

# Beyond Promotion and Protection: Creators, Audiences and Common Ground in User-Generated Media

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## ABSTRACT

In this paper, we present findings from a qualitative study of producers in a specific creative domain—online digital photography. We used social psychology and linguistic concepts of audience design and common ground to analyze data from interview and observational sessions with 26 individuals. Through this, we identified several recurrent types of intended audiences: intimates (friends and family), photo subjects and event participants, communities of interest, communities of practice, professional contacts and peers, current and potential commercial clients, the generalized audience of “the internet,” and the self as audience. We also identified three recurrent audience management practices. We use these findings to discuss the role of shared history and shared interpretive frames in the generation of common ground between creators and audiences. Our findings recast privacy controls and promotion support as subtypes of a broader set of audience management practices, providing new considerations for design of creativity support tools and user-generated media systems.

## Categories and Subject Descriptors

H5.m. [Information interfaces and presentation (e.g., HCI)]: Miscellaneous.

## General Terms

Human Factors.

## Keywords

Creativity, photography, user-generated media, audience, common ground.

## 1. INTRODUCTION

One of the most dramatic examples in recent years of the influence of information technology on creative production and dissemination has been the massive growth in the population, activity and profile of various user generated content and media sites such as Flickr, YouTube, Vimeo, Photobucket and others. Our work draws inspiration and motivation from this wave of growth and visibility, learning lessons from examples of creativity in the wild to better support online creative activities. In this paper, we focus on *creative producers' models of audience*--that is, the individuals or groups to whom they target their creative productions. We take a sociocultural perspective on creativity, particularly the emphasis the creative process necessarily includes a communicative component. This communicative perspective directs us to construct a concept of audience through social

psychology and linguistic perspectives of concepts such as audience design, recipient design and common ground formation.

We do not suggest that the current research or technology support in this domain are misdirected. In the analysis of technology use, researchers and designers often think in terms of responding to breakdowns and user frustrations, yet the growth of user-generated media broadly demonstrates that the work *is* getting done by millions of users. This fact was supported by our interview data, in which there was a distinct lack of frustration with current systems expressed by our study participants. Therefore, rather than proposing to fix a specific problem, the research project presented here asks “How can we *more effectively* support the relationships between creators and audiences?”

Discussions of user-generated media too often wind up in gravitating toward two rhetorical poles: *gates* and *bullhorns*. In the first, the primary concern is protection, often with a focus on privacy mechanisms against unauthorized access and theft from a potentially threatening online world. In the second, the primary concern is promotion, with a focus on broadly maximizing views, hits and followers, presumably leading to market-driven outcomes of fortune, fame and positive PR. In their most extreme incarnations, the “gates” perspective appears in media stories of identity theft, cyberstalking and “stranger danger”; the “bullhorns” perspective appears in a thousand e-marketing blog posts about gaining the most followers on Twitter and effective branding strategies via Youtube.

To a degree, both of these perspectives is legitimate; aspects of both the concerns and motivations of these perspectives do indeed exist in the context of user-generated media and creative content systems. But these two rhetorical poles represent an incomplete and distorting picture, one that neither represents the variety of audiences which individual creators may attempt to communicate with, nor the various ways in which creators manage those audiences. We suggest going beyond issues of protection and promotion, and consider instead the dynamics of interaction between creators and audiences, particularly through the analytical lens of socio-cultural perspectives on creativity..

To document these dynamics and ground new technology design for supporting creative activity in future work, we pursued two related research questions for this paper. First, what intended audiences were identified by the participants in our study? Second, what practices did the participants use to engage and manage those audiences?

To address these research questions, we conducted a series of semi-structured interviews and at-home observational sessions

with contributors to various online photography sites, in order to understand how these individuals conceived of, related to, and managed their intended audiences. When referring to our study participants in this paper, we will also use the terms “creator,” “producer” and “photographer” interchangeably.

Through qualitative analysis of the data, we were able to identify several recurrent types of intended audiences. These audience types included: intimates (friends and family), photo subjects and event participants, communities of interest, communities of practice, professional contacts and peers, current and potential commercial clients, the generalized audience of “the internet,” and the self as audience. We also documented cases in which multiple audiences overlapped, and others where the photographer intentionally addressed multiple audiences simultaneously with the same image.

We should not consider these intended audiences as categories that exist entirely independent from one another or from the creator. The relationship between creators and audiences is reciprocal in nature; audiences themselves are fuzzily bounded and reconfigurable contingent on creators' actions. This relationship is situated in a cycle of practices between both sides.

The creator envisions an audience or audiences for a given photo; that photo, when viewed, may or may not engender a response from part of the intended audience/s or from some other unanticipated audience. This response or lack thereof serves as a form of feedback for the creator, causing a revision or reaffirmation (however small or large) in their perception of the imagined audience/s in the future, thus influencing future creative output. However, a full treatment of this feedback loop is beyond the scope of this paper.

We focus here on the perspective of individual creators, highlighting three audience management practices: managing access, managing interpretation and managing expectation. Based on our findings, we propose that the different audiences and practices we documented can be better understood in terms of two related but distinct concepts – the shared personal history between a producer and their audience and the common ground of shared interpretive frames between producer and audience.

## 2. LITERATURE

The concept of “audiences” is a useful one, but the term that can take on numerous interpretations especially when viewed through different disciplinary perspectives. For instance, there is a large body of “audience studies” literature in Mass Media Communications related to research on traditional radio and television audiences. In other fields such as Political Science, the related concept of a *public* is more frequently invoked. (i.e. See [12] for a more detailed discussion of the relationship between these conceptions of audience and public.) However, these research perspectives tend to operationalize the concept of audience at a level of aggregation and abstraction higher than what we address in this study where we look at specific communicative audiences conceived vis-à-vis *individual* creators.

To focus on the individual user, we turn instead to several other bodies of literature. First, we considered sociocultural and sociological perspectives on creativity [8, 2], which emphasize the socially situated nature of creative production. In this tradition, creativity is not viewed as the work of isolated contemplators, but instead exists in a tripartite relationship, enacted by *creators* with the knowledge and tools available to them in a given *domain*, assessed in reference to the expectations and interpretive frames

of particular *fields*, recipients or gatekeepers. In this project, we focused on a conception of the “field” in terms of “audiences,” that is, targeted recipients who provide iterative feedback over time, co-constructed via the participation of creators.

Taking creativity then as having an essentially communicative component (in that it must be interpretable and relevant to a field/audience), we next considered social psychology and linguistic perspectives of audience design, recipient design and common ground formation. Briefly, audience and recipient design describe the processes through which communicative behavior is adapted in response to our models of what recipients know and believe [6, 16]. Processes of audience design have been shown to occur across a wide variety of communicative contexts, including explicit and tacit communication [15], and have been demonstrated to vary in reference to different audiences, such as those of friends, strangers and self [9], as well as across academic communities [17]. Similarly, common grounding describes the processes through which coordinate on content and on process in communication, in order to build mutual interpretability. Common ground formation can be both constrained and facilitated by the characteristics of different media, such as co-presence, reviewability, and sequentially [7].

Other approaches to consideration of audiences have also appeared in the recent literature on technology and social behavior. For instance, [13] is representative of a stream of current research on social networking sites, in that it conceives audiences in reference to Goffman-inspired self-presentation and identity performance [10]. Although this dramaturgical perspective has been a productive approach to analysis in many cases, we intentionally considered self-presentation as only one out of many possible reasons for creators to interact with audiences.

## 3. DATA, METHODS & ANALYSIS

We chose to focus our study on individuals who are engaged in the production and sharing of digital photography. Photography is a creative and expressive domain in a process of rapid transformation. The shift to digital formats and computer-based editing over the past decade has both decreased the costs of taking photos, and increased access for everyday photographers to broader audiences and to professional-level tools and techniques. Rather than being interested in photography *per se* in this project, we have focused on online photography practices because they present an appropriate research setting for studying the creator/audience interactions that are our focus. We were particularly attentive to the wide range of individuals who engage in photography in different ways. We wanted broad set of creators: considering those who engaged in photography as an act of everyday, personal and vernacular creativity [5], as well as artists and professional photographers.

We interviewed 26 individuals in their homes or workplaces. The participants included 11 men and 15 women, ranging in age between their mid-20s to 70+. Our sample included 8 individuals who explicitly self-identified as professional and “serious” photographers, and 18 who engaged in more everyday “snapshot” photography. Participants were selected via purposeful sampling, recruiting individuals who had been sharing photos online regularly for at least a year. This sampling approach was activity-focused, rather than system-specific. As a result, the participants reported using a wide variety of tools, services, and approaches for sharing their photos. These included, but were not limited to:

Snapfish, Shutterfly, Blogger, Facebook, personal websites, Kodak gallery, Livejournal, Photo.net, Picasa, Apple MobileMe, Flickr, Yahoo groups, private email lists and in two cases, self-coded photo management systems written in PHP, HTML, and Perl. The participants often reported the use of multiple systems, contingent on their target audience and the intended function of their photographs (e.g., communicative, expressive, promotional, etc.)

The primary data for this qualitative study consisted of semi-structured interviews and observation sessions. Conducting the sessions face-to-face in the participants' home or work spaces allowed the interviews to be structured primarily through a series of photo-elicitation tasks [11], using the participant's own photographs to contextualize and focus their responses. In addition to revealing general photographic and creative practices, this photo-elicitation protocol highlighted decisions related to media production and sharing, as well as prompting reflection on recent life events and the photographic representations of those events. Centering the research in the homes of the participants revealed local context and personal meanings that would not have been otherwise visible to a researcher. Similarly, this approach also provided access into patterns of exclusion, revealing not only what images had been posted publicly, but also those that were private or never shared at all.

We analyzed our interview transcripts, observational notes and analytical memos via an open, iterative coding process [14]. We did not generate a quantitative assessment of the speed, amount or quality of their creative activities. Our goal in the coding was to uncover, summarize and highlight the perspective of the participants. As recurrent themes appeared in our data, we evaluated them via a constant comparative method, eventually generating the set of findings related to audiences, practices and components of common ground described in the sections below.

#### 4. FINDINGS: AUDIENCES

As noted earlier, we were interested in a broad operational definition of creativity, encompassing "amateur" everyday creative acts for purposes of communication and social connection, a variety artistic and aesthetic-oriented production, and creative work that occurs in the course of producing of work-for-hire and work-on-spec by professionals. We were able to identify several target audience types in our data. We describe these here briefly, and then discuss the audience management practices at greater length.

The most common audiences addressed by our study participants, both everyday and professional photographers, were those consisting of *family and friends* – intimates with a shared history and pre-existing relationship with the photographer. Like other research on social networking systems, our participants did not always consider family and friends to be the same audience, and they described distinct challenges in negotiating both at the same time. Yet we group family and friends as a single audience type here because they were frequently grouped as one by our respondents, underscoring a key conceptual distinction--the intimacy between the creator and this intended audience, in contrast to the other identified audience types.

Another frequently invoked audience type was *photo subjects and participants*; that is, the individuals who appeared in the photo

directly, or participated in a meaningful way in the activity or event related to the photo. Beyond obvious friends and family participants (overlapping with the previous audience types), some examples that appeared in our data included fellow travelers on a cruise tour, office mates and co-workers, conference attendees, high school classmates at a reunion, or even subjects in an opportunistic or unplanned photo shoot. For example, participant BL (an aspiring professional photographer) spoke of taking pictures of a group of men playing roller hockey in a park as an ad hoc opportunity to expand his portfolio: "I thought, 'Oh! This would be great.' Because I don't shoot a lot of sports. [...] I thought this was going to be a fun chance to shoot some sports, it was kind of a push to see what happens." In asking for permission to shoot, he agreed to send digital copies to the players, a form of reciprocal social exchange between photographer and audience.

At times, the intended audience was not the event participants or photo subjects themselves, but rather a *proxy* for that subject. For example, study participant SS frequently took pictures of both teams at his children's soccer games. Via his personal website, he shared these images not with subjects (the children themselves), but rather with their socially designated representatives—their parents.

Target audiences also could be more generalized in nature. *Communities of Interest* (CoI) [4] appeared as target audiences for our study participants in several ways. First, there were content communities. In the context of photography, examples included communities sharing a specific type of photo subject, such as photos of flowers, biking, architecture, children, and local events, among others. We also saw engagement with aesthetic communities of interest, which were less concerned with the specific content of the images, but more so with a specific genre, or visual style, such as pinhole lens photography. The third type were agenda communities, which contributed images toward a specific end. For example, study participant MK was an active contributor to a Creative Commons photo group on Flickr due to her ideological support for that copyright reform movement.

*Communities of Practice* (CoP) [19] and knowledge-sharing communities also appeared as recurring audiences in our participants' accounts. These CoP were at times focused on the actual process of photography and photography skill development. In other cases, photography was in service of another type of generative, skill based craft or hobby, such as baking, knitting, ham radio or music production. The focus of the photography CoP audience was on documenting process, transfer of knowledge and skill, as well as gaining feedback from other members of the community.

The dividing line between CoI and CoP audiences can be somewhat blurry at times. For example, we saw participants whose audiences were concerned with macro photography, which is both a content interest and a set of related practices and equipment. Similarly, there is a fuzzy distinction when photography is used to support a generative hobby, since participation that broadcasts accomplishments is clearly coupled with sharing knowledge and skill. But generally, we could make a distinction between CoI and CoP engagement – such as the difference between posting photos onto a food blog where someone documents what they eat (engaging a CoI of "foodies"), versus a food blog where someone talks about making the food (engaging a CoP of "bakers/home chefs").

A more particular community audience identified by several participants was that of *professional contacts and peers*. Photos engaging this audience often took place in the context of semi-social events, such as networking lunches and conferences. Participant DC (a user experience designer) described taking and posting conference photos as “definitely an activity of service and documentation. I am basically doing this for the [professional] community.” This participant went on to describe posting business lunch photos online as a way of advertising engagement with his contacts, as well as providing an “excuse” to follow up with them.

We saw two other common work-related audiences appear in our interviews, those of *current commercial clients*, and *potential commercial clients*; potential clients were treated as a generalized public audience, not necessarily sharing a pre-existing relationship with the study participant. In several instances, the participants were self-identified professional or semiprofessional photographers. In these cases the photographers broke down potential client audiences into more specific genres of specialization (e.g., “child photography”, “wedding photography”). For three of the professional photographers in the study, their interactions with existing clients were typically enacted via specialized photo management systems, which provided features such as password protection, built-in print ordering support, watermarking, and so on. Other examples appeared where an individual was not a professional photographer, but used photography to engage commercial audiences. For instance, participant SW was an avid mineral collector who also maintained a side business selling rare geodes, crystals and fossils online. He posted pictures online to generate these sales, in addition to using his photos to engage with fellow hobbyists.

Distinct from the (at least partially) known audiences of friends, family and peers, was the *generalized audience of the Internet*. Most often this general audience was raised as an explicit target for exclusion. These concerns were sometimes framed in terms of exposure and privacy; participant KB stated “I [went to a more restricted privacy setting in Picasa] initially because my sister complained about having pictures of her daughter on the Internet *for all to see*.” At other times, this generalized audience was invoked to raise questions about the general interest of a given photo. KB noted this in describing a picture shared only with family, saying “that’s my dog’s butt, not something people really want to see.” In the first case, standard privacy controls were appropriate for addressing her concerns. In the latter case, the issue was not one of privacy, but of perceived relevance.

There were users for whom sharing some of their photos publicly and widely was viewed as an essential step of their photowork. Participant DC expressed this viewpoint by stating “On iPhoto on my machine, [...] [my pictures] are just clutter. Upon Flickr, organized, sharable. Then it becomes useful, then it may become interesting. They kind of serve a purpose.” The notion that someone was watching, even if who was left unspecified, also served as a motivator for some participants, particularly when their photography was used to document or support other interests or projects. Participant BL discussed this aspect of posting pictures about his various music and artistic projects on his personal blog, saying “it holds me accountable[...]that’s one of the tools I’ve really discovered as an artist is when I want to make sure I get something done I tell other people about it. So, then even if nobody really cares that much at least I have this sense

that there’s an expectation out there that I have to kind of deliver on what I promised.”

Standing in contrast to the audiences presented so far, all of which are inherently social in nature, we also saw repeated cases of *self-as-audience*. The self-as-audience was invoked in regards to the traditional role of photo as memory aid and memory trigger. Self-as-audience also appeared in a manner similar to Van Djick’s model [18] of personal photography conducted in service of some hypothetical future self, who we speculate will want to remember the photographed present. Participant EC described her need to address a future-self audience as even being a burden at times, saying, “Sometimes, I honestly feel like I wish I didn’t have to take these pictures, but I don’t want to miss out the opportunity. [...] I want the moment to be captured. And, if I don’t take the pictures, I’ll be disappointed with myself or whatever. So, sometimes I do feel like I wish I didn’t have to take these pictures. [...] Sometimes, I feel like... [...] Like, ‘I don’t really want to be taking pictures right now, but I want to picture to remember this by.’”

Before proceeding, we note that the neat delineation implied by naming the audiences above is itself somewhat misleading. An exclusive categorical division of audiences is not an accurate picture of our data. Particularly in the case of photography supporting hobby endeavors, we found several examples of bridging multiple audiences. Participant JH, for instance, was a baker and knitter who used photos of her creations both to engage with hobbyist communities online, as well as to communicate about holidays and special events with her remote family members. Another variation appeared in the case of SH, a ham radio enthusiast who posted photos of electronics projects to engage both a global community of practice as well as an extremely local group of friends who shared his interests.

The loose boundaries of audiences points to the fluidity of human social relations, as well as the ability for photographs to be used to address multiple audiences in parallel. The polysemic nature of photography has long been held as emblematic [1], and indicates both the power and challenge of photographic interpretation. We will return to describing the practices used in bridging multiple audiences in the next section of the paper.

## 5. FINDINGS: AUDIENCE MANAGEMENT PRACTICES

After identifying the audiences addressed by the participants of this phase of our study, we next characterized the practices that the participants used to target, address and manage these audiences. Through our analysis, we grouped these practices into three main themes: *managing access*, *managing interpretation* and *managing expectation*. Across these themes, we found illustrations of the intentionality of individual participants in engaging various audiences, as well as evidence of the mutual influence of audiences and creators on these practices.

### 5.1 Managing Access

Practices for managing access included standard decisions about privacy settings in the photo sharing application or applications used by the participant in question. Beyond in-system decisions, however, access management also took place at the level of system selection and adoption. That is, participants chose which photo sharing system or systems they would use with in reference to either the exclusion or inclusion of specific audiences.

For example, several participants with highly targeted audience models (not just restricted to “family” or “friends” but individual subsets of those groups) noted that they chose Picasa as their photo sharing tool because it supported user-level access controls, allowing specific images to be targeted at specific sets of individuals without broadcasting them any further. Other participants with a sufficient degree of technical proficiency spoke of accomplishing the same level of access control by creating password-protected HTML pages on personal web sites. These types of exclusion practices were dictated both by individual users’ goals and comfort levels, as well as by feedback and reciprocal obligation to certain audience members. In the example provided by participant KB in the previous section, her restricted access audience model first came about in response to her sister in law complaining about her daughter’s photos being public. Once KB received that feedback, the practice persisted: “...I’ve kind of carried that through in all my albums.”

Conversely, several participants spoke of adopting systems specifically because they facilitated access to audiences that they found it hard or impossible to interact with otherwise. Participant HK spoke with strong emotion of being able to share photos with an audience of remote family members with whom she had otherwise lost touch: “...without Facebook, there’s no way my nephew and I would ever have been back in touch, and there’s no way I would of ever seen pictures of his daughter. She’s 10 weeks now, and every week he sends us, on Facebook, posts with kiddie pictures. So, that’s probably one of the hugest things on photography that Facebook has done. Because even electronically, he didn’t have our email addresses. I mean, we had totally lost him, and we’re back in touch, and we’re able to, literally, week-to-week, see this baby. [...], it’s wonderful! I mean, it’s huge. It’s huge, because we lost... Half his life, we haven’t seen him. “

Some participants also controlled access by establishing inclusion and exclusion practices for themselves in terms of what photos they would allow to be posted online in any system. Noting her lack of trust in the built-in privacy mechanisms of user-generated content system in general, participant MK stated “if I’m afraid of it escaping into the wide, wide internet, I’m just *not* going to put it online.[...] I think of it as just a web-savvy rule.”

## 5.2 Managing Interpretation

Participants reported managing interpretation primarily by leveraging various aspects of common ground between creator and audience, such as when addressing multiple audiences. For instance, participant DC discussed a picture of his new home office posted on his Flickr account. This participant had recently left his job, and had begun to pursue freelance consulting. The messages that he intended to convey via this image deliberately depended on the viewing audience. For a set of geographically dispersed family members, the image was to indicate that he was coping emotionally with the loss of his job, and moving forward. For an audience of local professional and casual friend contacts, DC intended the office image to be interpreted in conjunction with other images he posted around the same time, showing activities such as trade luncheons and industry workshops that he would not previously have had time to attend. In DC’s account, these images were public signals that he was available but also still professionally active, without having to explicitly state that he was unemployed. DC labeled this as “sideways” maintenance; through an awareness of how each audience would interpret the

image, he felt he was sending distinct but related signals to both of these audiences at the same time,

In contrast to issues of “context collision” [3, 13], in our study the need to manage multiple audiences was not necessarily characterized by our participants as a burden or negative issue. For some participants, it was represented as an opportunity. When HK was asked if managing the audiences of co-workers, personal friends and remote family felt like “worlds colliding,” she responded by saying “No. I don’t see it as a collision. I see it as just as this melding that’s wonderful. [...] all my different worlds coming together, having moved away almost 18 years ago from Louisiana, lived in three different parts of the US, it’s magical to me that all these people coming together [laughter] [...] I find it fascinating that my friends from Connecticut are having conversations with my siblings and my friends from Detroit.”

## 5.3 Managing expectation

Participants in our study also engaged in practices to manage the expectations of their audiences so that *future* interactions would be viewed in a desired light. MB, one of the professional photographers in the study, noted that she both included and excluded certain types of photos on her portfolio blog in order to manage the expectations of her clients and potential clients: “I do try to post online photos that *I* would like to take more photos like [...] I’m showing clients not necessarily the photos that are their favorite but the photos that I feel like tell a story to other clients of, ‘These are the kinds of pictures she likes to be taking.’” Later in the interview, she continued: “there’s some work that I do that I just would never post online [...] Just this past weekend, I did a large family reunion and have like 29 people on it. I don’t love that. I feel like sometimes it’s okay to do work to pay the bills. [...] [But] I wouldn’t post those online because I don’t actually want more large groups calling me. I don’t want to advertise large groups. But if someone did call me, if I have the space I would do it. [...] [But] I just think they’re boring. “

At times, particular relationships between creator and audience overrode more general expectation management practices. For instance, participant BL worked in an elementary school, and frequently took photos at school events. This required BL to manage the general expectation of parents at the school if those photos were later shared online: “some of these [school trip photos] went up on the school’s website as well. [...] usually I don’t do this because if I advertise, it would just be overwhelming [with requests for copies].” At the same time, his general practice could be altered for specific individuals: “But for a couple of select parents, I emailed out like, ‘Here are five or six photos of your kid,’ [...] I couldn’t do that for everybody all time for every event because it would be all I would be doing but... ‘You’ve been on the PTO for four years and your kids are really nice so I’ll send you some files and photos.’ ”

## 6. DISCUSSION: COMPONENTS OF COMMON GROUND

Based on our identification of audiences and audience management practices, what appeared to be the relevant components of common ground shared between creators and different audience types? We found two key considerations: shared history with the audience and shared interpretive frame. These two components each influence common ground formation in reference to the meaning and value of a photo. The presence of

a shared history allows for that history to be leveraged to load the photo with implicit meaning. Shared interpretive frames allow the creator to assume that the audience will be engaging in the desired interpretation. Though similar, these two considerations are different in important ways. We present examples across several combinations of shared history and shared interpretation to illustrate the distinctions.

### 6.1 Shared history

Several examples of fairly mundane imagery took on new depth of meaning when viewed through the context of shared history. For instance, participant SM stated that moving into a new apartment was a major event in her life over the past year. She documented and shared this event by posting photos on Facebook as well as emailing them to select individuals. Given that many of the photos were of extremely mundane details, we probed further into the context of the apartment. She responded by highlighting one particular image: "Oh! Yeah here is [my son's] closet. [...] I e-mailed those to the [his grandparents] cause they helped us get this apartment." Though not publicly stated, SM had received assistance from her son's grandparents, which it made it financial feasible for them to move into the new apartment; an apartment, which among other features, allowed her teenage son to have his own closet for the first time in many years. Thus knowing the back story of the apartment changes a documentary photo of an empty closet into a gesture of reciprocity, obligation and thanks, and reveals it to be a more creative approach to communication than its mundane appearance first suggested.

### 6.2 Shared interpretive frame

SH's audience in his ham radio operator Community of Practice does not share the same level of personal history as did SM did with her in-laws. The CoP is a larger and more generalized audience, to which SH has less intimacy and less one-on-one interaction. Yet within the context of their hobby work, he can assume that he and his fellow hobbyists will share a high degree of interpretive frame, thus ensuring that the effort and care invented in SM's custom radio building projects will be interpreted and appreciated appropriately: "[...] This is something very interesting where it's a specific kind of transmission line. [...] this was probably being used in 1950s. So it's very difficult to get now and nobody uses it these days but I was able to find it during a radio festival. [...] I thought I would take pictures of this and send it to the discussion group, we have a group who are interested in all these things so they can see how it is constructed so if they want to make it they can. [...] this will be of interest to anyone who is trying to make this particular thing. It will also be of interest to people who have not seen it. It's a very rare find. Nobody sells it or manufactures it."

Yet the same enthusiasm and valuation for these pictures – the same interpretive frame—was not shared by SM's family, despite his strong relationship and deep personal history with them. In reference to his hobby, SM succinctly noted: "[my family]...generally they are not interested in the same thing."

A shared interpretive frame is not necessarily fixed. Consider the example from participant MB provided in section 5.3 about practices for managing audience expectations. Her efforts to shape her portfolio by excluding certain examples of her work demonstrates her desire to assert an interpretive frame for her clients, rather than broadly advertising herself as a jack-of-all-trades.

### 6.3 Sharing both history and interpretive frame

We can also see how sharing both components can be mutually supportive to create common ground between creator and audience. Participant JH described one such case while discussing photos taken at a friend's wedding and the context of those photos: "[...] they have a whole lot of family issues. [The bride's] parents announced that they were getting divorced two weeks after [the bride and groom] announced they were getting engaged so just like seeing everyone happy and her dancing with her dad, I knew that was important. I've known her parents since college as well.[...]" JH's shared history with both her friend and her friend's parents (including their marital issues) combines with the positive framing and shared symbolism of the traditional father/daughter wedding dance to create an image rich with meaning for photographer and subjects alike.

## 7. CONCLUSION

In this paper, we presented the audience models and audience management practices which we observed in our interview and observational data of participants in a specific creative domain – online digital photography. These findings and our discussion of the components of common ground relevant to these creator/audience interactions contribute to the literature by providing rich characterizations of individual behaviors and motivations in the context of technologically mediated creativity. Though grounded in the particular practices, audiences and technologies related to digital photography, these findings provide a helpful point of reference for other technologies of production and other contexts of user-generated media.

Our findings inform discussions of privacy and publicness by breaking down this dichotomy. As demonstrated in this paper, we can view both privacy and promotional practices as a subset of a larger suite of audience management and audience targeting practices. Doing so also allows for a more multifaceted conception of privacy beyond concentric circles, or simple trifurcations between family, friends and a general unknown public. At the same time, our data also pushes back at overly simplified notions of online community in user-generated media sites, calling for precision in our language and discussion. The variety of tools used and audiences addressed by our participants indicates that we would benefit from moving beyond analyses that are system-centric to those that are activity-centric or audience-centric. Working from an audience-centered perspective necessarily changes discussions about the quality of contribution in user-generated media systems; some "breakdowns" in system use are more accurately viewed as a mismatch between intended and actual audiences.

## 8. FUTURE WORK

Leveraging the concepts of audience design and common ground allow us to view individual acts of creativity through a communicative perspective. In turn, this perspective let us begin to untangle the relevant dimensions of common ground at play in the creator/audience relationship, which may lead to new considerations for design of features for notification, feedback and audience-finding in next generation systems which support content sharing and dissemination.

Future work on this project will proceed in two main phases. We are in the process of developing an online survey instrument in order to test and expand these findings across a broader

population of digital photographers. The results of this survey will be combined with the thicker description provided by our interview and observational data, and used in the development of a series of interface and interaction prototypes. These prototypes will allow us to test how different approaches to creator/audience interaction can influence, sustain and support individuals' creative practices.

## 9. ACKNOWLEDGMENTS

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