous implications for how art is disseminated and valued. The essay later inspired an exhibition curated by Polly Staple in 2009 at the Institute of Contemporary Arts in London featuring Price, together with Henrik Olesen, Hito Steyerl, Anne Collier, Hilary Lloyd, Maria Eichhorn and Mark Leckey. In Staple's curatorial spiel, these artists variously explore "the circulation of images in contemporary society, examining the role of money, desire and power in our accelerated image economy" (Staple, 2009).

Whilst commercial broadcasters and publishers seek convergence in distribution, artists and curators often seek less controlled approaches. The many-to-many connectivity of the Internet both challenges traditional broadcasting and publishing models and radically augments social relations within which producer and consumer become the same peer network. Like cultural activity more generally on the Internet, many artworks use peer-to-peer networks or open systems in which the user becomes the content provider. These distributed approaches problematize dominant art world networks that value discrete works authored by "branded" artists. At any rate, and at all levels of professional stratification, artists can no longer avoid distributing materials and documentation online. Massive changes affecting the distribution of images have underscored conditions of permanent transformation, open circulation, and in some cases, the unerasability of regrettable forms of expression. Given that images are easily reformatted without concern for their materiality, origin or attributive information, some images become interchangeable and placeless. These conditions have also inspired a range of critical responses. In his *Free Art* manifesto, US artist Brad Troemel argued that the art world is contaminated by private interests and gatekeeping and instead advocates self-distribution and the substitution of individual success for collectivity. Meanwhile, and by contrast, US theorist Douglas Kahn took issue with US conceptual poet Kenneth Goldsmith's position that online media should be free of branding or authoritative paratexts in order to travel to unimagined places. For Kahn, unattributed systems lead to "historical amnesia, social or ecological decontextualization, lack of attribution, cultural theft and imperialism" (Kahn 2005).

Several other observers have explored the nature of distribution in contemporary culture. US art historian David Joselit sees "a shift from the manipulation of material to the management of populations of persons and/or pictures" (Joselit 2011, 81). For Joselit, "formatting", which can be characterized as a "capacity to configure data in multiple possible ways," has all but replaced the concept of "medium" (Joselit 2011, 81). In practice, this shift involves a "re-enactment and relocation of the 'same' image in different places and times" (Joselit 2011, 81). Against this backdrop, many cultural producers attempt to "disrupt" production, distribution and consumption in an era in

which a once imagined democratized horizontality has effectively become a one-thing-after-another scrollable experience of algorithmically targeted messaging and advertising. Meanwhile, although new cultural objects can be easily produced from pre-existing fragments of image, object, symbol, narrative, text and melody, the limitations of private property still govern creative expression. Contesting this situation, open-source culture and crowdsourcing movements constitute a "new commons" (Hess 2015). Open-source cultures challenge commercial imperatives by substituting systems based on ownership, authorship and monetary value for open systems based on collective value. Unauthorized platforms for sharing artistic content such as *UbuWeb* and *Karagarga* exemplify this tendency. Spanish social activist Mayo Fuster Morell calls for knowledge that is "collectively created and owned or shared between or among a community" and "oriented to favor use and reuse, rather than to exchange as a commodity" (Fuster Morell 2010, 5). At a basic level, open-source participants contribute to edited collections. At the other end of the spectrum, participants build specialized software and system design.

Against a backdrop of surveillance and state or private control of the Internet, we are also (at best) witnessing a transition to more horizontal forms of social, political and economic organization. For Spanish sociologist Manuel Castells, horizontal participation within social networks is beginning to translate into other forms of political and social life. Consequently, we are seeing more horizontally organized "leaderless" political movements (such as Occupy, los Indignados, Black Lives Matter, and #metoo), together with "flatter" economic initiatives (such as car sharing and labor exchange). This contest is far from settled.

Un-curating, anti-curating, and artist as curator

In many ways, using digital networks as the basis for new curatorial models is simply a technologically augmented adaptation of the way in which artists have long included peers in processes of artistic production. These networks range from centralised or hierarchical to decentralised networks with multiple centres and distributed networks with no centre but many links. In any network, information is effective via relational positioning. The accelerated and open-ended nature of digital networks emphasises cultural forms that are incomplete, unresolved, and open to constant transformation. Artists and curators have of course long reached beyond the constraints of established institutional structures and traditional exhibition spaces. These tendencies were first clearly articulated (with some notable historical avant-garde precedents) in the language that framed conceptual and systems-based art in the 1960s and 1970s. The focus then, as it is today with much net-based art, was upon locating or creating alternative circuits.

For many contemporary artists, the often asymmetrically invested power wielded by institutional and globally mobile "super" curators is problematic. Consequently, there are now several initiatives seek to create alternative vehicles for selecting, evaluating, and disseminating art. *Project Anywhere*, for example, which was founded by the author in 2012 in conjunction with an international committee of artist academics, is promoted online through artistic and institutional networks as a "global blind peer reviewed exhibition program dedicated to art and artistic research at the outermost limits of location-specificity" (Project Anywhere 2018). Although primarily communicated via a dedicated website and related online networks, *Project*

Anywhere is not an online exhibition model. It is instead presented through the Internet as "an exhibition comprising the entire globe in which the role of curator is replaced with a peer evaluation system" (Project Anywhere 2018). With no curatorial imperative to develop specific thematic orientations, this curator-less approach is specifically designed to suit highly speculative and often radically transcategorical artistic projects that are potentially located "*anywhere* and *elsewhere* in space and time" (Project Anywhere 2018).

Another non-profit initiative that uses a dedicated website to point toward artistic projects located elsewhere in space and time is the *Random Institute*. Based in Zurich, Switzerland, the *Random Institute* has produced numerous intriguingly ambiguous exhibitions, events and research initiatives around the world featuring work by artists such as Richard Long, James Lee Byars, Cory Arcangel, Zilvinas Kempinas, Guido van der Werve, Bethan Huws, Carey Young, Julian Charrière, Federico Herrero, Allora & Calzadilla, Luis Camnitzer, Alfredo Jaar, Regina José Galindo, Aníbal López, Teresa Margolles, Rivane Neuenschwander and Liliana Porter. Founded by Sandino Scheidegger and Luca Müller in 2007, its focus is new exhibition formats and exhibition-making as practice. To date, perhaps its most ambitious yet enigmatically subtle initiative was the ostensibly secretive organization of an exhibition in Pyongyang in North Korea titled *All The Lights We Cannot See* (2016). For this exhibition, although nine artists were invited to exhibit, all other details surrounding the entire project were committed to secrecy. Beyond a very limited set of installation views, the only other trace of the exhibition is a one-line mention on each of the participating artists' CVs. Intriguingly, if asked about the exhibition, all participating artists have agreed to respond with: "I'm not supposed to talk about it" (Random Institute 2016).

The often-invisible power structures that shape contemporary life in the age of the Internet have also inspired new generations of leaderless artist collectives. The novel organizational and operational structure of the *Franklin Collective*, for example, constitutes an approach to collective artistic and curatorial organization that evades locational specificity and attribution in a manner darkly reminiscent of a global corporation. Offering an experience which is at once unsettlingly critical and complicit with the generically technocratic and bureaucratic nature of global capitalism in the age of the Internet, *Franklin Collective* manifests as "an immersive, multi-faceted institutional critique dwelling in both offline and online realms" (Franklin Collective 2016). In an interview conducted by the author in late 2016 with two of the Collective's founding members—New York-based artists Mark John Smith and Matt Whitman—some of the curious ambiguities surrounding the collective's operations were discussed:

> …you're not quite sure where it starts and where it stops and where the borders exist. And that it could be here, it could be Northern Ireland, it could be in South America, and not being able to see precisely how it gets from one point to the other (Whitman 2016)

One of many portals into the collective's world is made manifest through a strangely and antagonistically corporate styled call-center operated by representatives that answer calls and perform scripts outlined by the collective. Here, callers become implicitly aware of now ubiquitous social architectures, and in particular, ways in which "the language of the home, the language of the familiar, the language of friendship and kindredness [are] inserted into the corporate model" (Smith 2016). They are also

interested in the way in which words such as "proxy" can dislocate culpability. Rather than emphasizing relationships between artist and curator, the collective is interested in "activating different entities within the collective" (Whitman 2016). Although "there are artists [and] curators in the collective" (Whitman 2016), the collective is "not an artist [or curator]" (Smith 2016). When pressed, Smith and Whitman concede that "there are times when we go back to the idea of curation" (Whitman 2016)—for there are still decisions regarding which "images to put on Instagram and which images to leave off" (Smith 2016). This process is at once secretive and transparent, for the collective's website also features a Drop Box option enabling audience and collective alike "to go into a portion of the Franklin Collective cloud [to see what] the collective is working on" (Smith 2016). Although mindful that they have a responsibility to omit "identities of people that are involved and who for whatever reason do not wish to have that identity made public" (Whitman 2016), their quasi-anonymity is nevertheless adjusted for "instances in which a public face is necessary" (Smith 2016).

> …it's all about […] how the information is flowing and which direction […] and what side of the fence are you on. Are you in it, or are you looking at it? (Smith 2016).

In each example discussed above, we see evidence of an emphasis upon meanings generated through selective relationships made manifest through particular constellations of materializations. This tendency is of course not particular to art chiefly made or disseminated with the Internet, for as Groys has put it, "after conceptualism, we can no longer see art primarily as the production and exhibition of individual things" but rather as "a holistic exhibition space in which the relations between objects are the basis of the artwork" (Groys 2011, 1). Consequently, it is often unclear whether meanings are generated within relationships between specific materializations or in supplementary or paratextual materials. Artists and curators, it would seem, often deliberately problematize these relationships. In some cases, distinctions between a work/exhibition and its surrounding paratextual universe can be radically and profoundly uncertain. Australian artistic/curatorial initiative The Ghosts of Nothing, for example, is publicly presented through the vehicle of a fictional touring rock band. This artist as curator collaboration between the author and Ilmar Taimre epitomizes the continuous and continually-evolving nature of a radically distributed yet singularly identifiable work/exhibition of post-conceptual art. Their radically "open work" *In Memory of Johnny B. Goode - 2014-2018*, for example, was presented as a digital recording of a rock opera, a script, a radio play broadcast, a series of published writings, a "world tour" of live collaborative performances remediated through YouTube, and as a series of subsequent exhibitions of related images and performance artefacts—all curated by the artists.

Algorithmic popularity

> …curators now rival artists for influence the way DJs rival musicians. Both are a kind of portfolio manager of the qualitative. The next step after the dematerialization of the artwork may be the dematerialization of the art worker, whose place could be taken by new kinds of algorithmic functions (Wark 2016).

Notwithstanding a potential to reach new audiences, much contemporary artistic activity plays directly to an audience of specialized peers.[xi] Moreover, given that much of this activity is documented and disseminated as it happens through its surrounding peer network, the robustness of documentation and critical discussion can become distorted as a consequence of its inherent correlation to social acceptance and favorability. These networks can also exclude contributions outside a core group. Also, given that much art shares media with other databases and websites, algorithmically driven perceptions of popularity can influence ways in which art is evaluated, interpreted and valued. This can present challenges to curators seeking to establish new audiences or disseminate ideas without a #tag precedent. Some observers argue that algorithmically driven content and "filter bubbles" (Pariser 2011) generate echo chambers of opinion, perspective, and at worst, conspiracy.[xii] It is now well established that algorithms and sponsored search results on platforms such as Google and Facebook direct and manage online experience by privileging particular information. Some online realms enable users to decide or influence the most important content to feature. Meanwhile, audience data and online traffic analysis see art institutions and events at risk of comparison with popular entertainment. These comparisons can have real implications for viability and funding.

It is not difficult to find examples of what can happen when algorithmically driven technologies are unchecked. When Microsoft released their "millennial chatbot" Tay in 2016, for example, it quickly began using racist language and promoting neo-Nazi views on Twitter. And, after Facebook eliminated human editors to curate "trending" stories in 2016, the algorithm began promoting fake and vulgar stories (Thielman 2016). Meanwhile, Beauty.AI, the first international beauty contest judged by machines in 2016 saw over 6,000 entries from over 100 countries submit images for an algorithm to judge attractiveness. It was soon clear that the algorithm disliked participants with dark skin (Levin 2016).

Algorithms are clearly increasingly influencing the way in which we consume culture. The key problem with the algorithmic selection of cultural objects is that they only really function in response to what has already been consumed. They are arguably less equipped to introduce content that might expand horizons. Consequently, the digital objects that surround us are attempting to steer us in increasingly invisible ways. As *Franklin Collective* co-founder Mark J Smith quips, "our technology [even] knows that we're not using it. The network knows that we're sleeping." (Smith 2016). Given that online personalisation distorts what we see, it is imperative that curators present content that actively ruptures filter bubbles and echo chambers. Although many people were surprised when Donald Trump was elected president in late 2016, this surprise was potentially a consequence of "years [of] coaching Facebook, Instagram and Twitter" (Wortham 2016). Yet, as US writer David Weinberger argues, casting the Internet as a series of echo chambers is also potentially limiting, for even everyday use of the Internet can bring us into contact with at least some ideas that don't confirm our established views. Although Weinberger concedes that filter bubbles are diminishing diversity, he is quick to remind us that our informational diet before the Internet was also limited:

> Three channels of nightly news; a small handful of newspapers in major cities; a nice spread of national magazines, each one its own echo chamber; a Great Books series launched in 1952 that consisted of works by 130

authors, not one of whom was a woman or black, and almost all of whom were within the European tradition (Weinberger 2016).

Rather than bluntly rejecting or accepting social media on face value, we might, as US critic Howard Rheingold puts it, seek the benefits of practicing "real-time curation" in our use of social media (Rheingold 2012). Rheingold also warns of an "emerging digital divide is between those who know how to use social media for individual advantage and collective action, and those who don't" (Rheingold 2012). Given that the act of selection is effectively equalized with making in post-Duchampian art, curatorial thinking is already embedded in artistic processes — including the moments in which artists select filters on Instagram to reflect how they imagine their work *should* look. Curatorial strategies of self-promotion also extend to mimetically distributing an artistic identity and personal likeness as "brand". From outright complicity with "insta-like" and "selfie" culture through to more subversive forms of critique, variations of self-portraiture are in abundance on the Internet. Not long ago, the curated mediated self was the domain of public figures. Today, it is a pervasive condition within which an individual performs identity as brand to increase their symbolic capital. Less cynically, US critic and curator Brian Droitcour sees the rise of social media as a rebalancing of image-making power (Droitcour 2012). Of course, these shifts only form part of broader patterns of disintermediation.

Today, touring rock bands such as Metallica use local listening data from streaming services such as Spotify to "curate" their concert setlists (Jenke 2018). Meanwhile, political opinions and decisions are increasingly swayed by the impact of data generated through social media. Like other professions, artists are now implicitly valued through "likes". Social media platforms might avail everything from carefully curated perspectives of an artist's personal life to the presentation of fictionalized identities presented as art. Here, art that explores the nature of digital life is arguably more capable of performing a critically reflective function when experienced on the same devices encountered in everyday life. In 2014, for example, US-based Argentinian Spanish artist, Amalia Ulman ran an extreme, semi-fictionalised makeover though her Instagram account titled *Excellences and Perfections*. In this project, Ulman pretended to undergo a breast augmentation, followed the Zao Dha Diet, attended pole-dancing lessons, and paraded lingerie and stylized interiors. Even Ulman's friends were unable to distinguish her "real" and fictional persona. This work has already entered the canon as the first "serious" Instagram work. In stark contrast with Ulman's semi-fictionalised Instagram makeover, Australian artist Georgia Banks took to Tinder in 2017 to produce *Looking for Dick (in all the wrong places)*. Although this work was presented through real-time Tinder exchanges, it took place in a physical gallery. Re-presenting Chris Kraus' iconic *I Love Dick* (1997), Banks spent twelve hours a day for three days live on Tinder, swiping right only for men named "Richard". Accordingly, an otherwise private experience became public. Where Ulman inhabited the phenomenon of the "Hot Babe," Banks claimed the "Hot Mess of Tinder—embracing with open arms and unflinching honesty all the behavioural tropes women are taught to avoid during the 'getting to know you' stages of dating" (Banks 2017).

To be sure, a diverse range of cultural activities and institutional events in the art world are now heavily reliant upon social media. A good example of effective use of social media in an institutional context is US art curator and the social media manager Kimberly Drew (aka @museummammy), who presents herself online as

"#carefulblackgirl selling the shadow and supporting the substance". Significantly, Drew's currency is both supported by and extends her professional responsibility for running the Metropolitan Museum of Art in New York's social media channels. Another prevalent use of social media used to promote art institutions and events is the "takeover"—where an institution delegates its social media account to artists or a broader user community to vary voice or raise interest. To cite an early example, in August 2010, The Los Angeles County Museum of Art gave control of their Twitter account to actor Rainn Wilson. The results were confusing for many visitors, with Wilson deliberately sending out "alt right" styled provocations. A more recent variation of this approach was #AskACurator day, a cross-institutional initiative coordinated by @MarDixon. In its first iteration on Sept 13, 2017, audiences were invited to ask questions of staff at a number of participating museums.

The stubborn primacy of the image

> The architecture of the Internet, an arrangement of language, sound and images in which imagery is the most dominant, immediate factor helps facilitate an environment where artists are able to rely more and more on purely visual representations to convey their ideas and support an explanation of their art independent of language (Vierkant, 2010).

With or without the consent of author-producers, any work placed online is potentially open to mutation. Historically, fixed forms of media levied value driven by scarcity and one-to-many systems of distribution and commodification. By contrast, digitally networked modes of production, dissemination and reception problematize notions of a "primary experience" or "definitive version"—instead promoting conceptions of works or exhibitions as always provisional, always in progress, and available to be repurposed. Despite the multiplicity of possible medial materializations in an online context, the photographic image remains the primary point of entry.

As discussed earlier, photo sharing and social networking sites have radically extended the reach of everyday acts of curatorial selection. There is now no escaping the reality that artists and curators, irrespective of the content of their work, are deeply implicated in ways of behaving formed in response to the ubiquity of the digital image. As images dance across innumerable screens, "our eyes just scan the surface" as part of a process of "rapid-fire skimming" (Bishop 2012). Given that more people will invariably encounter any given work through the backlit glow of a screen than via any other means, some artists and curators are increasingly alive to the urgency of promoting other ways of engaging with art. As Bishop has put it, "the art object needs to be reasserted in the face of its infinite, uncontrollable dissemination via Instagram, Facebook, Tumblr, etc" (Bishop 2012). And, as Steterl points out, issues that were apparent long before the Internet would be hyperrealized in its image, for "[t]he map […] has not only become equal to the world, but exceeds it by far [for a] vast quantity of images [now] covers the surface of the world" (Steyerl 2013). In any case, it is reasonable to assert that cultural expression both has and hasn't been fundamentally transformed by the Internet. The irrepressible capacity of art to mock, subvert, and implicitly resist power structures both predates the era of the Internet, and—even allowing for the most dystopian visions of the future—will surely never be completely usurped or sublimated to the will of the few.

Conclusion

> …the role of the curator must evolve, and is evolving, in an age where informational systems underpin even the most traditional gallery system. Internet art not only incorporates such technologies, it also reveals them and reflects on their operation, and this in itself changes the curator's relation to the work (Lambert 2013, 16).

Internet-based and Internet-activated art is simply part of broader contemporary art worlds and not something significantly ontologically distinct from contemporary art more generally. At the same time, however, it is also clear that it sometimes demands its own languages and evaluative criteria. Ideally, Internet-based and Internet-activated art also requires a degree of digital historical literacy in order to avoid technological bedazzlement or Luddite suspicion. The Internet is also at once radically disrupting and entrenching the role of curators as cultural gatekeepers. We are not, however, at a point in which curating with the Internet is an integrated tradition with well-established curatorial roles. The future of curating with the Internet is therefore marked with many unknowns and possibilities. Just as the respective roles of artist, curator and audience are difficult to categorize in the era of disintermediation, many artists seek to actively bypass the figure of the professional curator altogether. Significantly, this potential "freedom from traditional curatorial structures […] makes internet-based art attractive to a range of artists operating outside the gallery system"(Lambert 2013, 16). For some, the future is marked by an urgent need to better democratize strategies of selection and display to reflect a world in which informational transmission is as important as its creation. In any event, we are well beyond believing in naïve utopian image of a democratic Internet capable of liberating culture for all. But all hope is certainly not lost. As Rebecca Morse, Associate Curator in Photography at the Los Angeles County Museum of Art, puts it, we are "making up the rules as we all go along" (Miranda 2016, 4). And, as they grapple with new challenges, artists and curators alike will no doubt continue to implicitly critique the spectatorial conditions of the digital devices that define contemporary existence by artistically presenting a philosophical doubling of their hold on nearly every aspect of life in developed countries. The creative use and adaptation of technology is inseparable from a broader human capacity to create alternative worlds. This is where, at best, Internet-based and Internet-activated art can signal the emancipatory potential within human existence.

Today, through the World-Wide Web, an artist, curator or collective can be virtually indistinguishable from a corporation or brand. Meanwhile, curatorial selection and documentation by artists and audiences is always already happening online, for as Bishop puts it, "the derive is the logic of our dominant social field, the Internet." (Bishop 2012). Unlike the assertions of aesthetic autonomy that prevailed in key twentieth century art, much art in the twenty-first century is more concerned with negotiating relationships and testing spatial and temporal boundaries. In short, the key twentieth century question "what is art?" has mutated to become "*where* is art?" and "*when* is art?" In particular, works and exhibitions of art presented in explicit relationship with the Internet are less likely to be regarded as fixed in space and time, and correspondingly, more likely to be regarded as porous and open to continual transformation. Given that we can now effectively scroll in and out of some objects almost infinitely, questions of scale are increasingly unhinged from bodily registers. At best, net-art offers an augmented form of reality that performs a critically reflective

intermediary role between that which we experience as embodied beings and abstracted echoes stored in code on massive servers elsewhere in time and space. Although many of the same questions that have long defined art's relationship with the world still hold, the dimensional scope of some art historical problems is distorted across an obese present of global multi-temporal transcultural interactivity. As Peter Osborne argues, contemporary post-conceptual art—of which Internet-based and Internet-activated approaches to art are simply subsets— is materially unlimited, ambiguously fictionalised, defined by a mutual insufficiency of material and contextual elements, and features a limit function provided only by the institutional networks of art. And this is only the beginning of the so-called "digital century". It is also clear that we possess only a profoundly inchoate sense of what art and curating can and will be *with* the Internet.

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[i] Ubiquitous Internet connectivity forms a significant part of the fabric of twenty-first century life in developed countries. This is not the case for the world's most marginalized and excluded. As more people go online, the relative disadvantage of being offline grows. Although the "divide is narrowing" it is also "getting deeper" (Ewing 2016). A United Nations report published in 2015 found that billions of people in the developing world are still without Internet access, including up to "90 per cent of those living in the poorest nations" (United Nations 2015).

[ii] The detritus of any life has always accumulated with the passing of time. Digital technologies have simply accelerated the efficiency of preservation and accumulation—in turn demanding correspondingly greater attention to processes of selection, classification, archiving, retrieval, and re-presentation.

[iii] Although the Internet has effectively transformed the world into a giant library built in the metaphor of the cloud, it is still limited by the editorial choices of contributing individuals and agendas of nations and corporations. As Lawrence Liang puts it, "the utopian ideal of the library […] is destined to be incomplete [and] haunted by what it necessarily leaves out and misses" (Liang 2012). The seductive allure of this metaphor was addressed in the curatorial premise underpinning a 2015 exhibition at the Serralves Museum titled *Under the Cloud*. The metaphor of the cloud also veils a broader shift from a culture of ownership to what American economic and social theorist Jeremy Rifkin describes as an age of access, in which through licenses and leases, we are all essentially becoming perpetual renters of cultural products.

[iv] The World Wide Web (abbreviated WWW or the Web)— invented by British scientist Tim Berners-Lee in 1989—is a globally connected information space in which documents and other web resources identified by Uniform Resource Locators (URLs) and interlinked by hypertext links can be accessed via the Internet.

[v] It is now relatively well established that social media gives rise to cultural conditions in which non-expert comments and opinions carry commensurate weight with that of "expert" opinions.

[vi] Despite the relatively small percentage of users that actually leave comments on YouTube etc. (Some videos with over a million views have zero comments).

[vii] Although Rosalind Krauss' influential description of a postmedium aesthetic in the late 1990s can be adapted to encapsulate something of the way in which reproducible and distributable media forms are flattened in an online environment, established postmedial understandings doesn't necessarily account for ways in which behaviours in an online environment constitute a central distinguishing feature. (Krauss 2000).

[viii] In a gesture that echoed John Baldessari's ritual destruction of his paintings in 1970, net artist Igor Štromajer systematically deleted all his net art works created between 1996 and 2007.

[ix] The art world is not a homogenous body but an aggregate of worlds which interact and overlap in a complex manner. It is a network of dependencies between sets of stakeholders, whose influence changes over time.

[x] For a discussion of the minimum cultural traces required to establish the existence–somewhere in time and space–of an artwork, see Taimre (2018, 58-59, 509-512). As Taimre explains, the seminal work of Jeffrey Strayer (2007) is highly pertinent here.

[xi] Legitimation begins as peer support. With symbolic capital dependent upon the value of peer recognition, the ability to maintain meaningful communities is critical for the success of any new idea. The term "networking" is widely used to refer to the exchange of information or services between individuals, groups, or institutions, and the cultivation of productive relationships.

[xii] Molly Sauter usefully describes the susceptibility of internet users to conspiratorial thinking: "Humans are storytellers, pattern-spotters, metaphor-makers. When these instincts run away with us, when we impose patterns or relationships on otherwise unrelated things, we call it apophenia" (Sauter 2017).

Biography

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