

The Role of Information in a Community of Hobbyist Collectors

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This article marries the study of serious leisure pursuits with library and information science's (LIS) interest in people's everyday use, need, seeking, and sharing of information. Using a qualitative approach, the role of information as a phenomenon was examined in relation to the leisure activity of hobbyist collecting. In the process, a model and a typology for these collectors were developed. We find that the information needs and information seeking of hobbyist collectors is best represented as an interrelationship between information and object needs, information sources, and interactions between collectors and their publics. Our model of the role of information in a particular domain of hobbyist collecting moves away from the idea of one individual seeking information from formal systems and shifts towards a model that takes seriously the social milieu of a community. This collecting community represents a layer of a social system with complex interactions and specialized information needs that vary across collector types. Only the serious collectors habitually engage in information seeking and, occasionally, in information dissemination, in the traditional sense, yet information flows through the community and serves as a critical resource for sustaining individual and communal collecting activities.

Introduction

Library and information science (LIS) has long been concerned with the information-seeking needs and behaviors of engineers, health professionals, and scholars, particularly vis-à-vis work activities (Case, 2002). Few studies have

explored the information-seeking behavior of people outside scholarly and professional realms (Rieh, 2004). Research on the information-seeking behavior of low-income people (Chatman, 1991; Spink & Cole, 2001) and research in the vein of Dervin's *sensemaking* approach (Dervin, 1992) have done much to expand the contexts in which studies are undertaken. Other promising arenas for expansion include studies of the role of community information systems in helping individuals and building communities (Pettigrew, Durrance, & Unruh, 2002) and the role of the Internet in everyday life information seeking (Rieh). A recent article by Kari and Hartel (2007) calls for more studies of information behavior in leisure activities. In so doing the authors take a strong rhetorical stance: reframing everyday life and problem solving as a "lower context" for information behavior, and reframing pleasurable and profound activities as "higher contexts." Leisure activities are considered higher *because of*, not in spite of, their pleasurable qualities. The authors argue that leisure activities should not be ignored given that they comprise such an important, even cherished, part of the human experience.

Difficulty in accepting the academic study of leisure is not limited to the field of LIS. For example, the meteoric rise of massively multiplayer online gaming and hybrid interactive learning environments have left researchers in domains such as educational technology and economics struggling to come to terms, as academics, with notions of play and gaming. Current research on the gaming culture typically contains elaborate justifications of value as follows: citing research in anthropology, psychology, and education, which indicates that play is an important mediator for learning and socialization through life (Rieber, 1996); showing that play can be seen as a form of cultural production (e.g., folk art; C. Pearce, 2006); and demonstrating that much online play is undertaken by all ages including adults with regular jobs and meaningful

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relationships, and not a small cadre of stereotypical, socially isolated teenagers (Castronova, 2005). Currently, researchers in gaming and simulation are rallying around the term *serious games* (Abt, 1970), while leisure studies researchers are rallying around the term serious leisure: the systematic pursuit of substantial amateur, hobbyist, or volunteer activity (Stebbins, 1992). What is unfortunate about the defensive armor of seriousness is that it posits itself against a vague other—a straw man of frivolity—that is unworthy of study. Rather than raise up the study of leisure and play by denigrating other activities, we dispense outright with notions that some elements of the human experience, and hence the human information experience, are somehow unworthy of academic study. Instead, we take up the challenge of Kari and Hartel (2007) to research the pleasurable and profound.

Our research subjects comprise hobbyist collectors who participate in an online community information system that includes an informational Web site and an electronic bulletin board. The collectors have a wide variety of occupations, including art director for a textbook publisher, homemaker, artist, student, university researcher, retiree, private investigator, emergency management specialist, and high school teacher. Their occupations require them to create, teach, learn, care for others, and research. They have interesting occupations to be sure, but, for us, it is their leisure activity that is of interest. What is the hobby shared by this disparate group of people ranging in ages from 18 to 60+? Their shared hobby is the collecting of toy rubber ducks.

Serious Leisure and its Relationship to Human Information Behavior

There is a substantial literature theorizing Web technologies as tools and venues for communication and social activity, and, therefore, the particular role of Web-based information systems forms a background to our research. In contrast, there is a much more modest body of literature that examines the intersection between leisure and information behavior, and this, therefore, forms the main interest of our study. While a person-focused study of information needs is a dominant approach in information studies (Case, 2002), we take steps here, following Hartel (2003), to integrate the serious leisure perspective with a focus on the *social worlds* (Unruh, 1979) of the collectors and ultimately on how their activities result in and fulfill information needs. In doing so, we show that the social worlds of these collectors comprise a constellation of actors, events, and practices that have coalesced into a perceived sphere of interest and involvement.

The “serious leisure perspective” was developed by sociologist Robert A. Stebbins in the early 1970s as a way of framing the study of leisure (Stebbins, 2007). Stebbins defines leisure as “uncoerced activity engaged in during free time, which people want to do and, in either a satisfying or a fulfilling way (or both), use their abilities and resources to succeed at this” (Stebbins, 2007, p. 4). Stebbins’ perspective acknowledges the existence of three main forms of leisure: casual, project-based, and serious leisure. Casual leisure

(which includes play, relaxation, and sociable conversation, as well as passive entertainment such as watching television) is defined as “an immediately, intrinsically rewarding, relatively short-lived pleasurable core activity, requiring little or no special training to enjoy it” (Stebbins, 2007, p. 38). Project-based leisure (which includes activities such as volunteering for a sporting event) is characterized as a “short-term, moderately complicated, either one shot or occasional, though infrequent, creative undertaking carried out in free time” (Stebbins, 2007, p. 43). Serious leisure (the focus of our study), in contrast, is described as the “systematic pursuit of an amateur, hobbyist or volunteer activity that is sufficiently substantial and interesting for the participant to find a career there in the acquisition and expression of its special skills and knowledge” (Stebbins, 1992, p. 3). Serious leisure, therefore, entails a level of commitment and perseverance, a distinctive knowledge and skill set, the notion of a career, and durable benefits that are typically absent in casual and project-based leisure.

As both a component and a further typology of those involved in serious leisure, amateurs, hobbyists and volunteers have differences that Stebbins sees as setting these groups apart. Volunteers offer help, either formally or informally, with no pay or, at most, token pay, for the benefit of both other people and the volunteer. Amateurs (often found in the fine arts, science, sport, and entertainment) are usually linked with professional counterparts and with publics. Stebbins introduces the professionals-amateurs-and-publics (PAP) framework from sociology to deconstruct this relationship. Stebbins defines the concept of publics as “sets of people with a common interest; people not served by, but rather informed, enlightened, or entertained by professionals or amateurs, or both, and who make active demands upon them” (Stebbins, 1992, p. 59). The notion of publics is further separated into lay and collegial publics, with collegial publics made up of “the amateurs and professionals themselves as they consume the products of their colleagues” (Stebbins, 1992, p. 59). Stebbins characterizes a hobby as “a specialized pursuit beyond one’s occupation, a pursuit that one finds particularly interesting and enjoyable because of its durable benefits” (Stebbins, 1992, p. 10). In contrast to amateurs, *hobbyists* lack a professional counterpart, though they may have commercial equivalents and often have small publics who take an interest in what they do. In contrast to the amateur’s PAP system, hobbyists are said to have a hobbyist-public (HP) system. There are five types of hobbyists: (a) makers and tinkerers, (b) activity participants (in noncompetitive, rule-based, pursuits), (c) players of sports and games (in competitive, rule-based activities with no professional counterparts), (d) the enthusiasts of the liberal arts hobbies, which are primarily reading pursuits and, (e) collectors (Stebbins, 1992, pp. 10–15).

Stebbins has credited Hartel (2003) with extending the perspective of serious leisure into the sphere of LIS (Stebbins, 2007). As Hartel points out, however, leisure (more broadly defined) has been a part of a number of theoretical models of everyday life information seeking dating back to the

mid-1990s (Hartel, 2006). Over twenty years ago Savolainen (1995) acknowledged that everyday life information seeking, and the selection of sources to meet those needs, took place within a sphere that included leisure activities. The study of human information behavior in the realm of leisure activities has continued apace since the mid-1990s and includes Ross' (1999) study of the information encounter in the context of reading for pleasure; Kari's (2000) study of people's need for and use and seeking of paranormal information; Spink and Ozmutlu's (2001) study of sexually related information seeking on the Web; Savolainen and Kari's (2004) study of online information seeking behavior and the role that information sources play in the context of self-development; Hartel's study of the role of information in gourmet cooking (2006); and Prigoda and McKenzie's (2007) study of human information behavior in a public knitting group.

Collecting, Collections, and Collectors

As Baudrillard has observed, objects have two functions: "to be put to use and to be possessed" (1996, p. 86). Possessing an object involves abstracting it from its immediate utility and viewing it instead in direct relationship to the person who possesses it. It is the act of acquisition and possession of objects and the bringing together of objects to construct a subjective world that lie at the very heart of collecting (Baudrillard). Other definitions of collecting include the notions that collecting is an active and selective process (Belk, 1995; Alsop, 1982); collecting involves an element of passion or obsession (Benjamin, 1969; Belk; Aristides, 1988); collecting entails a valued connection between an object and the series or entirety to which that object belongs (Durost, 1932; Belk) and that this relationship between objects means that some system of organization is required (Aristides); and collecting involves the development and application of a system of specialized knowledge (Gelber, 1999). Collections themselves have been divided into different types based on criteria such as the nature of the collectible itself and the manner of its acquisition. According to Gelber, for example, there are three kinds of collections: primary collections composed of objects made to be collected (e.g., baseball cards); secondary collections composed of items originally made for other purposes (e.g., postage stamps); and intangible collections in which the things collected are not actually possessed (e.g., bird watchers "life lists"). Rapp & Dodgen (2001) not only create a typology based on the nature of the collectible (topic versus item focused collections) but also differentiate collections based on the manner of acquisition. In this scenario, the passive collector relies on other people to add to his or her collection, while the active collector takes an active interest in acquiring the collectible him/herself.

In relation to collecting, what is not in dispute is that there is a long history associated with this activity. Creating cabinets of curiosities that held collections of unusual objects was a hobby undertaken by the nobility in the 1700s. The political stability and wealth of the Netherlands, in particular,

stimulated a passion for collecting that was later embraced by members of a wealthy middle class (Mauries, 2002). In North America today it is estimated that nearly one in three people collects something (S. M. Pearce, 1995), and collections encompass an endless variety of both rare and common natural objects and manmade artifacts (Economist, 2005). Adults have long collected toys. While dolls, trains, and cars have dominated toy collecting, the diversity of toys collected extends to teddy bears, board games, yo-yos, tin toys, action figures, and Barbies. It seems that almost anything can be a collectible, including the humble rubber duck. The simple rubber duck has gained remarkable visibility and popularity in contemporary American culture (Meyer, 2006). Although many people today consider rubber ducks to be floating bath toys only, squeezable rubber ducks have existed at least since the 1930s when the Seiberling Latex Products Company produced 7-inch standing, rubber toy figures of Donald Duck. Rubber ducks designed to float in the bath tub were not commonly seen until the late 1950s and early 1960s, by which time most "rubber" ducks were made out of synthetic materials such as vinyl. The rubber duck achieved widespread popularity in 1970 when the children's television show *Sesame Street* produced a segment where the Muppet character Ernie sang the song *Rubber Duckie* (Meyer).

Over time, the rubber duck has become an icon. It is a symbol for babies, childhood, bathing, and bathrooms, and the image of the rubber duck is commonly found on books, clothing, and decorative items. The appeal of rubber ducks now extends far beyond these venues. Rubber ducks are used for charity fund raising, business names (Meyer, 2006), and as artwork media or subjects. Rubber ducks have also become popular promotional giveaway items for businesses as varied as sports teams, hotels, universities, and technology companies. Hobbyists have also created oversized kites and hot air balloons that look like rubber ducks. Enthusiasm for rubber ducks has spread to other nations. In 2001, the Sun, a tabloid newspaper in the UK, gleefully reported that a visiting decorator had spied a crown-wearing rubber duck in the private bath of Queen Elizabeth II. Newspapers in the UK, U.S., Canada, and Australia picked up the news item. Recent years have seen rubber duck collectors featured in the popular press such as in collector's magazines *Antiques & Collecting* (Glew, 2004) and *Collect it!* (Bates, 2004), and in popular books such as *Rubber Duckie* (Davis, 2004), *Ripley's, Believe It or Not!* (Rainford & Putnam, 2005), and the *Guinness Book of World Records* (Glenday & Way, 2005, 2006). Today rubber duck collectors can be found around the world, including Japan, Brazil, UK, U.S., Australia, New Zealand, China, Belgium, and the Netherlands. Collections range in size from 5 ducks to the Guinness World Record collection of 2,583 unique rubber ducks. (See Figure 1.)

Despite international scope and steady growth, rubber duck collectors are still relatively rare. Collectors tend to be geographically dispersed, and most novice and intermediate rubber duck collectors know of no local peers. When we interviewed rubber duck collectors, we found a strong recurring



FIG. 1. A rubber duck collection.

theme: By and large, collectors imagined themselves to be somewhat unconventional and individualistic, and many of them were drawn to the absurdity or ridiculousness of collecting rubber ducks. At the same time, collectors usually reached a point where they desired some company, or as one interviewee put it, “you begin to question your sanity.” It is quite a common occurrence for a new member to appear on the rubber duck collecting community bulletin board with a relieved, joyous post declaring, “I thought I was the only one!”

Research Design

In our research, we adopted an interpretive paradigm (Rossman & Rallis, 2003) and a naturalistic research philosophy (Lincoln & Guba, 1985) to examine one particular aspect of serious leisure. Such a framework eschews any notion that reality exists independently of people and their lived experiences. At the heart of an interpretive framework is the need to understand how people construct, interpret, sustain and make sense of the social world around them. In such a framework, an emphasis is placed on rich contextual description and an understanding of the local context in which action takes place. An interpretive paradigm also legitimizes a participatory stance on the part of the researcher. In this

vein, this study rises to the level of a reflexive ethnography (Ellis & Bochner, 1998) in that the experience of one of the researchers (Lee) was studied alongside that of other participants. While the analytical constructs proposed by this article were derived from analysis of interviews, Lee’s personal experience as a member of this hobbyist collecting community was invaluable in terms of gaining access to the community as well as in terms of providing a base of knowledge about events, concerns, and terminology. The specifics of the minutiae of the collecting life were culled both from interviews and from Lee’s personal experience.

In studying this community of collectors, the goal was not to attempt any grand or overarching theorizing but rather to discern patterns to help us understand hobbyists as leisure participants. As researchers publishing in the LIS arena, our interest in leisure activities was, to some extent, tailored to an understanding of those aspects of serious leisure that dealt particularly with the acquisition and expression of special skills and knowledge (Stebbins, 1992). Therefore, in seeking to uncover the social world, meanings, and networks that compose this hobbyist pursuit, a specific focus was placed on the following research questions: (a) Can a typology of collectors be detected and how, and to what extent, does this typology fit into Stebbins’ work on serious leisure? (b) In negotiating this hobby, what role does information play in

the process? (c) Given the lack of institutionalized scholars and scholarship, how do these collectors define and identify credible sources of expertise?

Participants

Criterion-based selection was used to identify the participants to be studied. In this form of selection, the researcher lists attributes that are deemed essential to the study and then seeks out participants to match these criteria (LeCompte & Preissle, 1993). Our criteria were straightforward: the person must be over 18 years old and must have some experience with collecting rubber ducks. Our intent was also to work with what is termed “a complete or naturally bounded population” (LeCompte & Preissle). In this case, the bounded population comprises participants of a community information service called Duckplanet (an online community for “rubber duck collectors and other duck-minded people to chat with and share information”). Although community information services are typically perceived as being linked to a geographical community, the Duckplanet Web site can be considered an information service for a geographically dispersed collecting community. Charlotte Lee, one of the authors of this article, founded Duckplanet in October of 1999 as a way to share her collection with friends, family, and the general public. Lee is also the holder of the Guinness World Record for the world’s largest rubber duck collection and is active in the rubber duck collecting community. Since 1999, the Web site has grown to include a database of Lee’s duck collection, pictures and descriptions of other collections of rubber ducks, a squeaker game, a favorite links page, and a community bulletin board. At the time the study was conducted, there were several hundred fan forum members, mainly adults and teens, although the majority of the members never or rarely posted to the bulletin board. Although participants in this study were drawn from members of Duckplanet, it is important to note that the primary purpose of this research was not to model the online community of Duckplanet per se but rather to model the information activities of rubber duck collectors more generally. Technology played a role but was not the focus of this study.

To secure participants for our study, we monitored posts on Duckplanet and solicited interviewees from members of the bulletin board. We posted follow-up solicitations to ensure that our participants included individuals who had been collecting for 3 years or less. Thirteen in-depth interviews were held with five men and eight women, their ages ranging from 18 to 61 years (pseudonyms have been used throughout this article to protect the privacy of the collectors). Twelve of the collectors hail from the United States (three each from the South, Northeast, Midwest, and Western United States), and one research subject is based in Europe. These individuals have been collecting rubber ducks between 1 and 27 years. The average number of years the research subjects have been collecting rubber ducks is a little less than 9 years. The median number of years the research subjects have been collecting rubber ducks is 6 years.

TABLE 1. Participant data (with pseudonyms).

	Sex	Age	Years collecting
Stuart	M	18	1
Laura	F	46	1
Linda	F	44	25
Bill	M	46	27
Erin	F	18	3
Tanya	F	30	3
Patsy	F	61	6
Christine	F	32	8
Ron	M	58	5+
Cindy	F	55	6
Dave	M	39	9
Charlotte	F	37	10
Tom	M	57	12

Data Collection and Analysis

As an in-process qualitative study, data collection and analysis were ongoing activities. We developed an interview protocol derived from our research questions, and after receiving human subjects’ approval from our respective institutions, we solicited research participants via the Duckplanet Web site. Data was then collected from the research subjects via semistructured interviews that took place over the phone and in person. These interviews generally took anywhere between 30 minutes to 1 hour to administer. A total of 10 hours and 39 minutes of interviews were transcribed verbatim to produce four hundred and fifty-four pages of written data. Data analysis took place through a method outlined by Emerson, Fretz, and Shaw (1995). Analysis began with a combination of close reading of the transcribed interviews and line-by-line open coding to discover general patterns or categories in the data. This preliminary analysis was further refined through initial written memos. A subsequent more selective coding allowed further contextualization of the core themes identified in the research data.

Findings

We present our findings in three main sections. In the first section, we introduce two dimensions of collecting and their constitutive elements: attainment and sociality. In the second section, we use the dimensions of collecting to create a typology of collectors (serious, casual, and social) as well as a visual representation that allows easier comparison of collectors based on their collecting-oriented priorities. Finally, we use these findings to draw out and present our own model of the information needs of this hobbyist collector community as well as to discuss more generally the role of information in hobbyist collecting.

Dimensions of Hobbyist Collecting

Data analysis yielded a typology of collectors based on three ideal types: Social Collectors (Stuart, Laura, Linda,

Bill), Casual Collectors (Erin, Tanya, Patsy, Christine), and Serious Collectors (Ron, Cindy, Dave, Charlotte, Tom). In brief, serious collectors can be thought of as true enthusiasts who have a lot of interaction with fellow collectors and who care deeply about minutiae and about procuring rare examples. Casual collectors have far less interaction with collecting peers and, although they enjoy adding to their collections, they have little interest in learning how to identify and procure rare specimens. Social collectors, by contrast, enjoy collecting primarily as a social activity rather than as an acquisitive or information gathering activity. As Stebbins notes, and we acknowledge, any typology represents “merely the poles of a complicated dimension along which individuals may be ranked by their degrees of involvement in a particular activity” (Stebbins, 1992, p. 6). What is common to all these collectors is that they are engaged in a form of leisure that is part-time and that has no professional counterpart. However, our research highlights two key dimensions among which distinctions can be made: (a) sociality (represented by the elements of both lay and collegial publics) and (b) attainment (represented by the elements of knowledge acquisition and object rarity). The first dimension, sociality, relates to the fact that hobbyist rubber duck collectors are part of what Stebbins (1992) calls a hobbyist–public system of relations and relationships. Some of the publics are very intimate, perhaps only a partner and a few fellow collectors, while others are quite large—a whole high school, or a Web site with over 400 registered members and 35,000 visitors per month. The second dimension, attainment, includes object rarity and knowledge interest. Knowledge interest represents the level of interest in gaining knowledge about rubber ducks and collecting activities. Object rarity represents the level of interest in acquiring unusual rubber ducks.

Rather than focusing our research solely on what we identify as the axis of attainment, we believe that the axis of sociality is equally important for understanding the social world of hobbyist collectors and their information needs. The four elements that make up these two dimensions are useful for understanding not only what sorts of collecting activities comprise collectors’ collecting lives but also to what degree these elements differ from collector to collector. We found that collectors differ in terms of their interest in acquiring knowledge about their collectible and in terms of the intensity with which they seek to acquire the objects themselves. In the rubber duck collecting community, we found that having different types of publics entailed different sets of interactions and information behaviors.

Element 1: Interaction With Lay Public

In this study, lay publics comprise networks of family, friends and co-workers that are found across the board for all collector types. Children and grandchildren represent an important part of the family “public,” but it also includes parents, grandparents, siblings, sisters-in-law, spouses, and partners. Friends are another key public, with eleven collectors (across collector types) mentioning friends or girlfriends

as publics. The general public is also a key audience for the majority of collectors, and this public ranges from a cashier at a grocery store, to the mother of a child’s friend, to complete strangers. Eight collectors bring their rubber ducks to work or to school, resulting in yet another public: co-workers.

Interactions with lay publics is a defining element of being a hobbyist collector and, as we will discuss later, for a subset of collectors, interactions with the lay public are the *most* important element of collecting. Almost every collector interviewed mentioned receiving rubber ducks as gifts from family, friends, co-workers, acquaintances, and even sometimes anonymously when rubber ducks would just appear at work with no note or explanation. As most rubber duck collectors do not live near other rubber duck collectors, friends and family are often the primary public and play a key role in helping collectors get started with their collections. As collectors amass larger collections, their lay publics tend to play a lesser role in procuring ducks, with serious collectors acquiring a vast majority of their rubber ducks themselves and with the help of fellow rubber duck collectors. For some collectors, giving gifts is also a huge part of their collecting life and eight of the collectors (two casual, two social, and four serious collectors) mention giving or gifting rubber ducks to their lay publics. Close family also provide material support to the collectors as in the help that Patsy’s husband gives her in putting up shelving to house her rubber ducks and the help that Charlotte’s husband provides in tracking down rubber ducks and helping to run her Web site. About a quarter of the collectors also talk about the experience of going on rubber duck hunting trips with their family. Tanya, for example, takes her young son with her on duck hunting trips and finds that he is a useful ally to convince retailers to check their storeroom for any new duck arrivals.

Although initial reactions to hearing about their collecting activity can generally be categorized as skeptical or even quizzical, most collectors report that their lay publics really warm to the idea, particularly after they have actually seen the collection. Indeed, the vast majority of the collectors enjoy sharing their collections with their lay publics. Dave, who has a whole room in his house dedicated to the display of his collection (complete with shelves he custom made and painted to complement the ducks), makes a show out of revealing his sizeable collection:

When somebody, for the first time, comes to visit, you know, they stand in the hallway, and I tell them how like, “You’re about to enter the duck room.” And I turn the quacker on, and it starts quacking. And then I open the door and I just step back and they just go, “Ahh,” and I just love it. I mean, it’s just so thrilling. I wish I had a camera for every time somebody goes in.

In rare instances, as with Stuart who reports that his father does not particularly like his collecting because he considers it “a feminine thing,” negative feedback is either too infrequent or too mild to stop these collectors from pursuing their hobby.

Element 2: Interaction With Collegial Public

Interactions with the collegial public are very important for most collectors and all but one of the collectors (Bill) have collegial publics in the form of both the community of duck collectors at Duckplanet and the community of collectors on eBay (relationships with local collectors are relatively rare). Although most of the interaction with the eBay and Duckplanet community took place online, all of the serious collectors and two of the casual collectors (Patsy and Christine) had met with other collectors face-to-face, particularly at the annual gathering of the Duckplanet community: Duckfest. Although concerns about the reaction of the lay public to their collecting activities can be very real, the attitude of their collegial public is obviously quite different. Many collectors are initially shocked to discover that they are not alone. Yet, for most, there is also a sense of relief that a wider community of rubber duck collectors exists and who shares a common purpose and interest. And learning about other collectors and their collections gives some collectors something to which to aspire.

When new ducks are released in local and chain stores, on eBay, and in online shops, collectors receive alerts from other collectors, often through Duckplanet or sometimes through personal e-mails. Collectors may also share information about techniques and tools for bidding or searching more effectively on eBay. Other information that collectors share with each other concerns the provenance of ducks or repair techniques. Collegial publics are also instrumental in the exchange of ducks. It is not uncommon on Duckplanet for new collectors to solicit free or cheap ducks and for more experienced collectors to oblige them with extras. Three of the collectors (Tanya, Charlotte, and Dave) give rubber ducks to other (particularly new) collectors. In Tanya's case, she keeps her duplicates to give to new collectors in the hope they might reciprocate (something she refers to as "duck karma"). At least seven of the collectors trade rubber ducks with other collectors. It is also common for these collectors to accumulate rubber ducks by initiating buying and selling activity (occasionally through Duckplanet but much more typically through eBay) with other collectors.

The majority of collectors also exchange e-mails, phone calls, and letters with other collectors and read, chat, and post on the Duckplanet forum. Tom says, in his interview, that he has become close friends with some of his fellow collectors. Charlotte says she communicates with her collegial public daily. During a recent essay contest on Duckplanet, one of the members posted the following message:

Duckplanet was a place I never expected to find when I began my collection just over two years ago. To me, the prospect of collecting rubber ducks was bizarre (or, so that's what my peers often reminded me of.) Never would I expect once I came to visit this site for the first time I'd be experiencing such joy and creating memories with such wonderful people. . . . To me, Duckplanet became a place that resembled almost a close-knit family, and always willing to accept more people. Besides the people, the site has proven to be an excellent resource for

viewing the hard to find ducks from various collections and even providing help finding places to buy such ducks. I love the heartwarming feeling this site brings to so many people, and nothing feels better than helping out someone with their newly "hatched" collection. And just viewing the collections of other fellow collectors almost pushes me to try and expand my own!

Element 3: Object Rarity

All rubber duck collectors purposely want to add to their collections of rubber ducks. The concept of object rarity refers to how collectors talk about growing the collection in not just numbers but also diversity. This concept is strongly related to the variety of methods that collectors employ to achieve their desired level of diversity. At the most casual level of collecting, a collector's primary concern is simply to add objects to their collection that appeal to them personally. For example, because Laura is a democrat, she bought a rubber duck that looks like former president, Bill Clinton. Cindy bought a hippie duck because she considers herself a child of the 60s. What the duck represents to the collector is very important in this mode. As Patsy said, "I don't know much about (the ducks). I just take them at face value." Even at this casual level, collectors are concerned about finding something different to what they already have, so even the most casual of collectors care about the diversity of objects in their collection to some degree. In this case, personal taste and expression are extremely important to the collector.

As we move away from strictly casual approaches to collecting, we find collectors for whom, while caring about personal taste and expression, the diversity of objects is a primary concern. Tanya dabbles in eBay to look for vintage floaters (ducks in a floating position). She says she is looking for ducks that just look different, but she does not really care about their age or history. Stuart displays his collection in the rear window of his car and considers strangers who are behind his car at stoplights and people who stop and look at his car in parking lots (who smile when they see his display) to be an important audience. Stuart seeks out objects that deviate from the standard solid yellow duck because he wants his public to understand that there are many different kinds of rubber ducks. Even so, he does not believe any of his ducks are rare as he bought almost all of them at large chain stores. Collectors on this level are those who are looking for internal diversity: they want the ducks in their collection to look different from each other. Collectors in these first two groups tend to focus on brand new ducks that are found in local stores and which they often discover through "duck alerts" on Duckplanet. They may even attempt to complete a line of readily available commercial ducks, or they might stop at the occasional garage sale and dabble in collecting on eBay.

Collectors who are higher on the object rarity scale are still primarily concerned with diversity of objects, but they may also want something "different" and "special," although they may not be very articulate about what that means. Cindy,

for example, writes to individuals she considers experts to ask if a duck on eBay is a “special one.” Collectors in this vein may try to complete several lines of readily available brands of rubber ducks—usually requiring a bit more involvement with eBay or active trading with others. They may also have more than a passing interest in vintage rubber ducks—again entailing purchasing on eBay or visiting second-hand or antique markets. Or, perhaps like Ron, they may be extremely proactive in identifying and acquiring several rare ducks of just one brand, although believing themselves to be lacking in knowledge about rubber ducks in general.

The next level of involvement for object rarity concerns those collectors whose primary concern is the acquisition of rare objects. Those at the highest levels of object rarity are concerned with external measures of rarity. These collectors also score high on knowledge interest. Because even the largest collection of rubber ducks numbers less than 3,000, it is possible for rubber duck collectors to attempt an almost comprehensive collection of these items. Although even the most experienced collectors with the largest collections proclaimed it impossible to get all ducks in existence for financial and practical reasons, it seems possible to have a majority of all rubber ducks ever made. To achieve this, however, these collectors must spend an inordinate amount of time trying to procure rare ducks. Usually, these rare ducks include vintage ducks of which there may be very few surviving any given production, and also new and vintage ducks that are produced and sold in foreign countries. These collectors also have the greatest diversity of methods for procuring ducks including not only taking advantage of duck alerts and regularly visiting second-hand or antique markets but also spending large amounts of time on eBay, online shopping, and networking with international pen pals over e-mail. At this level, collectors look to their own or others’ large collections to determine if their duck is rare, relative to all other known rubber ducks.

Element 4: Knowledge Interest

Although all rubber duck collectors purposely want to add to their collections, only a subset of collectors are intensely interested in adding to their body of knowledge about rubber ducks and rubber duck collecting. The concept of knowledge interest refers to how collectors talk about growing their knowledge of rubber ducks or of amassing more information. This concept is related to the notion of expertise, which will be explored later. The majority of the collectors (nine including all of the serious, two of the social, and two of the casual collectors) wanted to know how to care for or repair the rubber ducks in their collections. These included questions about how to clean rubber ducks (such as removing paint, pen marks, and mold from the surface of a rubber duck), and how to fix rubber ducks that had become misshapen when shipped to the collector or through subsequent exposure to the sun. The need for this information appears to be more prevalent among the serious collectors, in part for pragmatic reasons. They were more likely to collect vintage

rubber ducks and to have been collecting longer, and both factors result in condition issues.

A majority of collectors—all the casual, two social (Laura, Linda) and three serious collectors (Charlotte, Dave, and Tom)—also reported that they were interested in finding out about the availability of rubber ducks currently in stores, including when, where, and what rubber ducks were available. This information was mainly gleaned from Duckplanet’s “duck alerts,” but some collectors also monitored eBay to see what new ducks were available. A majority of collectors (eight including all the serious, two of the casual, and one of the social collectors) were also interested in knowing the history or provenance of the rubber ducks in their collection. This includes information about the rubber duck itself, such as its age, and the history of rubber duck manufacturers. Information about toy companies was also highly valued, particularly by the serious collectors. Collectors mentioned that Duckplanet was a main source of information on the history and provenance of rubber ducks because it links to company Web sites (which have comprehensive lists of the ducks they had produced) and Web sites of other collectors. Only one collector mentioned trying to find information about a toy company in a library. The collector, notwithstanding the assistance of a reference librarian, was unable to find the information she required.

Two casual (Erin and Tanya), two social (Stuart and Linda), and three serious collectors (Cindy, Charlotte, and Tom) were also interested in knowing about the value or rarity of rubber ducks in their collection. Although there was more interest in this particular knowledge among the serious collectors, common among collectors was that they couched their interest in value or rarity not so much in monetary terms but in terms of curiosity or pragmatism. Collectors may check eBay to determine a monetary value for their duck even if they have no intention of selling. For those who buy vintage ducks, it is useful to know how much a duck might cost to get a sense if it is out of their price range, or if they want to bid on it, how high the bidding is likely to go.

Collectors sometimes had a hard time determining if the duck they found was a brand new duck or a remake, and two of the collectors expressed an interest in knowing whether a particular rubber duck was an original or a copy. In Stuart’s case, while he had wondered on a number of occasions whether a particular rubber duck was authentic, he qualifies this statement by saying that this really is not important to him. “That actually—it doesn’t matter to me. . . because I see my collection as just a way to make people smile.” eBay tips were also highly valued information. Collectors might alert others to what is currently available, and these tips could be especially important because rubber duck collectors are more likely to understand what another collector is looking for. Even more precious were tips on what search terms to use to find hidden treasures, such as valuable ducks that were listed under strange or misspelled terms on eBay. Although many participants in this study feel that other collectors have been very open about where they got their ducks and actively seek to help each other, collecting as a joint venture does have

its limitations. Those duck collectors who continue to sell ducks on eBay to subsidize their collections (despite competition from professional vendors) had more motivation to hide information. The founder of Duckplanet, for example, despite spending hours and hours helping other collectors, holds back on sharing sniping tips and search terms. Another collector tells only a “special few” other collectors about sniping software because she does not want them to outbid her, and she says that as they share some of their tips with her, she shares a little back.

Overall, at the most casual level of collecting, collectors are not at all concerned about gaining more information about rubber ducks or collecting. It is a casual pastime and they understand it as such. Laura, for example, suggests she might not even be a collector because she is not interested in the history or value of her rubber ducks, yet she has a collection of over 1000 ducks. Collectors who are slightly more interested in gaining knowledge and yet are still casual collectors, express interest in learning more about rubber ducks and more effective techniques for finding them, yet expend little effort to seek information and accumulate this knowledge. By contrast, collectors who score high on knowledge interest usually expend a great deal of effort in accumulating information about rubber ducks and rubber duck collecting. These activities are as follows: spending significant amounts of time looking for historic information about toy companies and the history of rubber toys; compiling and organizing answers gleaned from other rubber duck collectors; experimenting with techniques to restore vintage rubber ducks; and archiving lists or databases about ducks acquired (such as by age, source, etc). Collectors who scored very high on knowledge interest were interested in amassing knowledge for the sake of knowledge.

Some collectors are also concerned with the notion that information is expert information. The casual collectors did, on occasion, seek out information about rubber ducks, but they generally gave little thought as to the source of expertise, generally trusting that their colleagues on Duckplanet knew far more than the general public and have little incentive to misinform. By contrast, the serious collectors in our study who score highly on attainment care greatly about seeking out expert information, even going so far as to look for expert information in related collecting domains such as vinyl dolls or vintage toy rubber cars. In the absence of formal experts, these collectors must be resourceful to find or create needed information. Nine of the thirteen collectors used common sense knowledge and personal trial and error to figure out how, in particular, to care for and find rubber ducks. An example of this process is shown in Tanya’s description of how she learned to search for rubber ducks on eBay.

And, of course, they’re trying to figure out how the people who are going to buy it are thinking, but a lot of times you just have to kind of figure out, okay, what key words should I use because certain things you might type in for, like, a vintage duck, you know, you might get vintage duck decoys or duck collars or things like that that you kind of have to weed through. But I just think you just need to figure out

how the other people is going to tag it; whether it’s going to be antique or vintage or, you know, how many words do you want to put in because you’re going to keep getting more things that aren’t really applicable for you too.

On occasion, several of the serious collectors (including Charlotte, Tom, and Cindy) rely on their own knowledge, not because they are disinclined to seek out information but for other more complex reasons. In particular instances (such as determining value), these collectors either exhausted or felt that they knew more than other known sources of knowledge. Therefore, they were left with the recourse of either drawing from their own expertise to derive the necessary information or undertaking their own process of trial-and-error, such as with duck repair.

A person’s understanding of their own level of expertise appears to be dependent on their ability to compare themselves with their collegial public. In Linda’s case, her initial estimation of her level of knowledge of rubber ducks was tempered when she discovered Duckplanet and saw that she had not even scratched the surface when it came to collecting. Although Erin understood that she knew more about rubber ducks than the general public, she did not see herself as an expert because she realized that she knew less about rubber ducks than some other collectors. Some of the serious collectors do indeed consider themselves to be experts. Charlotte considers herself an expert partly because she can think of only one other person, Tom, who might know more about rubber ducks than she does. Tom also considers himself and Charlotte to be experts. When asked why he thinks that he is an expert he replies:

What information constitutes an expert? In terms of collecting and knowledge about when ducks were made, for instance, like knowing the approximate time and recognizing certain manufacturing stamps, you know. Like, Stahlwood, for instance, and when they made toys. And their approximate date, and then you try and fill in with the ducks that you’ve owned or seen, what was their line? What was the line of their ducks like? Yes, it would be nice to know the history of that line, but until you can find someone that has that information, it can’t be shared. So you know as much as there is to know in your limited contact, and yet it’s all revolves around the same item, right? It all revolves around rubber ducks. So I think like, how to find them, how to negotiate owning them, how to clean them, fix them, coordinate them or classify them, you know, it’s like this very slow knowledge base that’s being added to. And maybe I’m not an expert, it just seems like I know an awful lot about them.

While Charlotte and Tom name themselves and each other as experts, they are somewhat ambivalent about doing so. Tom notes that resources do not exist for rubber duck collectors to have the same detailed level of knowledge shown by object appraisers on television shows such as *Antiques Roadshow*. Ron, who has a moderate amount of interaction with his collegial public, expresses some skepticism about the very idea of experts as it pertains to rubber duck collecting, remarking, “Are there any experts to begin with?” As expertise is linked to

the accumulation of specialized knowledge (Gelber, 1999), it would seem logical that those collectors scoring mostly highly on the attainment axes would be the experts of the group (Tom, Charlotte, and Dave).

The notion of expertise is complex. When these collectors were asked what makes someone an expert, responses were as follows: level of knowledge a person has about rubber ducks (seven collectors); length of time collecting (six collectors); ability to answer a question relevant to duck collecting (four collectors), ability to talk from experience; interest or time commitment to rubber ducks (three collectors each); number of ducks; memory for rubber duck information; knowledge of specifics relating to rubber ducks; surety and authority in answering a question (two collectors each); ability to impart something new about rubber ducks to others; number of ducks sold; level of organization of a collection; number of postings on Duckplanet; intensity of interaction with publics; and ties to the rubber duck community (one collector each). In parsing out these responses, we can see that a person's general level of interest in and knowledge of rubber ducks demonstrated a level of collecting ability, and the ability to provide information about rubber ducks and rubber duck collecting are key components to defining what constitutes expertise in this community.

Collector Typology: Operationalizing the Elements of Hobbyist Collecting

Having discussed each element of the typology, it is time to show how, in practice, these elements work together to form specific collecting types. The axes of sociality and attainment, combined with individual scores for the four factors, enabled us to create two-dimensional diagrams that are useful for comparing collectors. As mentioned previously, our data was based on self-reporting in that we relied on the collectors themselves to account for the intensity of their activities and relationships. Thus, we did not “quiz” the collectors on their knowledge to try to achieve some sort of objective measure of expertise, nor did we ask for an inventory of objects to assess how many rare objects the collector had; rather, we took a pragmatic approach and focused on reported interest in acquiring knowledge or seeking information and reported interest in seeking rare objects, interacting with publics etc. Based on the interviews, we were therefore able to create a scoring system for the four elements according to the following coding scheme (Table 2).

It is important to note that the scores attributed to individuals are ordinal values, not absolute values, and therefore the exact degrees of difference are not meaningful. Nevertheless, the diagrams that we called *collector kites* are useful for easy comparison.

To reiterate, collegial public refers to the intensity of interaction with the collegial public and lay public refers to the intensity of interaction with the lay public. Knowledge interest represents the level of interest in gaining knowledge about rubber ducks and about their collection. Object rarity represents the level of interest in acquiring unusual rubber ducks. The latter two notions are strongly linked because an increased desire for rare ducks correlates to increased interest in collecting information about rubber ducks. However, while one factor is information-centric, the other is object-centric.

The kite diagrams for two casual collectors are shown in Figure 2. Tanya and Erin are both casual collectors. They like to collect rubber ducks that “look different” from those they already have, but they have little interest in seeking rare ducks. They recall only one or two occasions when they actively sought information about rubber ducks. They like the objects for what they are and for their aesthetics but care little about their provenance. They interact relatively infrequently with their lay and collegial publics with the exception of regularly reading (but not posting to) Duckplanet.

Dave and Charlotte are both serious collectors. They score high on every element (Figure 3). They frequently talk to their colleagues by phone or e-mail. With their colleagues they carefully negotiate the exchange of special techniques, such as eBay search terms or the exchange of rare ducks. Often the exchange of rare ducks is a show of friendship among colleagues. Serious collectors also have frequent contact with their lay public. Both Dave and Charlotte keep rubber ducks at work and engage their friends and family to help them with their collections. Notably, they also informally engage in outreach to strangers to introduce them to ducks or duck collecting. Dave often gives ducks to strangers, including people he helps in his work in disaster management, and tells anyone who has an interest in rubber ducks to visit Duckplanet. Charlotte is one of the founders of Duckfest and is one of the creators of the popular Duckplanet Web site and forum, which is visited by tens of thousands of people every month. Both Charlotte and Dave cultivate their knowledge of rubber ducks. For example, Charlotte created a database of rubber ducks that is available online and a typology of

TABLE 2. Scoring schema for four elements of hobbyist collectors.

Element score	Lay public	Collegial public	Knowledge	Object rarity
1	Very little interaction	Very little interaction	Very little interest in gaining	Very little effort to add objects
2	Some interaction with public	Some interaction with public	Some interest in gaining knowledge	Some effort to add objects (seeking internal diversity)
3	A lot of interaction or very meaningful interaction	A lot of interaction or very meaningful interaction	A lot of interest in gaining	A lot of effort (seeking rare items)

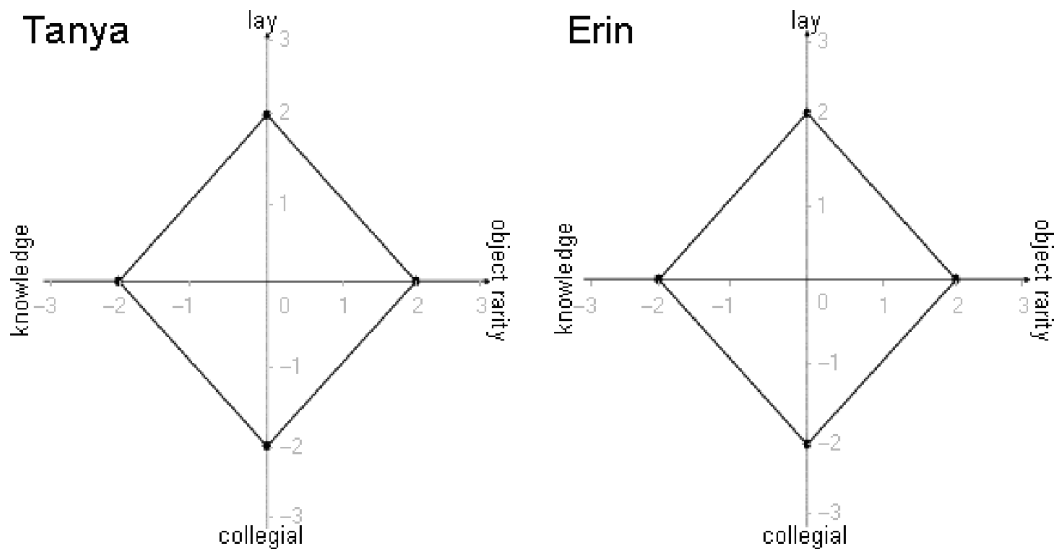


FIG. 2. Kite diagram for casual collectors.

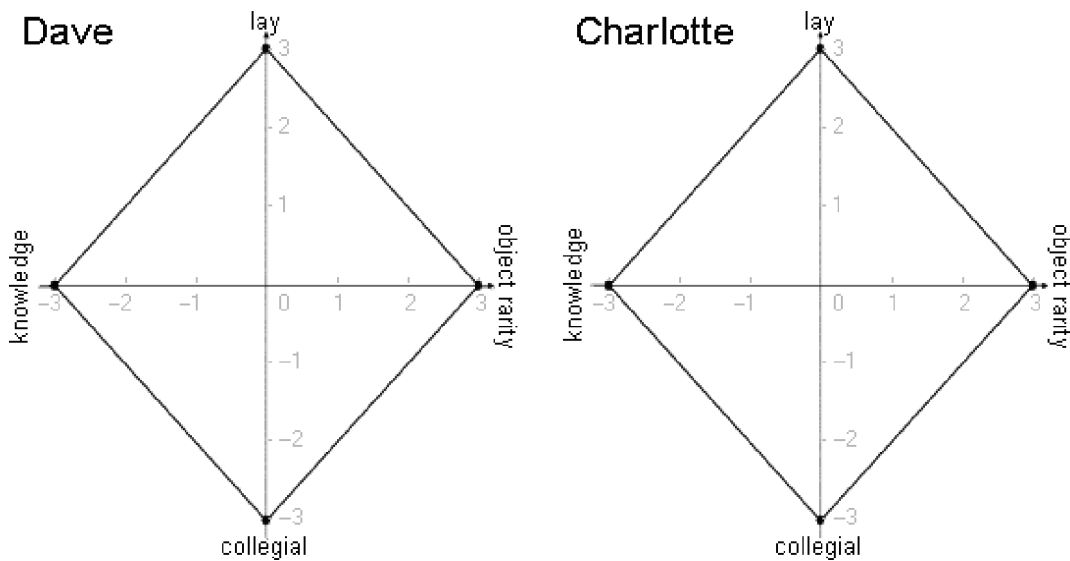


FIG. 3. Kite diagram for serious collectors.

rubber duck shapes that has been published in the popular press. She is also in charge of sorting posts in the online forum that have been posted in the wrong category and she considers the archive of posts to be the only reference “book” in existence for rubber duck collecting. Dave has gathered enough e-mails from various colleagues and vendors about rubber ducks to fill several binders. He has sorted them and describes his binders as his “encyclopedia”.

A high score on interaction with a lay public relative to the score on the other three elements is a key indicator of a social collector (Figure 4). Although they do not score high on attainment, and therefore would not be considered to be involved in serious leisure, social collectors are an important part of the hobbyist collector landscape. Laura and Stuart are exemplars of social collectors who have little interest in

acquiring knowledge about the history of rubber ducks, how to care for them, or the provenance of the items that they collect. They are modestly interested in object rarity as they are interested in increasing the diversity of their collection, but they neither care if a duck is rare or valuable nor actively seek such ducks. Social collectors do seek information; however, it is not about the collection but about the individuals to whom they will gift ducks. The information need is therefore more personal, more intimate in nature (e.g., birthdays, interests, etc.). We find that social collectors, however, can have a significant personal and sometimes monetary investment in their collections. Although they do have some interaction with other duck collectors, they post very little to Duckplanet and these posts may also be social rather than informational in nature.

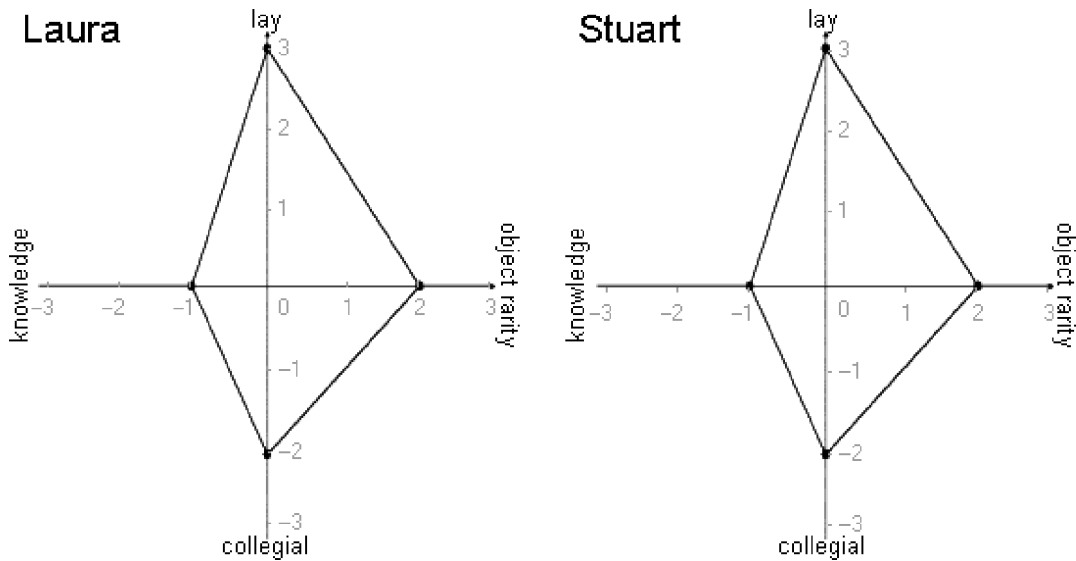


FIG. 4. Kite diagram for social collectors.

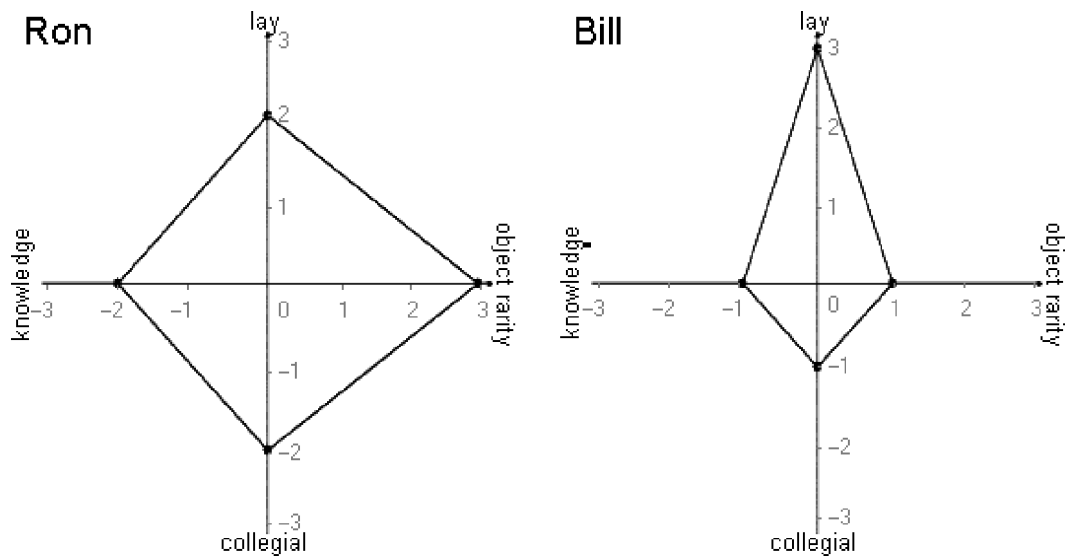


FIG. 5. Kite diagram for unique collectors.

Bill, Linda, and Laura are particularly good examples of how social collectors get their publics more intimately and socially involved with their rubber duck collections. In Bill and Linda's case, this meant sharing stories about their rubber ducks and also loaning rubber ducks to friends and family who were going on vacation. In all three cases, rubber ducks were also used to play and take part in practical jokes with friends and work colleagues, and in these instances, rubber ducks can be seen as forming a substantive part of these collectors' relationships with other people. In Laura's case (she calls herself a "ducktor"), these pranks turned into the phenomenon of "ducking" someone (which usually involves hiding numerous rubber ducks all over the home of an unwitting victim), and this activity has caught

on and has been taken up by colleagues (self-proclaimed "duck-meisters") and students at the school in which she teaches.

And now they were duck-meisters. Duck-meisters duck people's houses. So I had to get back at them. So I took the ducks and I went to work. And I ducked up the math department. In the coffee cups, in the desks, in cans—whatever I could find. So then they said to me, well, we got a new principal last year. And we were kind of—he decided to have the Christmas party at his house. So they said, "Laura, why don't we duck his house?" I said, "No, man. No, we can't do that. That's just not—I don't know how he would go for that, right?" Well, we have the party over at his house. And the next day he comes up to me, he goes, "My wife wants to know how many?" I

said, "What, how many people? Seventy-two." He says, "No, how many of the little critters are around our house?"

For Laura, her duck collecting has grown into a social phenomenon involving hundreds of people at her school. She says that she gives people ducks "to make them feel better" and that her collecting has made her a better person.

While the three types of collectors mentioned above were recurring types, we did find some cases that were unique within our sample (Figure 5). One can see that Ron has an unusually shaped kite. Although he scores similarly to a casual collector on the three elements of lay public, collegial public, and knowledge interest, he scores similarly to a serious collector on object rarity. As a result he scores somewhere between a casual collector and a serious collector on the dimension of attainment. Ron had only a small amount of contact with his lay and collegial publics, so how did he manage to score so high on attainment? Ron was a long time collector of other objects, such as coins, and he had a set idea about what collectors do. According to him:

The key to it is that there's certain units that are produced like in any collecting hobby that are more scarce or valuable. And the less number that's produced is—increases the dollar value. So that makes it much more desirable. And that's part of the hobby. That's the part of—just like collecting coins or stamps, you hunt for that one that no one else has or that very few people have, to complete that collection.

The Celebriducks kind of presented a challenge. And, you know, any person that collects, if you're collecting coins or stamps or whatever, there are certain sets or what they call a key that is the choice unit of that collection. If you were collecting Lincoln-head pennies, well there's, I believe, four different what they call key coins. There's a 1909 SVDB, which is extremely rare, and there's a 1909 S, and a 14 D, and a 31 S. And of all the rest of that collection, they all have some worth, but those four coins are by far much more expensive and there's a very small mintage of that particular.

Because of his participation in other collecting hobbies (hobbies with a long history and a large market), Ron brought these same sensibilities to his collection of one particular line of rubber ducks. Ron, like serious collector Tom, bemoaned the fact that rubber ducks did not have the same types of encyclopedic information about them that other collectibles had. For Ron, this was a problem in that it was difficult to complete a set without knowing what actually constituted the entire set.

Bill is another unique case. His wife Linda, who is a Duck-planet member, drew him into our study. Whether Bill is a collector is debatable. By some definitions he is not. He owns a collection of rubber ducks that is proudly displayed in his home and he was instrumental in acquiring the first several objects, but, unlike his wife, he no longer actively seeks to acquire more. Yet he does accompany his wife on duck hunting trips and strongly resembles a social collector. As a borderline case, Bill represents the difficulty of not only classifying who can be considered a serious collector and who can be considered a casual one but also defining the

point at which one is no longer considered a collector at all. Our collector typology, along with unique instances such as Bill and Ron, show that hobbyist collecting is a complicated affair with a significant amount of variety in not only the degree of intensity but also the direction in which they take their collecting activities.

By looking at the distribution of activity across the four elements of lay public, collegial public, knowledge interest, and object rarity we begin to see a coarse-grained dimensionality to collecting activities. We find that the differences between types of collectors are not so much in undertaking unique activities as they are in the intensity with which the various activities related to the four axes are undertaken. Our study did find serious and casual collectors, but we also found social collectors and unique subjects. There are many different kinds of collectors, and our research suggests that some collectors are perfectly happy with their collecting activities, whereas others express an interest in increasing or decreasing their level of interest or activity.

The Role of Information in Hobbyist Collecting

This study sheds light on why collectors need information, what they need information about, how these needs differ between types of collectors, and what mechanisms or sources are used to meet information needs. In examining aspects of hobbyists' lives, we can state categorically that collecting is what Ross (1999, p. 785) calls an "information-related" activity. Collecting is an everyday practice that contains within it, as one of its facets, the aspect of human information behavior. We found that with hobbyist collectors, it is almost impossible to extricate information needs from object needs. Object needs are the driving force for most collectors, but object needs spawn information needs (e.g., I need more ducks and want to find out how to get more) and vice versa (e.g., I want to know who manufactured my favorite duck and in the process discover that the manufacturer created a whole line). As other researchers in every day life information seeking (ELIS) have found, much information is found that is not actively sought (Ross, 1999). Although person-focused study of information needs is a dominant model in LIS (Case, 2002), we find that the information needs and information seeking of hobbyist collectors is best represented as an interrelationship between information and object needs, information sources, and interactions between collectors and their publics.

Although the interactions among the serious collectors were numerous and produced and fulfilled various information needs, there is another important information activity taking place in this collecting community. Rather than operating discretely, the legions of casual and serious collectors had a symbiotic relationship. The serious collectors did not look upon the casual collectors with disdain as dabblers, rather they welcomed them, providing help and sometimes free ducks to new collectors. There was also a certain amount of evangelizing, with Cindy and Dave providing acquaintances with rubber ducks and telling anyone with any interest

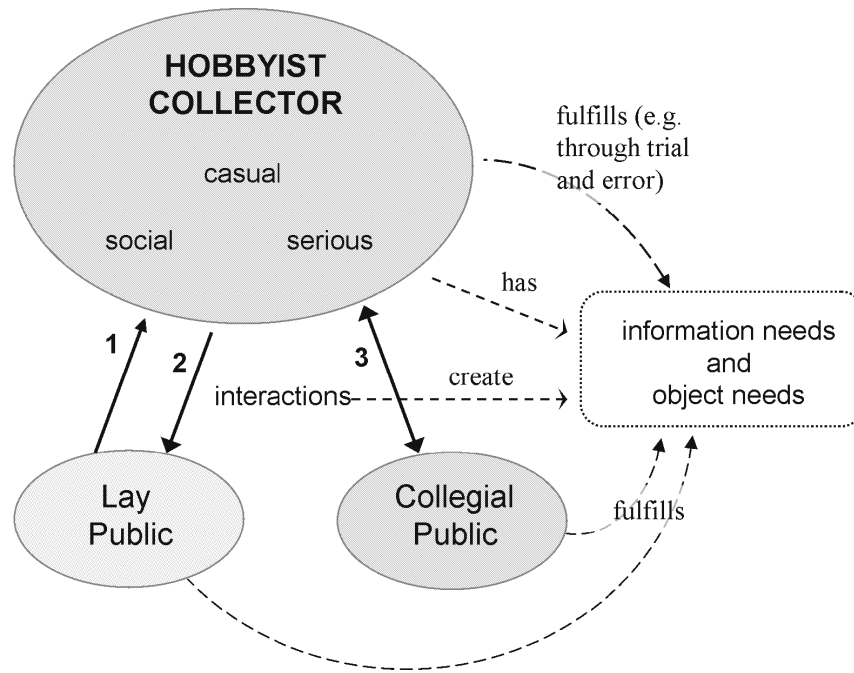


FIG. 6. Hobbyist-public (HP) system and information needs.

in rubber ducks to check out Duckplanet. Through Duckplanet's online forums, serious collectors, and sometimes also casual collectors, respond to requests for information. Although information is generally passed down to those who have a lower score on attainment, simple information such as duck alerts is also passed upward. There is a significant amount of mentoring that takes place in the rubber duck community, much of it through the online bulletin board. Although we cannot speak to other types of leisure in general or serious leisure in particular, our data shows that the rubber duck collecting community represents a social system with complex interactions and specialized information needs that vary across collector types.

The relationship between a hobbyist and their lay public entails two different types of relationships. The lay public provides the hobbyist with (see Figure 6, number 1) (a) gifts of found rubber ducks (showing care for the collector), (b) an audience (usually appreciative, and occasionally skeptical), and (c) low-level tips (e.g., I saw a duck at a specific store; you should look for ducks on eBay). In the other direction, the hobbyist collector provides the lay public with (see Figure 6, number 2) (a) a spectacle (many collectors reported enjoying watching the amazed, delighted, or appalled reactions of visitors), (b) guided tour (e.g., historical information such as when the duck was made and personal information such as "this is the duck I bought when I went to Austria"), and (c) gifts of ducks usually matched to the recipients' tastes or interests (showing care for others).

Unlike the interaction between hobbyist collectors and their lay public, the interaction between hobbyist collectors and their collegial public is largely the same in either direction. Hobbyist collectors and their collegial public provide each other with the following (see Figure 6, number 3):

- (a) quality rubber ducks (highly desirable and sometimes rare, these ducks may show care or given in trade for other desirable ducks);
- (b) quality information (e.g., where to find an unusual duck online, the names of sniping tools, specific eBay terms);
- (c) quality tour (with details about provenance, discussion of copies and originals, and minutiae about design such as wing shape and paint color);
- (d) technical information (e.g., how to clean vintage ducks); and
- (e) a more sophisticated audience (even among hobbyist collectors there is a large range of knowledge interest and thus a range of knowledge about unusual and rare ducks and, with the possible exception of social collectors, fellow hobbyist collectors generally provide a much more sophisticated audience that appreciate the ducks themselves and how they are displayed). In this interaction between more experienced collectors and new collectors, experienced collectors share knowledge and provide information and rubber ducks to other collectors through the Duckplanet forum or through personal relationships with other collectors.

Discussion and Conclusion

Studies such as this one show that information behavior comprises more than "information purposively sought from system sources such as libraries, information centers, or official helping agencies" (Ross, 1999, p. 784). The social context of hobbyist collectors is concerned primarily with the acquisition of objects or with the establishment and maintenance of personal connections with others. In ELIS, information is usually a means and an end. The primary role of information in collecting is to help build interpersonal connections and to help with the acquisition of objects that bring pleasure and joy. Only the serious collectors habitually

engage in information seeking, and occasionally information dissemination, in the traditional sense, yet information still flows through the community and serves as a critical resource for sustaining collecting activities, both individual and communal. The types of information needs of rubber duck collectors that have already been mentioned in connection with this study are as follows:

How to care for or repair rubber ducks. This information is usually created by serious and casual collectors themselves through experimentation, although serious and casual collectors have occasionally been observed sharing tips on Duckplanet. Social collectors did not care about this type of information.

When, where, and what rubber ducks are available. This information is of extreme interest to serious, casual, and social collectors alike and is exchanged through the Duckplanet forum. The exception is the highly competitive vintage rubber duck market (particularly eBay) where serious collectors may be secretive about their methods and search terms. Serious collectors generally keep in closer contact with each other and exchange rare ducks on occasion. Serious and casual collectors sometimes provide extra collectibles for free or at low cost to each other through the forum, thus Duckplanet itself becomes a peer-to-peer resource for sharing information and ducks.

Where specific ducks came from, from what series, what year, what country, what company. Serious collectors actively seek this information, casual collectors less actively, and social collectors not at all. Serious collectors may also actively collect this information: for example, Dave created his own “encyclopedia” by sending e-mails with lists of questions to more experienced collectors. Information is shared freely among serious collectors. Serious collectors occasionally provide this information to casual collectors on the Web site. Casual collectors also occasionally provide this information to their fellow casual collectors.

How much to buy or sell a rubber duck for and whether a rubber duck is common. Serious collectors who want to know how much to sell items for and how much they should expect to pay seek this information actively. Casual collectors are somewhat interested in this information; however, they are much more likely to specialize in new ducks available from chain stores and thus do not usually require pricing information.

Whether a rubber duck is original or authentic. Serious collectors usually like the mastery of being able to distinguish originals from copies. However, most collectors do not care about this information.

History of rubber ducks. This is of strong interest to serious collectors, but it is also of some interest to casual and social collectors. Unfortunately, little is known about the history of rubber ducks. Two serious collectors mentioned the need for a rubber duck museum and more historical information about these collectibles.

History of rubber duck collecting. Only the most serious of duck collectors care about this information. Social collectors are very disinterested.

How to display rubber ducks. This is one of the few cross-cutting interests that is orthogonal to serious, casual, and social collectors. It seems some collectors are more

interested in the art and method of display than others and it does not map to our collector typology thus far.

When and how to bid, what search terms to use, how to gauge the reliability of a seller on eBay. This is of strong interest to serious collectors who frequent eBay for vintage and rare items. Serious collectors will typically share their most valued tips only with “special friends.” Serious collectors may help casual collectors with basic searching. Casual collectors are mildly interested in this but are usually disinterested in paying extra shipping for new ducks and are very disinterested in the high prices of rare ducks. Most casual and social collectors do not collect vintage ducks. Social collectors are sometimes interested in this information in order to get the latest ducks before they reach local stores.

How to network to get unusual ducks. This is of interest to the most serious of collectors who are looking for an edge in finding rare ducks from other countries.

Hobbies, interests, or characteristics of peers and colleagues. This type of information is of intense interest to social collectors, who use this information to match rubber ducks with gift recipients. Serious collectors who score high on the sociality axis, particularly on the element of lay publics, are also very interested in this information.

Existence and source of ducks that pertain to or are representative of the interests or characteristics of peers and colleagues. This is a special type of information that is unique to the social collector. While a serious collector seeks out the broadest possible variety of collectibles, the serious collector may need only one example of an item. The social collector, on the other hand, may need an ongoing source of these items (contingent, of course, on issues of space, availability and desire to maintain a stockroom of gift items).

Without particular information about hobbies, interests, birthdays, and life changes, the “Ducktor” cannot properly dispense her cheer-bringing gifts. Without location and descriptive information, the casual collector would be unable to locate new rubber ducks. Without provenance information, the serious collector would not be able to identify and search for rare, vintage collectibles. Much more than is implied by the notions of information seeking, information dissemination, or even information exchange, these information flows are an integral aspect of community building.

This ethnographic research provides an unprecedented typology of elements and dimensions of hobbyist collecting, a method for visualizing differences between collectors, and a model of how different types of information flow amongst different groups within one community. The typology we presented is a contribution to the study of hobbyist collecting that details how, within one domain, people can vary widely in terms of their general goals, motivations, and intensity levels. Furthermore, these variances consequently affect not only the source and intensity of information seeking but the sources they seek to fulfill their needs. To be a collector is to be in a near-constant state of object desire. Casual collectors may have less active approaches to information seeking, such as monitoring Duckplanet for alerts about the

release of new ducks in chain stores. More information, however, can push a generalized desire for an item into a specific desire for a particular item or class of items, thus entailing specific information needs. The community becomes a sort of monitoring system that provides information, which then turn into dovetailed information and object needs. Serious collectors also make use of the monitoring system, but they also actively search. We find that the information needs and information seeking of hobbyist collectors is best represented as an interrelationship between information and object needs, information sources, and interactions between collectors and their publics. Our model of collecting related activities moves away from the idea of one individual seeking information from formal systems in favor of a conceptual framework that takes seriously the social milieu of a community.

As information science expands toward the study of information behavior in domestic and non-work spheres, we believe it should also embrace the study of “common” information practices. This study raises many interesting possibilities for future work and points to the need for further development of the model of hobbyist collectors and their information behavior. In the case of our study, technology seems to be allowing the creation of collegial publics where they could not otherwise exist. One area for future research, therefore, is to examine the extent to which this group of hobbyist collectors is different from collectors who do not belong to an online collecting community. A longitudinal study would likely yield noteworthy changes in the types of collectors over time and might yield interesting information in how a change in collector type results in changes in information behavior. For example, after 24 years of social collecting, Linda is only now reaching out to her collegial public and expressing an interest in gaining more specialized knowledge about rubber ducks. Our prototypical collector types suggest that as her interactions with her collegial public change, so will her information needs. A limitation of our study is the relatively small number of participants, and a larger study of rubber duck collectors would allow further testing and refinement of the model. Further research might uncover other varieties of collector types and allow us to construct a model of the predominance of different types of collectors in this collecting domain. Ultimately, it would also be useful to study other kinds of hobbyist collectors to see how much our model generalizes to other domains.

The intersection of LIS and the study of collecting is a fruitful area of enquiry. After all, many LIS professionals have an intimate connection to collecting and collectors. By studying the impulse to acquire and possess objects, we are also studying the beginnings of the materials that we manage, as well as the impetus within ourselves to transform individual collections into larger systems of organization that provide evidence of what we deem valuable. The intersection of information and the study of material culture is also a rich area for further study. Objects, examined within the rubric of the study of material culture, are increasingly being viewed as information bearing entities in-and-of themselves,

capable of being both read and deconstructed. Finally, as this article demonstrates, the intersection of information studies and the study of material culture also provides a rich context for exploring human information behavior: in this instance, documenting information behavior as it coalesces around our accumulation and possession of three dimensional objects that form a part of the popular culture milieu.

To understand information behavior and the role that information plays in everyday life, we must study the social worlds of people. Such undertakings do not make us sociologists. Sociologists do indeed study social worlds, but sociologists are primarily concerned with describing and theorizing about the negotiation and enactment of power relations. As information scientists, we are not tied to that agenda. We are in a unique position to focus on and theorize the relationship between information flows and social contexts. The methodological consideration of social context allows us to deepen and broaden our theories of what it means to create, use, seek, and need information. The consideration of social context also allows us to deepen and broaden our theories of how information serves not just geographic communities but also communities of practice. We should not cede the opportunity to deeply theorize information and knowledge building because we are afraid of getting too close to the intellectual border between information science and sociology. Rather, we should run up to the border and occasionally step across for another view. This is not to say that all information scientists should follow this tack, but certainly more work in this area could only serve to expand our knowledge base and our field. Fields such as science and technology studies, computer supported cooperative work, and social informatics have already discovered that computerized information systems can best be developed and studied while borrowing not only the toolkit of sociologists but also some of the related approaches and conceptual frameworks. Symbolic interactionism (Blumer, 1969), with its theoretical and methodological focus on how people ascribe meaning to objects through a process of interpretation, seems to be particularly compatible with existing social science approaches to information behavior. Without question, information science has already taken steps in this direction under the guidance of Dervin, Chatman, and Savolainen, to name just a few. Now, however, we must boldly push on and study information practices as cultural artifacts that sustain a great variety of communities of practice, social worlds, etc. Embracing the study of society will allow our field to more fully understand the human information experience and what it means to be informed or informative.

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