

Digital Happy: Contemporary Jewelry in the Internet Age

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*Our focus should be not on emerging technologies
but on emerging cultural practices.*

Henry Jenkins

A growing trend in craft theory suggests that new media is not denaturing craft as much as it is reinforcing craft's existing relational and participatory turn.¹ Craft commentators have been looking at how the functions and ideologies of new media align with the ethos of craft. As a proponent of contemporary jewelry, I, too, am interested in investigating the behaviors these technologies encourage, the narratives they may imply, and the new cultural responsibilities they bring with them. Over the past twenty-five years, new media have transformed nearly all aspects of our lives. The challenge of this essay is to identify how universally accessible technologies and tools that are now part of everyday life have been appropriated by makers and have affected contemporary jewelry specifically.

The emergence and subsequent development of contemporary jewelry from the early 1960s onward overlaps with the rapid transformation of tools that we use to communicate with and about one another. In terms of cultural pollination, this means that the narratives of seminal artists' visits shaping the development of a local community, and the structures of production and transmission of knowledge these stories imply (the studio, the exhibition, the printed catalogue), are losing traction to new media communication. Information is now produced, received, evaluated, and bounced back in a multichannel textual, visual, and audio environment open to all. It does not call for the same mechanisms of physical interaction it once did. This increased capacity for communication is matched by a range of new computer-aided design



FIG. 1
Remedios Vincent, *Prosthetic rings*, 2013,
resin (antique ocular prosthesis) and bronze

and manufacturing tools. Heralded as the manufacturing equivalent of the personal-computing revolution, these tools have the potential to transform the process of making and have been adopted with some excitement by contemporary jewelers.² I therefore use the term "new media" to describe the digital technologies that allow the production, circulation, and transformation of cultural objects, as well as the online platforms that connect data and people.³ This broad definition is useful because it straddles both fabrication and communication, and like any definition of rapidly changing technologies, it is fluid: "Details may change by the time you read this."⁴

I will focus here on the way jewelers, dealers, educators, and collectors surf, browse, perambulate, search, and otherwise

hang out on the web by analyzing the changing nature of their relationships to information. The emergence of 3-D modeling and prototyping, and of the web as a global information resource that creates new opportunities for collaboration, will underlay this discussion. This essay will consider how new conventions of data representation, access, and manipulation are impacting the historical cultural practices of the field. I will look specifically at the circulation of information online and at dissemination strategies native to the Internet. These processes have reconfigured the relative significance of online and offline activities and signal the growing alliance between the jewelry community and online networks.

To List

What I felt in the 1970s was that contemporary art jewelry was an underground movement. The artists worked separately from the buyers, and there was no contact. Nobody actually knew what was happening.

—Lasse Pahlman

The information paradigm implicitly referred to by collector Lasse Pahlman was one of sketches sent by post, of exhibition catalogues and artist monographs transiting between poles, and of seminars, lectures, and exhibitions far from home that could change a maker's practice. This was a time when the importance of encountering people, objects, or the books about them was premised on the relative insularity of each jewelry center: to exert any influence, jewelers had to travel.

And so they did. During the 1960s and 70s the contemporary jewelry community's vested interest in establishing itself both locally and internationally, and in creating opportunities for professional development, translated into a frenzy of meeting opportunities, including seminal visits later recounted as myths of origin: Vivianna Torun Bülow-Hube's departure from Sweden for France in 1956; Swiss-born Kobi Bosshard's arrival in New Zealand in 1961; or Dutch artists Gijs Bakker and Emmy van Leersum's visit to the United States in the early 1970s under the aegis of the World Crafts Council.

This was the time of snail mail, and the collector's long-distance education model was the catalogue. Primarily conceived as an inventory of formal innovations, the catalogue's classification system and organizing principle reflected the field's ongoing transformation. An early focus on the maker's country of origin and experimentation with materials and processes was reflected in the type of information included in image captions (typically artist name, place of residence, title and date of work, fabrication process and materials). A jeweler's training was invariably framed as genealogical and local—individual expression was assumed to reflect the influence of an identified mentor (typically the apprenticeship master) and of one's direct cultural environment.

Visiting artist's studios was a particular interest of collectors who, like Pahlman and his wife, Helena, started collecting in the pre-Internet age and wanted to widen the scope of their holdings beyond their own country's borders. Before the fall of the Berlin Wall, however, the free circulation of goods and people in Europe was still a political dream, not a legal reality, and access could be complicated. Lasse

Pahlman remembered: "I drew by hand the forms of the jewelry that I was interested in. . . . In those days, there were no digital cameras. You could not send a photo. If you put a letter in the post to Estonia, you never knew if it would reach the person."⁵

In 1989 the Wall collapsed. In 1991 the web, as theorized two years earlier by British computer scientist Tim Berners-Lee, became available to the public and permitted the connection and distribution of information across a network of machines (the Internet). Then, in 1999, Susan Sarantos, a silversmith based in Newport, Rhode Island, launched a website called Metalcyberspace.⁶ It was little more than a hyperlinked list, but to this author living in France, it provided unprecedented access to a global directory of makers and galleries. Sarantos assumed that collectors and makers engaged in the tedious work of gathering information on international jewelry would eventually come across her website. A small drawn portrait of her, reproduced in white on the page's black background, suggested a benevolent, vaguely witchy figure, and heralded, some years before it became mainstream, the web's function as identity-mixer.⁷

To Publish

The computer was my window to the world of jewelry. I am very inquisitive and a visual person. Over many years I slowly learned and developed my eye ... I bought pieces solely on the basis of how they looked to me "online." It was great to wander the world in search of objects. From the Western Hemisphere, Europe to Australia to Thailand, I let my fingers do the walking.

—Lois Boardman

Until the 1990s, galleries were the main avenue for learning about current jewelry developments. Catering to collectors, makers, and curators, they also produced modest catalogues extolling the education and exhibition history of the artists they represented. Galleries were, in effect, the sole distributors of objects made in a network of studios more or less local to them. Artists who produced their own printed matter were rare, and galleries shared a form of information monopoly with a few specialized printed periodicals such as *Metalsmith* and *Art Aurea*. But at the end of the decade, two new sites—one American, the other Catalan—signaled the shift from print to semi-independent, professionalized online information

sources, and radically changed the way collectors like Lois Boardman would continue to educate themselves.

Art Jewelry Forum (AJF), launched in 1997 by a group of like-minded jewelry collectors in the United States, was primarily conceived as an organization to educate its constituents through direct immersion in local and foreign jewelry centers. It also functioned as a self-aware incubator for the field's cultural stakeholders: curators, historians, and the institutions for which they work. Collectors traveled in small groups to learn about and buy work, and quarterly reports on foreign expeditions were sent to members. The organization soon saw the importance of expanding its mandate, however, and wanted to make the information it gathered available to a wider audience. In 2000 AJF launched its first website, and in 2010 it appointed New Zealand craft historian Damian Skinner as its first editor, thereby recasting itself as a global platform with a mission to "help [its] readership . . . build knowledge, understanding, and a critical appreciation of contemporary art jewelry."⁸ AJF (for which I now serve as editor) currently publishes online an average of sixteen articles, interviews, or reviews per month.

If the art magazine served as AJF's primary model, Catalan platform Klimt02 was initially conceived as a community-wide information board and creative showcase. It was a place to "find information about contemporary jewelry,"⁹ as cofounder Leo Caballero explained, and it initially did so by posting captioned images of the work of its members along with a wealth of information about exhibitions, workshops, competitions, and publications happening internationally. Caballero and his fellow cofounder Amador Bertomeu gathered in a single place information about multiple events in the field, achieving what was technically unfeasible for Sarantos's Metalcyberspace: they built a community through connected information. "At the beginning of Klimt02 [in 2002–03], the idea was to create a network, a community, to build it. There wasn't a community, it was more tribal then," Caballero said.¹⁰

Both organizations can be seen as publishers and they still emulate the "one-to-many" model of legacy media: a sole agent, acting as content commissioner, selects and/or produces content that is then distributed to its readership. Neither platform is without filters, and while both allow users to comment, they act as gatekeepers of the information they publish. Moreover, they categorize that information according to systems that they themselves have created.

Klimt02 and AJF are currently the most visited online platforms to learn about contemporary studio jewelry, whether a user is new to the field or a serious collector. The collectors interviewed for this essay all tended to have built strong relationships with galleries before the founding of the Internet and although now less "gallery dependent" for their jewelry education, they continue to use them as respected sources of information on jewelers' creative development and to purchase work.¹¹ For Susan Cummins, it is out of loyalty toward a business model that she knows is precarious,¹² while Lois Boardman values the decades-long friendship she has forged with someone like gallerist Helen Drutt.¹³ Ron Porter prefersto rely on the strong relationship he has built with dealers over the years, and welcomes the counsel and occasional spontaneous suggestions they offer. All of them recognize the Internet as an invaluable place for research, however. As Porter explained, "Never has there been such a wealth of information available to anyone who wants it at the touch of a key. . . . I might start with looking at the use of silk in Korean jewelry and end up with exposure to an exceptional new talent using silk in an entirely new way. It doesn't get much better than this educationally."¹⁴

To Circulate

Blogging is the way in which we get to complicate the world again.

—David Weinberger

Starting around 2005, a web-surfing culture that was predominantly nomadic started producing tentative forms of cultural real estate: posted as chatbacks on Facebook and images were harvested and recirculated on Pinterest and Instagram. As a result, makers, commentators, and to a lesser extent, collectors, began to respond to new media content in kind, with information gathering and transmission of their own. This evolution is described in media theory as the advent of Web 2.0, and the way it works is at the core of how web users handle information today.

Web 2.0 can be described through the various technical changes that took place at the beginning of this century. The emergence of improved search algorithms, user-generated content, and tagging systems, and the rise of simple, user-friendly blogging templates like WordPress put a much greater share of the distribution and organization of information into

the hands of web users. Later in the decade, a number of contemporary jewelry blogs were launched: *Mar de Color Rosa*, under the helm of Montserrat Lacomba (Spain, 2008); followed by Marianne Gassier's *Bijou Contemporain* (France, 2010); Nichka Marobin's *The Morning Bark* (Italy, 2011); and Kellie Riggs's *Greater than or Equal To* (Italy, 2011). These are just a few, and their numbers pale next to the myriad personal Flickr, Tumblr, Pinterest, and Instagram accounts devoted to contemporary studio jewelry.

Putting undue emphasis on technology, however, misses the point of Web 2.0: it was less a technological revolution than what Tim O'Reilly described as a "tipping point."¹⁵ Its importance, according to media specialists Francis Pisani and Dominique Piotet, depended upon the fact that the web was not supported by "major technological innovation. . . . The technology exists, it is accessible to everyone, and it is cheap."¹⁶ Pisani and Piotet make much of the fact that the "low knowledge barrier"¹⁷ of Web 2.0 was fundamental to the massive appropriation of early platforms such as Myspace by people engaged in creative pursuits. The same argument explains why, ten years later, a large percentage of jewelry makers have their own websites and engage in a variety of online activities through multiple new media platforms.

One example of a maker taking advantage of this user-driven web culture—and of a single artist using multiple platforms for specific purposes—is Remedios Vincent, who started making jewelry as a form of occupational therapy in 2011. Her practice involves the assemblage of antique, often anthropomorphic, found objects (fig. 1) repurposed into jewelry that she describes as "infamous accessories" (tortured, Frankenstein-like collages that are "made to dislike"¹⁸). Fiercely independent, she does not participate in any public jewelry events and functions largely outside of the contemporary jewelry market. Vincent, a typical "webactor," is a useful example because of the unusual clarity of her investment online: she actively manages five different online platforms simultaneously for specific and—very distinct—purposes, which in turn allows her to maintain complete control over the dissemination of her existing work, while building archives of her work in progress. She has a blog and a Tumblr account for posting and commenting on visual arts (both called *Flores en el Ático*); a private Facebook account linked to her jewelry activities; another Tumblr where she inventories parts and supplies used in her work; and an Instagram account to document her jewelry production. (She uses Pinterest

infrequently to collect pictures of alternative jewelry and unconventional objects, much like one would a scrapbook.)¹⁹

Although Vincent is perhaps more active online than most, her multiplatform approach is not rare, and it highlights a few characteristics shared by many of her peers' virtual presences: evidence of hours spent on unpaid work managing one's online presence, a self-selecting readership that engages directly with the jeweler, and a relationship premised on a virtuous circle of exchange embodied in the idea that, as Nichka Marobin explained, "The more you give, the more you get back."²⁰ Like art historian and fellow blogger Marobin, Vincent channels online her desire to find an audience outside of the academic or print media. But this is probably less about being "alternative" than about being self-sufficient.²¹ Both Vincent and Marobin use benchmarks of professionalism online that are derived from legacy-media practice; Vincent does not post anything if she can't identify its author, and Marobin provides a bibliography in every post.

Blogs exemplify the way online users are redefining publishing media ("one to many") into circulation media ("many to many"): part of their content is "grabbed" from elsewhere, enriched by their own comments and content, and then reposted on networked platforms that further propel its circulation.²² Each platform has its codes and readership, and each has a unique way of eliciting meaning from the varied combination of images and text. In general, and in shorthand terms, we could say that it is associative on Pinterest, proclamatory on Facebook, accumulative on Tumblr and Flickr, and discursive on blogs.

This digital environment can divest images of work of the authorial markers that surround and "protect" them in a book, gallery, or museum; images can easily drift away from their source, losing some of their provenance information. They may have neither duration nor origin, and details about authorship, modes of fabrication, or intended function can be lost (although these can often be inferred).

Having fewer coordinates to navigate by does not mean no coordinates exist, however, and one of the most compelling arguments put forward by Pisani and Piotet is that we now consume information that is continuously enriched by the very networks that relay it. Webactors like Vincent or Marobin upload proprietary or aggregated content onto a shared platform. As they tag web objects, they overlay existing classification values with categories of their own. As they share these tags, they participate in an increasingly complex system

of circulating information that carries a load of metadata on its back (where the images came from, who liked them, etcetera). This data, Pisani and Piotet note, is "more intelligent thanks to the tools [used by the webactors to assign them value], and more still thanks to the network effect that these tools generate."²³ In its wake, the art-historical notion of cultural objects as genealogical—a perception premised on authorship and artistic influence—is losing ground to a constant recombination of information according to evolving affinities, a perception premised on kinship and viewer endorsement.

To Share

The evolution [toward Web 2.0] invites us to lend more importance to relationships, to flux, to what is being exchanged, to social networks that articulate themselves on a technical network, of which images inspired by plumbing or car travel only give a very imperfect idea.

—Francis Pisani & Dominique Piotet

The rise of blogging is an important, but partial, aspect of our changing online activity: it marks the rise of webactors but does not tell us how networked relationships increasingly govern data management, nor does it say anything about the mutually reinforcing logic of online user participation and information dissemination.²⁴ In effect, social networking sites are reinventing and spurring how artists' work is shared with other members of the community and the wider world.

In October 2014 someone in the Netherlands chose Donna Greenberg, a Jersey City, New Jersey–based fine artist specializing in polymer clay and metal, as a nominee for #ArtJewelryChallenge, a Facebook dissemination project. The rules of the challenge were simple: post a piece of your own work on your Facebook profile page every day for five consecutive days. Meanwhile, nominate another artist on each of those five days. A nominee then "would also mention the name, or 'tag' the artist/friend that nominated them."²⁵ Greenberg picked three artists working in metal and mixed media; realizing that polymer clay was absent from the challenge, she selected two polymer artists for her last choices. She recalled that over the next few weeks, "There were dozens, then hundreds, of pieces of jewelry showing up on my timeline daily, all with my name attributed to [them]. At one point I counted over four hundred jewelry posts on my page in one

day. By the time the challenge began to die down after January 2015, thousands of pieces of jewelry [had] passed through my page."

One aspect of the challenge was particularly significant: the system of recommendation relied upon an individual's goodwill to post, label, share work, and then nominate five other artists. The beauty of it was that friendly co-optation—as opposed to juried selection—naturally encouraged choosing more, not fewer, people, thus giving lesser-known makers a chance to show their work to, and get feedback from, the community. The great achievement of the "challenge," the initial goal of which was to "fill up Facebook with art jewelry," was to turn selection into an outward-moving, inclusive phenomenon. Ultimately, #ArtJewelryChallenge created connections where before there had been none (in particular between the polymer community and the wider contemporary jewelry world) by leveraging two mutually reinforcing phenomena: jewelers' tendency to think of themselves as a community and social media's ability to channel individual, voluntary contributions into network effects.

To Manufacture

The prognostication of a coming revolution in art jewelry is credible because of the development of new tools capable of creating a similar climate of access in the design, manufacturing, and distribution of objects.

—Gabriel Craig

A brief history of digital fabrication starts with the invention of computing technology; tracks with the development of personal computing and the introduction of 3-D modeling tools (computer-aided design or CAD) into design and architecture colleges in the late 1980s; through the popularization of 3-D prototyping and manufacturing machines between 2005 and 2010; and reaches a high point with the launch of large 3-D models databases such as Thingiverse, and of 3-D modeling software such as SketchUp, Countersketch, Tinkercad, or 123DMake. This story follows roughly the same technical arc as image or graphic-design technologies: the products of an analog technology are mimicked by personal-computer software, resulting in the wider public's participation in an economy hitherto restricted to professionally trained designers using expensive machines. And it has the potential to



FIG. 2
A student at Haystack Mountain School of Crafts in Deer Isle, Maine, cuts vinyl on a laser cutter in the school's digital fabrication laboratory (fab lab).

democratize production in the same way that the Internet has democratized publishing and the release of music and video content.

Manufacturers of 3-D prototyping machines and modeling software are keen to present their technology as both accessible and revolutionary: computer-aided manufacture (CAM), they say, will usher in an era of personal fabrication and users will cease to rely on outsourced—read “overseas”—manufacturing. Instead, people will just print things at home after modifying them to suit their specific needs and tastes. The market has already anticipated users’ reluctance to actually print “at home,” and has increased accessibility with a variety of services that make it possible to outsource one-off and batch production and allow on-demand printing. However, those visions of manufacturing self-sufficiency and mechanization of production do not mean quite the same thing for jewelers as for the general public.²⁶ Jewelers and other craft practitioners have an enormous advantage on the rest of the population in that they do not need to reinvent themselves as makers: for them, digital-manufacturing technology simply offers another set of tools that they may decide to use.

In May 2015 Haystack Mountain School of Crafts then-director Stuart Kestenbaum and Neil Gershenfeld, director of MIT’s Center for Bits and Atoms, spoke at the Society of North American Goldsmiths (SNAG) conference in Boston about a miniature fabrication laboratory (fab lab) that they installed at Haystack in Deer Isle, Maine (fig. 2).²⁷ A fab lab essentially functions as a technological open bar offering various digital modeling and manufacturing tools and providing plenty of opportunities for trial and error. It allows an exploration of multiple techniques that is similar to bench-based iterative experimentation. While Gershenfeld suggested that the fab lab’s model and vision hinge on maintaining a “low technological barrier” (like the low knowledge barrier of Web 2.0), craftspeople who have engaged with the technologies insist that mastering digital software—if one is to go beyond the simple tweaking of given parameters—requires time, experimentation, and often a different skill set than that honed for manual making. As digital-manufacturing specialist Arthur Hash (fig. 3) has stressed, learning to use this equipment expertly, “much like mastering a craft, takes years.”²⁸

If fab labs’ promise of personal production as an exciting alternative to industrial manufacture overlaps with craft’s own agenda of self-sufficiency, this socioeconomic narrative seems less important to designers than digital manufacture’s impact



FIG. 3
Arthur Hash, Clasp necklace, 2013, ABS plastic and stainless steel, 22 × 10 × 1 1/4 in. (55.9 × 25.4 × 3.2 cm), collection of the artist

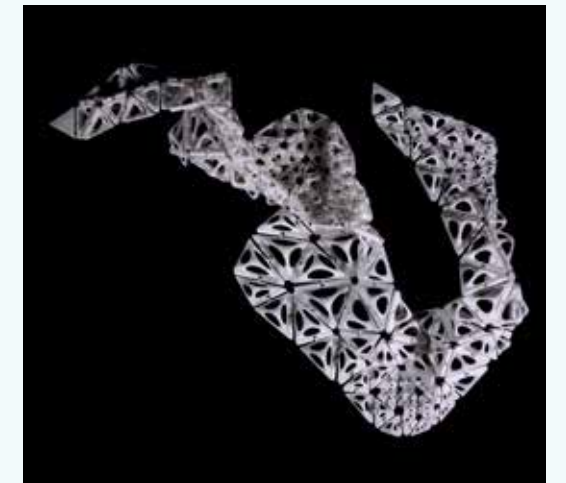


FIG. 4
Jessica Rosenkrantz and Jesse Louis-Rosenberg, Nervous System, *Tetra Kinematics 175-N* necklace, 3D-printed nylon, 2013, length: 17 in. (43.2 cm), collection of the artists

on the process of making itself. Jessica Rosenkrantz and Jesse Louis-Rosenberg, who founded and lead Nervous System, a design studio in Somerville, Massachusetts, describe their work as employing “computer simulation to generate designs and digital fabrication to realize products.”²⁹ (fig. 4) Louis-Rosenberg points out (in reference to projects like Robohand, in which engineers around the world collaborate on open-source designs for prosthetics) that the digital nature of computation data lends itself to collaboration in ways that studio techniques do not: “The nature of the language we use—which is essentially mathematical—means that disparate

people with different backgrounds (and often living far apart from one another) can easily work on the same project at the same time. Traditional techniques, by contrast, have a higher access barrier and are sequential: someone fabricates this, then someone else adds to it, etcetera.”³⁰ This statement underscores one of the paradoxes of new media: technology creates distance, in the sense that it mediates direct contact both between people and between people and things, but it also provides platforms and languages that allow far easier transmission, and therefore greater connection, between people.

To Engage

The logic of the art world and the logic of new media are exact opposites. The first is based [on] the romantic idea of authorship which assumes a single author; the notion of a unique . . . art object; and the control over the distribution of such objects which takes place through a set of exclusive places: galleries, museums, actions. The second privileges the existence of potentially numerous copies, [an] infinitely large number of different states of the same work, author-user symbiosis . . . the collective, collaborative authorship, and network distribution (which bypasses the art-system distribution channels).

—Lev Manovich

Collaborative and participatory models in craft have surged in the last ten years and encompass an extremely broad array of interactions, both on- and offline. This surge has ideological origins in the Happenings of the 1960s and tends to reframe the craft notion of usership into the fine-art notion of participation.³¹ These offline endeavors have since spawned a number of native online projects that similarly embrace the participatory renaissance in craft and tend to use the web to maximize social media’s ability to communicate, document, and disseminate projects.³²

Like their 1960s forebears, these participatory projects are structured as calls for action and usually follow three distinct phases: the circulation of a participation protocol; a form of collective interaction or transaction; and a representation of activity in the social sphere (whether on- or offline). Also like their forebears, participatory actions assume there are disenfranchised communities and aim to enroll these



FIG. 5a–c
Ojalà Itinerante, piece number 10. Seed piece made by Alejandra Koreck, 2015, paper, cotton string, metal sheet. Koreck handed the piece to Sayumi Yokouchi during the Ojalà Itinerante exhibition at Café Clara during Munich Jewelry Week; first modification by Yokouchi, 2015, cotton tape and elastic ribbon. Yokouchi handed the piece to Erin Daily in the Brooklyn Botanic Garden; second modification by Daily, 2015, cotton tape, elastic ribbon, copper, elastic cord.

communities in collective acts of creativity, using craft objects or processes as activators. Unlike their predecessors, however, participatory activists today can rely on the serendipitous alignment of their ultimate goal (loosely defined as “outreach efficiency”) and some recent technology-driven phenomena, in particular the rise of self-selected online communities that can immediately engage with specific protocols, along with the rise of user-generated content³³ and the attendant renaissance of the amateur.³⁴

Ojalà Itinerante, a relatively modest project launched in 2014 by jewelers Patricia Galluci, Sabina Tiemroth, and Alejandra Koreck, illustrates the potential of collaborative authorship in the craft world.³⁵ Based on the Surrealist concept of the exquisite corpse, the project invites participants to rework, and then pass on for further alteration, a piece of jewelry made by one of the organizers (fig. 5a–c). Participation is free and does not require any special skills. The organizers state that they “emphasize the process, not the result of the finished pieces.”³⁶ The blind faith required to send your work to a relative stranger is represented on Ojalà’s Facebook page by a plus sign between the multiple authors of each piece. This project, like many others of its kind, uses social media itself as its primary form of documentation. Images of work in progress, bookended by a list of rules and group pictures of participants in various locations around the world, bear testimony to the global ambition of the project, much as a visual diary would. The organizers function less as artists than as *gamemasters*—a term borrowed from role-playing scenarios and online video gaming—that better describes their dual role as narrators and managers of a short-lived but intense bout of *play*. Participants similarly become *players*, less concerned with individual recognition than with collective action. Like in role-playing, this form of interaction both acknowledges the distinction between master and players and encourages rotation: today’s organizers will be tomorrow’s players in an endlessly reconfigured list of participants.³⁷ In this way, new media is providing jewelers’ with secondary, career-supporting activities as producers, organizers, promoters, commentators, and information aggregators.³⁸

To Take Responsibility

We continue to perceive and represent technological innovations much as we did almost 150 years ago: as agents of social

change, for better or worse. The climate surrounding 3-D prototyping technology or digital communication is markedly different, however, from that surrounding the introduction of the telephone or automobile: twenty-first-century culture embraces technological innovation, and whatever resistance these technologies may have elicited at first seems to be dissipating in the face of several incontrovertible arguments that underscore the craft field’s enthusiastic adoption of new media: the promise of self-sufficiency; the possibility of grassroots diversity through equal access;³⁹ simple and powerful tools for community building and audience outreach; and the promise of empowerment through participation.

The rise of webactors and the capacity for personal manufacture have begun to challenge the territorial distribution of roles within the field. Physical places once associated with specific activities (the studio, the gallery, the museum, the newsroom) are merging online under the aegis of multitasking individuals such as Marobin, Lacomba, or Vincent, as well as Leonor Hipólito, Zoe Brand, and Mah Rana. It is tempting to think of new media as an extension of existing resources and conditions—the printed page, the photograph, the gallery, the museum, the public square—that carry a stronger sense of “proof.” But proof, or legitimacy, may not be this generation’s paradigm. Some practices, in fact, do not call for actualization, either because the images they produce have gained some form of autonomy from the objects they refer to, or because online presence (in its rich variety) outperforms and outlives physical existence, or simply because more and more projects are conceived as inseparable from their online existence. This form of digital and cultural penetration implies a shift in the making of craft. Craftspeople are now less dependent on having a gallery, dealers on owning a brick-and-mortar shop, and collectors and curators on visiting either of them. Physical places are less important than the ability to establish connections with others and engage with them using self-managed digital avatars.

This redistribution implies a shift in power, or, perhaps more precisely, a dilution of the authority traditionally held by figures such as the gallerist, journalist, historian, or curator in a sea of unregulated self-expression and personal initiative. The top-down education model, or the figure of the expert, is not annulled, but it must coexist with deliberative forms of discussion, instantaneous commenting, and transversal knowledge sharing. Legitimacy now also takes the form of collective endorsement.

Web 2.0, as described by those who first theorized it, represents an ideal: a form of self-realization in which modes of production and diffusion are in the hands of everyone. It is a democratic dream that abolishes class and boundary, posits mutual support as a principle, and refutes the hegemony of an elite group of decision makers or producers, in favor of nonhierarchical circulation and validation. In the case of craft, this phenomenon prompted the argument that collaborative, open-source paradigms are already part of craft's ethos and of its supposed social mission.⁴⁰

While very seductive, part of the community-powered agency promised by new media begs to be examined. Its promises may confuse global access with equal opportunity and equality of means, and new media may lend token participation a form of political agency that it does not always have.

Pisani has asserted that online communities have not taken power from other institutions as much as they have simply started to exercise their own power. With this comes a responsibility that has not yet been fully envisaged by the networked individuals and webactors that administer today's

new media, most of the online communities or digital work groups discussed in this essay are self-selecting communities very much like the contemporary field itself and based on “opt-in” membership. Opting in means caring enough about that platform's agenda or content to follow or participate in its development. Opting in, in a community whose collective goal is the legitimization of the field of contemporary jewelry, means a willingness to participate. It supposes a form of complicity. Similarly, the social engagement evidenced by new media, as seen in the fab labs, #ArtJewelryChallenge, or various other participatory projects, is always conceived of as functional, positive, friendly. What is at stake here—should we indeed believe that new media is producing new norms of social interaction—is to understand how a culture lobbying for its own cause and buoyed by collective impulses will exceed the limits set by its own agenda and invent the means to encourage and manage debate, dissent, and decision making. Treat participation as something other than political, and it risks becoming a mere cultural—or artistic—motif.

Notes

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up the original source in English. I would like to acknowledge my debt to this book, more than a simple line in the notes will. My final thanks go to Francis Pisani, who kindly agreed to read this essay before publication.

- For discussion of the participatory turn in craft and contemporary jewelry, see Kevin Murray, “The Change We Can Wear,” *Art Jewelry Forum*, May 20, 2010, <http://artjewelryforum.org/articles/change-we-can-wear>; David Gauntlett, *Making Is Connecting: The Social Meaning of Creativity, from DIY and Knitting to YouTube and Web 2.0* (Cambridge, England: Polity Press, 2011), PDF e-book; and *Build Your Own* (London, Liverpool, Norwich: Crafts Council/FACT/Norwich Museum Service, 2015).
- Although they were analyzed primarily in relation to jewelers, some of the dynamics discussed in this essay are applicable to other areas of creative expression.

- Artists are increasingly considering the web as a subject in their work. See Ian Wallace, “What Is Post-Internet Art? Understanding the Revolutionary New Art Movement,” *ArtSpace*, March 18, 2014, http://www.artspace.com/magazine/interviews_features/post_internet_art. While I did not find significant examples of jewelers who respond to, critique, examine, or use data from the Internet as a fundamental aspect of their work for this essay, it would be a fruitful direction for jewelers to pursue.
- Lev Manovich, *The Practice of Everyday (Media) Life* (PDF version, 2008), available at <http://manovich.net/index.php/projects/the-practice-of-everyday-media-life>.
- Benjamin Lignel, ed., “Helena and Lasse Pahlman,” in *AJF Best of Interviews* (Mill Valley, CA: Art Jewelry Forum, 2014), 93.

- See <http://www.metalcyberspace.com>.
- Web platforms have since been used to create multiple discrete projections of oneself, either as avatars (in the gaming industry), as aliases (in online chat rooms), or simply as representations of multiple professional selves.
- Art Jewelry Forum's editorial mission statement, as repurposed on Klimt02, <http://klimt02.net/publications/publishers/ajf-publications>.
- Leo Caballero, email to author, December 15, 2014.
- Leo Caballero, interview with the author, April 23, 2015, followed by email to author, May 17, 2015.
- Marion Fulk, email to author, May 27, 2015.
- Susan Cummins, email to author, June 17, 2015.
- Lois Boardman, email to author, July 21, 2015.
- Ron Porter, emails to author, May 27 and June 11, 2015.
- Early Web 2.0 advocate Tim O'Reilly, as quoted in Francis Pisani and Dominique Piotet, *Comment le web change le monde, L'Alchimie des multitudes* (Paris: Pearson, 2008), 13.
- Pisani and Piotet, *Comment le web change le monde*, 51 (author's translation).
- Ibid., 27 (author's translation).
- See Kim Dhillon, “A Moodboard Moment: Feeas,” Not Just a Label (NJAL) website, June 2, 2015, <https://www.notjustalabel.com/editorial/a-moodboard-moment-feeas>.
- Remedios Vincent, email to author, June 19, 2015.
- Nichka Marobin, email to author, May 28, 2015.
- When asked what inspires her about new media, blogger and artist Remedios Vincent responded, “The possibility of complete self-management.” Vincent, email to author, June 19, 2015.
- For an historical analysis of this transformation, see Pisani and Piotet, *Comment le web change le monde*, 215. For a more detailed discussion on the passage from old media to new media, see in particular Doc Searls, “Giant Zero Journalism, Cont'd,” blog, October 22, 2014, <https://blogs.law.harvard.edu/doc/2014/10/22/giant-zero-journalism-contd/>; and Henry Jenkins, “Eight Traits of the New Media Landscape,” *Confessions of an Aca-Fan*, blog, November 6, 2006, http://henryjenkins.org/2006/11/eight_traits_of_the_new_media.html.
- Pisani and Piotet, *Comment le web change le monde*, 66–67 (author's translation).

- The textbook examples for describing the phenomenon, which combines network effects and crowdsourcing, are Wikipedia and before it, CDDB (Compact Disc Database). For a complete discussion on the various ways that shared databases are filled, see Dan Bricklin's *The Cornucopia of the Commons: How to Get Volunteer Labor*, website, 2000–2006, <http://www.bricklin.com/cornucopia.htm>.
- All quotes by Donna Greenberg are from an email to the author, June 19, 2015.
- For a detailed account of jewelers' appropriation of personal manufacture and distribution, see Gabriel Craig's excellent “Art Jewelry 2.0,” *Art Jewelry Forum*, February 24, 2011, <http://www.artjewelryforum.org/articles/art-jewelry-20>.
- Benjamin Lignel, “WTF is M.I.T. Doing at SNAG?,” *Art Jewelry Forum*, July 6, 2015, <http://www.artjewelryforum.org/articles-series/wtf-is-mit-doing-at-snag>.
- Arthur Hash, email to author, April 28, 2015.
- See the Nervous System website, <http://n-e-r-v-o-u-s.com>.
- All quotes from Jessica Rosenkrantz and Jesse Louis-Rosenberg (Nervous System) come from an interview with the author, May 20, 2015, followed by email to the author, June 24, 2015. Since 2007 Nervous System has been designing “growth algorithms,” which are used to develop objects that are manufactured using digital fabrication processes. However, the most appealing (and probably the most radical) aspect of their work is not its technological novelty, or the shift from object making to algorithm design, but in their economic outlook and their ambition, which Jessica Rosenkrantz describes as a desire to create one-offs that compete with mass-produced objects.
- For a historical overview and critical appraisal of participatory art, see Claire Bishop, *Artificial Hells—Participatory Art and the Politics of Spectatorship* (London and New York: Verso, 2012).

- See, for example, the Oplulent project discussed by Julia Morris, “Collecting and Social Media,” *Art Jewelry Forum*, February 4, 2012, <http://www.artjewelryforum.org/articles/collecting-and-social-media>.
- For more on the development of user-generated content, see Lev Manovich, *The Practice of Everyday (Media) Life*; and Jeff Howe, “The Rise of Crowdsourcing,” *Wired*, June 2006, <http://archive.wired.com/wired/archive/14.06/crowds.html>.
- Howe, “The Rise of Crowdsourcing.”
- To avoid conceptual slippage between two terms that are hard to pin down, I will define “collaborative” as “engaging several people with recognized skill sets in the different stages of a project,” and “participatory” as “inviting people with no presupposed skills to contribute/make/participate in an exercise of community empowerment.”

- See Ojalà's Facebook page: <https://www.facebook.com/notes/348784821978454/>
- The three most prevalent roles currently being synthesized online are commentator, organizer, and maker, each of which may be realized via a distinct platform. Some characteristics of online identity are quite different from institutional—or for that matter, legal—identification: the images we project of ourselves online are fluid, digressive, multiple. The search for different audiences encourages webactors to cultivate multiple online personas, and it is exciting to think of the performative aspect of online identity as part of a slow pixelization of the singular author in favor of individual projects and the communities that rally around them.
- Recent sociological research focusing on labor conditions in the arts points to the causal relation between precariousness in the arts and professional polymorphism. See sociologist Pierre-Michel Menger's description of the contemporary artist's economy as one of “multiple job-holding, occupational-role versatility, portfolio diversification of employment ties” in “Artistic Labor Markets: Contingent Work, Excess Supply, and Occupational Risk Management,” in *Handbook of the Economics of Art and Culture*, vol. 1 (Paris: École des Hautes Études en Sciences Sociales, 2006), PDF e-book, http://faos.ku.dk/pdf/undervisinging_og_arrangementer/2010/ARTISTIC_LABOR_MARKETS_191010.pdf; and Sophie Le Coq, “Le travail artistique: effritement du modèle de l'artiste créateur? (Artistic Work: crumbling of the model of the artist as a creator?),” *Sociologie de l'Art* 3/2004 (OPuS 5): 111–31, www.cairn.info/revue-sociologie-de-l-art-2004-3-page-111.htm.

- For an interesting link between the participatory tendencies of nineteenth-century folk culture and the “explosion of grassroots expression” online, see Jenkins, “Eight Traits of the New Media Landscape.”
- For a description of craft as “intrinsically democratic” and several examples of participatory projects, see the Crafts Council's (UK), *Build Your Own*.