Explorers, Detectives, Matchmakers, and Lion Tamers
Understanding Jigsaw Puzzlers' Techniques and Motivations

•

ANGELA CORA GARCIA

Why do people enjoy jigsaw puzzles, which—challenging and time-consuming as they are—might be considered more like work than play? The author investigates the motivations, preferences, and satisfactions of individuals working on jigsaw puzzles, and she explores how these elements of play relate to the procedures and strategies puzzlers use to assemble their jigsaws. She identifies four general approaches to completing these puzzles: the Explorer, Detective, Matchmaker, and Lion Tamer. She then describes how those who use these approaches differ in their openness to serendipity and flexibility, their attraction to the aesthetics of the puzzle picture, the degree of difficulty they embrace, and their relative interest in the process of puzzle assembly or in producing a finished puzzle. She concludes that the study of jigsaw puzzling helps us better understand leisure activities in general by allowing us more effectively to distinguish serious from casual leisure, explore the relationship of work to play, assess the importance of rules, investigate the relationship between product and process in play, and identify some of the intrinsic rewards that motivate play. **Key words**: sociology of leisure, jigsaw puzzles, play, motivation

JIGSAW PUZZLES as a leisure-time activity dates back to the mid-1700s (Williams 2004). Although their use has ebbed and flowed since then, they remain popular today. Contemporary jigsaw puzzles typically have a square or rectangular picture glued to cardboard backing, although many variations of puzzle shapes, materials, and sizes exist (Burns and Burns 2002; DeCristoforo 1990; Nemy 1966). Manufacturers cut the picture into pieces of many shapes and patterns, such as regularly shaped interlocking pieces, irregularly shaped pieces, or geometric patterns (Williams 2004). Designers produce jigsaw puzzles for people of all ages. Many educators believe that these puzzles benefit childhood development (e.g., Petroski 2003; Weber 1979) and improve mental acuity in

adults (e.g., Recer 2001). Some people engage in jigsaw-puzzle competitions, but most consider puzzling a solitary leisure-time activity or at best one they share with family and friends (Drabble 2009; Williams 2004).

As Williams notes, puzzlers differ in their approaches to assembling puzzles, in the rules and procedures they set for themselves, and in the level of difficulty they prefer. A challenging task, completing a jigsaw puzzle consumes time and, in the effort required, resembles many jobs, though no one gets paid for doing jigsaw puzzles. Indeed, the tasks involved (sorting, classifying, searching, comparing, and testing) are the same as those found at many work sites, and the personal qualities needed to finish the puzzle (patience, diligence, concentration) resemble those required in a number of professions. Given, then, the amount of work involved, why do some people find this leisure activity—this "recreational" work of assembling jigsaw puzzles—interesting, intrinsically motivating, and fun? Where does the boundary between work and play lie?

While completing jigsaw puzzles always involves the transformation of a chaotic and random set of pieces into an ordered, completed picture, puzzlers differ in their attitudes toward chaos and order. Some puzzlers engage in and enjoy the random aspects of puzzles and welcome serendipity and flexibility; others appreciate structure and routine. These differences affect puzzlers' enjoyment of puzzles and how they complete them. Some prefer simple puzzles and straightforward techniques for putting them together (such as laying out all the pieces face up on the table, assembling the outermost pieces that define the perimeter or edge of the puzzle then working on the interior pieces), and others—reveling in complexity and challenge—try to maximize the difficulty (by completing a puzzle with the pieces turned upside down, for example, or mixing together several puzzles and completing them all at once).

In this article, I discuss how people differ greatly in their procedures for solving jigsaw puzzles, their motivations for doing so, and the sources of satisfaction they obtain from it. I show how these differences fall into four approaches to puzzling, which I label: the Explorer, Detective, Matchmaker, and Lion Tamer. Each approach emphasizes a different aspect of puzzle solving: the goal of the activity, the source of its aesthetic appeal, its preferred degree of difficulty, and its openness to serendipity and flexibility. Briefly, the Explorer emphasizes flexibility, creativity, and discovery; the Detective stresses problem solving; the Matchmaker champions the aesthetics of the picture and the process of matching pieces to the picture; and the Lion Tamer makes the process of puzzle completion as challenging as possible (for example by imposing additional rules or restrictions

on the process of completion). Following a brief review of the research on leisure activities in the next section, I present the findings that led me to posit these four approaches to assembling jigsaw puzzles.

Previous Research

Social scientists have long recognized the importance of play for understanding human behavior. For example, Mead (1967) considered the role of children's play in the creation of the self and our ability to take the role of the other. Piaget (1962) investigated the role of play in the development of cognitive processes and moral reasoning. Geertz (1973), too, showed how play symbolically expresses the values of a society. Social-science investigations of specific types of play have addressed a wide range of leisure activities, including competitive sports (Anderson 2011; Messner 2007; Sage 2010; Wiersma and Fifer 2008; Woodward 2004); extreme sports (Laviolette 2011); outdoor activities (Bogardus 2012; Dilley and Scraton 2010; Scott 2009); technological innovations such as video games (Kane 2009); fantasy role-playing games (Waskul and Lust 2004); competitive games such as chess (Puddephatt 2003); and participation in cultural activities such as making music (Dempsey 2008; Sudnow 2001; Barrett 1998); and dancing (Kraus 2010). With the exception of Livingston's (2008) work on skill and reason, social scientists have largely ignored assembling jigsaw puzzles as a leisure activity.

Livingston characterizes his study of how people complete jigsaw puzzles as part of a project on the "ethnography of reason," a study of the skills and reasoning processes people use in everyday life as they conduct various types of work and leisure activities. In his chapter on jigsaw puzzles, Livingston investigates the nature of the step-by-step procedures used to complete them: "The lived-work of solving jigsaw puzzles is the work of devising and implementing, modifying, and planning future ways of searching and examining the pieces to discover the solution-relevant inter-relational details of those pieces. Work on a jigsaw puzzle is the continual attempt to find ways of working on the puzzle" (Livingston 2008, 48).

My study extends Livingston's work by investigating puzzlers' perspectives on the experience of completing puzzles to discover how their enjoyment of the task informs and shapes the procedures and strategies they use to assemble the puzzle. This analysis contributes to our understanding of the nature of leisure

activities and why individuals participate in them as well as of the relationship between work and leisure.

To specify the differences between work and leisure and to enable the systematic study of the wide range of activities people undertake during their leisure time, Stebbins (2010) distinguishes between serious, casual, and project-based leisure activities. Stebbins defines serious leisure as the "systematic pursuit of an amateur, hobbyist, or volunteer activity sufficiently substantial, interesting, and fulfilling for the participant to find a (leisure) career there, acquiring and expressing a combination of its special skills, knowledge, and experience." He describes casual leisure as "immediately, intrinsically rewarding, relatively short-lived pleasurable activity, requiring little or no special training to enjoy it." The third type of leisure, project-based leisure, is "short-term, reasonably complicated, one-shot or occasional, though infrequent, creative undertaking carried out in free time or time free of disagreeable obligation (Stebbins 2007)" (cited in Stebbins 2010, 470; see also 1979, 1992, 2005a).

Stebbins (1979, 1998) notes that motivations for participation in leisure activities vary with the type of activity. For practitioners of "serious leisure," the benefits of participation may include self-fulfillment, self-expression, refreshment, financial return, and social rewards such as making friends. Watkins and Bond (2007) found a range of motivations and rewards that people experienced from participating in leisure activities that included achieving fulfillment, escaping pressure, exercising choice, and passing time. Kyle and Chick (2004) found that personal relationships and opportunities to socialize with friends and family members motivate people to participate in leisure activities. Dilley and Scraton note that "the social realm and relationships within [leisure] are acknowledged but are often treated as secondary" (2010, 127).

However, whether a specific activity falls under the serious, casual, or project-based category of leisure depends not so much on the activity itself but on how people engage in it and incorporate it into their lives (Dilley and Scraton 2010). While Stebbins (1998) lists jigsaw puzzles as a hobby (a type of serious leisure), he also notes that puzzles function as a form of casual leisure—an "active entertainment" (Stebbins 1997). For most people, jigsaw puzzles do not hone career skills or increase specialized knowledge the way serious leisure activities sometimes can (Stebbins 2008). Most people who like to assemble jigsaw puzzles do it as casual leisure, occasionally and for pleasure. On the other hand, completing jigsaw puzzles qualifies as a form of serious leisure for the minority of puzzlers who engage more intensely in the activity—for example, those who participate

in puzzle competitions, collect puzzles, preserve or frame completed puzzles, or make their own puzzles. Jigsaw puzzles have both work-like and play-like attributes, which may be valued and experienced differently by different participants. Since work is a component of the serious leisure category (see, for example, Stebbins' [1979] description of the arduous work involved in amateur archaeology), completing jigsaw puzzles does have some of the attributes of serious leisure.

Previous research makes varying assumptions about the relationship between work and leisure. Stebbins (1998) conceptualizes leisure as something that one does during "free time" or "after work." However, in another work, he notes that efforts to conceptualize leisure as distinct from work can be problematic (Stebbins 2000), for example, when considering the place of obligation in leisure activities. Cropley (2009) found that some individuals successfully maintain clear boundaries between work and leisure, while for others, work intrudes on their leisure time (see also Schor 1991). Anderson describes how his interest in sky diving "conflicted with the 'real worldly' demands of time-consuming work and family life" (2011, 135). Kelly (2009) questions previous ways of distinguishing between work and leisure activities and recommends characterizing leisure as nonwork activity. Fine (2003) challenges the conceptual distinction between work and play in his analysis of how students in cooking school learn to create aesthetically pleasing food. He argues that cooking-school students engage in activities that some might consider artistic or craft-like if done as hobbies but that comprise part of the work of becoming a chef. Stebbins (1979) also notes that some people coordinate their leisure activities with their professional lives. As in a busman's holiday, they may use overlapping knowledge and skills in both their work and leisure activities. For example, Davis (1933) writes, "There is nothing novel about a jig saw puzzle to an archaeologist. Inviting him to help put a picture puzzle together at a party would be about like the classic joke of suggesting to the postman that he might take a walk for diversion on his day off" (1933, 245).

Ravenscroft and Gilchrist (2009) challenge the traditional concept of leisure as something distinct from work that people do during nonworking hours. They found that some individuals pursue creative types of leisure (such as arts, crafts, and photography) as a career or as their life's work, regardless of whether they receive financial compensation for it. This previous research suggests that while assembling jigsaw puzzles falls clearly on the leisure side of the continuum between work and leisure, it proves harder to characterize as either serious or casual.

I seek to fill several gaps in previous research on leisure activities. First, as

I have noted, with the exception of Livingston's (2008) work, social scientists have not investigated jigsaw puzzles. Second, the focus on creating a taxonomy of leisure activities (e.g., Stebbins 1994), has directed attention away from investigations of how people practice and experience leisure activities. I explore here how individual's preferences and attitudes toward puzzles affect the choices they make in piecing together jigsaw puzzles. I look at their procedures, motives, and methods for this form of leisure.

I first describe the research methods and data I used, then I present my analysis of how people assemble jigsaw puzzles. I describe more fully the four approaches to puzzle completion (the Explorer, Detective, Matchmaker, and Lion Tamer) that emerged from my analysis and address the implications of these findings for our understanding of how and why people engage in leisure activities.

Methods and Data

I conducted a qualitative analysis of interview data from the symbolic interactionist perspective developed by Blumer (1967), which holds that our beliefs shape our definition of a situation and how we act in it (Berg 1989; Thomas and Swaine 1928). For example, if an employee believes that his or her supervisor has the power to offer a raise, the employee might act differently toward the supervisor than he or she would if the supervisor were powerless. Similarly, a jigsaw puzzle has a very different meaning depending on an individual's beliefs and attitudes toward the puzzle. Blumer directed sociologists to study the way the symbolic meaning of "objects" in individuals' social world shapes their actions.

> Instead of the individual being surrounded by an environment of pre-existing objects which play upon him and call forth his behavior, the proper picture is that he constructs his objects on the basis of his on-going activity. In any of his countless acts—whether minor, like dressing himself, or major, like organizing himself for a professional career—the individual is designating different objects to himself, giving them meaning, judging their suitability to his action, and making decisions on the basis of the judgment. . . . The human individual pieces together and guides his action by taking account of different

things and interpreting their significance for his prospective action.
(2003, 56)

The analytical methodology I used relies on the grounded-theory process; this approach to the analysis of qualitative data involves an inductive, reflexive process of theory development (Charmaz 2003; 2004; Glaser and Strauss 1967; Morse 1994). I began conducting autoethnographic fieldwork on the process of jigsaw-puzzle completion in 2004, producing narratives about my own experiences with the topic (Ellis and Bochner 1992; Sanders 1999; Sudnow 2001); I observed myself completing jigsaw puzzles and wrote detailed field notes about my experiences. Several hundred pages of these notes, describing the mental and physical strategies used to complete puzzles (Garcia 2007), underpinned my investigation of the role of emotion and memory in the puzzler's experiences completing jigsaw puzzles (Garcia 2008). These autoethnographic investigations led me to understand the issues involved in puzzle completion, which, in turn, guided the development of interview questions for the current study.

I designed a semistructured, open-ended interview guide (Rubin and Rubin 2005) and used personal contacts and the snowball method to recruit fourteen interviewees who enjoyed jigsaw puzzles. All of them had at least a college education and were either employed or full-time graduate students. The interviews took between twenty-five and sixty minutes, and they were collected and processed with support from a Valente Center for the Arts and Sciences research fellowship. I tape recorded and transcribed each, then analyzed the techniques and procedures the interviewees described for assembling puzzles, the preferences they noted for types of pictures on the puzzles, the level of difficulty they assigned to the puzzles they solved, the motives they gave for doing puzzles, and rewards they felt they derived. I found their answers and observations differed greatly, and that these differences indicated the four distinct approaches to solving puzzles I introduce in this article.

Techniques and Procedures for
Assembling Jigsaw Puzzles

The interviews revealed that people used a variety of techniques and procedures to complete jigsaw puzzles. The interviewees sometimes differed dramatically in key aspects of puzzle solving. Some, for one example, referred constantly to

the picture on the puzzle box when working on the puzzle; others, much less often—if at all. Still other puzzlers stored and managed the loose pieces of the puzzles differently, and they also sorted the loose pieces differently.

Using the Picture on the Box

Consider the way puzzlers differed in how they used the illustration on the box as an aid in assembling the puzzle. The picture on the box provides a wide range of clues that can help place pieces in the puzzle of course—puzzlers match the color or shade of one color on a piece to the illustration, for example, or look at the objects in the picture to determine where in the puzzle a particular piece goes. While almost all of the interviewees used the picture on the box as an aid, their attitudes toward the tactic varied considerably: some of them used the picture less often or less extensively. Some interviewees always used the picture on the box, typically propping it up on the table so that they could refer to it as they searched for and placed pieces. Barbara, for example, explained that she uses the picture on the box to help find and place the pieces by matching details on them to the puzzle. She described matching the particular shade of a color and the direction of the artist's brushstrokes: "I did Van Gogh's *Starry Night*, and I could hold up a piece, and I could see Van Gogh's brushstrokes. And I could look at, you know, the model, and I knew exactly where it fit. Because you could see the shade of the yellow and you could see the direction of the brushstroke. . . . You knew that maybe it fit on that starry, you know. Or up in the sky, right about here, because the brush stroke was going like, you know, counterclockwise."

Sam explained why the process of solving a puzzle by matching the loose pieces to the picture on the box engages his interest: "If you're patient enough you can pick up an individual piece and figure out where that is on the picture. . . . You can pick up a piece, and you can say 'Oh, look this piece has a tiny little bird on it . . . and it's got, you know, a distinctive wing pattern.'"

However, some interviewees preferred to complete the puzzle without looking at the picture on the box. One of the interviewees routinely worked without looking at the picture unless she got stuck and needed to use the box to solve a tricky problem. For example, a given shade of green might appear in several parts of the picture. By looking at the box and comparing subtle details of the picture and the piece, the puzzler figured out where a particular piece of the puzzle belonged. Other interviewees often used the box but recognized that some might view that as cheating. "We'll do it without looking at the cover," Lacey pointed out, "because, generally, we've got puzzle pieces in the cover so it's upside

down. But then it's like, 'Where does this go? I don't get it.' And then we'll look [at the box]. So I always feel like we're sort of cheating, but I've never actually done it without 'cheating.'" Another interviewee used the box when beginning a new puzzle to help set up the edge. She also examined the picture on the box to familiarize herself with the "geography" of the puzzle, but then she put the box aside for most of the remainder of the process.

Some interviewees found completing a puzzle with only minimal use of the picture on the box both more satisfying and engaging. Elaine cited the excitement of the process of discovery as the source of her enjoyment in not referring to the picture. She used the analogies of scientists discovering and assembling fossilized bones and of children digging for buried treasure to describe how exciting and fun she found not looking at the picture on the box: "It's the feeling of discovery. It's almost like I'm a scientist finding the bones, the fossils, the pieces, to put this together, and you know, come up with the solution, the ultimate picture. . . . I found this, this looks like this, and when it fits, you're excited. And when it doesn't, you're like, 'Okay, why did I think this one fit?' 'Oh, this has a square thing!' 'Okay, I'll save that for later.' It's like a little kid digging through and saying, 'This is a gem I just found.'"

In sum, whether the puzzler chooses to use the picture on the box to help assemble the puzzle has implications for their enjoyment of the process. Some puzzlers enjoy the process of discovery, of exploring something new and unknown. They like to encounter pieces that are mysterious and initially unidentifiable. For them, completing the puzzle without looking at the picture on the box makes the process more interesting. Other puzzlers find matching loose pieces to the corresponding image in the picture on the box more exciting. The choice to use the picture on the box or not also affects the difficulty of finishing the puzzle. In another section of this article, I address how puzzlers regard this degree of difficulty; but for now, I turn to how they manage the loose pieces prior to placing them in the puzzle.

Managing the Loose Pieces

As I have mentioned, individual puzzlers handle the loose pieces that have not yet been placed in a puzzle differently. Many begin by laying all of the pieces face up on the table, which enables them to examine all the pieces when searching for a particular piece and to organize the loose pieces by color, pattern, or shape on the table top. Having all the pieces visible at once also helps them use the picture on the box to search for and match pieces if they prefer. Some of my

interviewees kept almost all of the loose pieces in the box or box lid and pulled out only individual pieces or small groups of pieces at a time.

Both Barbara and Sam preferred to have all pieces laying face up on the table. If there was not enough room on the table, they kept some pieces in the box. But Sam expressed his strong preference for having all the pieces visible: "I would say if we had a big enough table, I like to lay all the pieces out face up. Sometimes we don't have a big enough space, although I think that is so essential, that I find it to be like crazy that you would do a jigsaw puzzle when you can't have the pieces visible, so I work really hard to have them all laid out."

On the other hand, some interviewees preferred to keep most pieces in the box, except for those they were currently working with. Elaine decided which part of the puzzle to work on, then searched through the box for a small number of pieces (typically only ten to fifteen pieces) that she thought might fit that part of the puzzle. After trying to place that group of pieces, she would put those she could not place back in the box. She then searched through the pieces in the box again to find more pieces to try.

The way interviewees managed the loose puzzle pieces related to their tolerance for randomness and order. Those who kept the loose pieces in the box enjoyed (or tolerated) the randomness of this method of placement, but those who laid the loose pieces face up on the table preferred systematic searches through all the pieces. These two different methods of managing the loose pieces facilitate different methods of sorting the pieces as well.

Sorting the Pieces

Puzzlers sort pieces in a number of ways: isolating the edge pieces, locating bits of the picture on the pieces (such as colors, say, or objects, or patterns), and comparing the shapes of the puzzle pieces. The interviewees sorted the pieces in just such a variety of ways, although almost all began by searching for the edge pieces and more interviewees sorted by color than by shape.

Linda reported that her family always began by seeking the four corner pieces of a square or rectangular puzzle. Next, they searched for the remaining border pieces. Linda always completed the entire perimeter before placing any of the interior pieces. After completing—or at least starting—the edge, most interviewees sorted pieces by color, then by shape. Dianne followed this sorting with a search for specific objects depicted in the picture, which helped her distinguish pieces that otherwise appeared to her quite similar. "So let's say a side of a wall had, um, I don't know, a vine climbing up it. Then I might try to find the

pieces that were the vine and construct out from there. . . . If it were a stone wall and there were really no distinguishing markers within the image, then I think at that point I'm looking for interlocking shapes and trying to work from there."

Almost all the interviewees sorted pieces by shape either as a second or last step in the sorting process. Lacey sorted pieces by shape only when she had almost completed the puzzle and had just a few loose pieces left to place. She searched for all the pieces that had the shape she needed, then she tested each of them until she found a fit.

Only two of the fourteen interviewees sorted primarily by the shape of the puzzle pieces. Lee completed some puzzles entirely by working with the shape of the pieces. Sandy found sorting by shape more effective than sorting by color or other aspects of the picture: "I definitely tend to look more for shapes than I do for the actual completion of the picture, because I always find that very deceptive to me. I'm not good at doing it that way, and I also prefer that mental process [of focusing on shapes]. It's more problem solving to me; it's more satisfying than completing the picture which is someone else's picture."

To summarize, puzzlers sort for some or all of the following characteristics of pieces: the four corners of the edge, the edge pieces, the colors of the pieces, objects depicted on the pieces, and the shapes of the pieces. These differences in sorting reveal major differences in how individuals experience the puzzles and in what they find interesting and fun about jigsaws.

In the next section, I explore the different ways puzzlers use the box and manage and sort the loose pieces and how these relate to their interests in puzzles. For some puzzlers, the visual appeal of the picture seems very important, so sorting pieces by color or by the object depicted on the pieces enables them to focus their puzzle-completion strategies on the aspects of the puzzle they find most engaging and motivating. Other puzzlers—with more interest in the shapes of the pieces and the challenge that fitting pieces by shape provides—sort by shape or by shape and other criteria simultaneously.

Puzzlers' Preferences

In this section of the article, I consider how puzzlers regard the picture on the puzzle, the level of difficulty of a puzzle, and the flexibility or rigidity of the process of puzzle completion.

The Nature and Relevance of the Picture

The interviewees differed in their preferences regarding the nature of the picture on the puzzle and how it related to their enjoyment of assembling puzzles. Some interviewees had a strong interest in the aesthetics of the picture (e.g., the particular colors in the picture or the style of the artwork). Others preferred puzzles that depicted scenes or objects with personal meaning to them (e.g., pictures that reminded them of home or that resembled their pets). Some puzzlers had a strategic interest in the nature of the picture, in whether it provided the level of difficulty they preferred. For example, a landscape with a lot of blue sky or a picture with a strong pattern may make the puzzle difficult to complete. On the other hand, intricate patterns or details in the picture may provide clues that aid puzzle completion. Barbara described the aesthetic appeal of working with reproductions of fine art: "I like the Impressionists because I think, you know, that all the little brushstrokes and the variation in color is fun to work with."

Some puzzlers expressed emotional or personal reasons for liking particular pictures or types of pictures on puzzles they had done, favoring puzzles—for example—that remind them of places, people, or things they loved. Barbara offered: "I like photographs of vacation places, because we can . . . it's kind of like reassembling the experience. It allows you to think back about, you know, we have this one of the sand dunes in Colorado. The Great Dunes. You know, we love to work that. We think about what it was like climbing the sand dunes on that morning." On the other hand, Linda liked puzzles depicting the region of her childhood: "I would say, most of the scenic ones that I've done, they're all New England. I grew up in New England. I love New England."

Some interviewees noted that the nature of the picture affected the difficulty of the puzzle. Molly preferred puzzle pictures with "sharp contrasts" and "distinctive patterns" that provided detailed clues to completing a puzzle. She found puzzles with repetitive geometric patterns too difficult and aesthetically unappealing. "You might as well just turn the pieces over," she said, "and leave them upside down."

Lee had a very different perspective on the importance of the picture. She expressed little interest in the picture aesthetically or emotionally. She considered whether the picture facilitated the type of puzzling she enjoyed at that point in time. She found that some types of pictures worked better when sorting loose pieces by color, and others made sorting by shape successful: "I mostly don't care what the picture is. . . . I mean, the picture does count at times; but mostly if I want a puzzle, I just want a puzzle. And I will choose a picture; like if I feel

like doing something where I sort by color, I'll choose a puzzle where I can sort by color. If I feel like just doing the whole puzzle at once and sorting by shape, I'll choose something that's conducive to that. So I choose the picture that's conducive to the kind of puzzling I want to do."

In sum, puzzlers vary greatly in the importance they assign to the picture and in what aspects of the picture they value. Their preferences regarding the picture relate to the way they manage and sort the pieces as well as to the degree of difficulty they seek.

Work-Play Balance and the Level of Difficulty

When the interviewees described the level of challenge they preferred in assembling puzzles, both the complexity of the picture and the shapes of the individual pieces proved important. Linda found solving puzzles with too few visual cues in the picture too much like work for her taste: "Of course, I kick myself every time I do this: I'd get a puzzle mostly with sky with clouds, and those are next to impossible. So then it becomes, well, this isn't so relaxing any more. It's more frustrating. I'd still do them. . . . It's more like work." Linda also offered, "If I took one. . . say geometric design, very much the same across the whole thing, I would not find that enjoyable at all. Because [although] I do like looking at the shapes of the pieces, . . . I don't want to do that for the whole puzzle and just be looking. . . for the little idiosyncrasies of each piece."

Barbara described how she selects a puzzle that provides a good balance between work and play: "And the trick when you buy them is to have an interesting picture that is not too busy, but also not too many huge expanses of the same texture or color. So a good challenge is not too easy because it's so busy, and not so hard that it'll get very boring."

Molly expressed her preference for puzzles that she found reasonably easy to complete. She had no interest in the specialty puzzles designed to make assembly more challenging: "I like the ones you actually stand some chance of making some progress on . . . the ones that are more fun than frustrating. It seems like it's getting harder to find puzzles that are easy. . . . Somebody got the bright idea of mixing two puzzles in one bag. It's like, 'No. I don't want to do that. . . .' Those are way too much like work."

Puzzlers who prefer greater challenges seek out more intricate puzzles and employ more complex methods to complete puzzles. Lee had stored four very large completed puzzles (ranging from three to eight thousand pieces each) in her father's closet; each puzzle rested on a sheet of poster board. Unfortunately,

her father disassembled the puzzles and placed all the pieces into one container. Although initially dismayed at what he had done, she redid all four puzzles concurrently, admitting at the end of the process that she had enjoyed the challenge. Lee also described doing puzzles with the pieces turned upside down to increase the level of difficulty: "I'd be working on a puzzle and get bored, and flip it over and do it upside down. And I still like to do that now and then. I wouldn't do that like with an eight-thousand-piece puzzle, although it's very tempting. Usually like with a thousand, fifteen hundred, something like that. And I'll just, you know, turn all the pieces upside down and work it as if the picture was a brown picture. And so then, obviously, I would go by shapes mostly! Yeah, I just find that very enjoyable and relaxing. I like these challenges."

To sum up then, the interviewees differ on the level of challenge they believe appropriate for a puzzle. Their preferences regarding the level of difficulty affect the types of puzzles they choose to assemble, the nature of the picture on the puzzle, the number and size of the pieces, and so on.

The procedures they use to complete the puzzle also relate to the level of difficulty. In the next section, I discuss how puzzlers' preferences for particular procedures—whether they are relatively flexible or more rigid—impact their experiences in working puzzles.

Flexibility and Rigidity

Although solving jigsaw puzzles always involves transforming the chaos of loose pieces into the order of a completed puzzle, individuals prefer different approaches. Some display flexibility, randomness, and serendipity; others favor rigidity, order, and linearity. Some interviewees found interacting with and experiencing the random aspects of the puzzle more compelling than creating and experiencing order. For example, some puzzlers—rather than using a systematic approach—start by working on whatever part of the puzzle seems easiest to put together. Some puzzlers may be comfortable with interrupting a search for a particular piece when they notice another piece that might be useful elsewhere in the puzzle; others prefer to stay focused on the original task. Although Linda typically used a systematic process for locating specific pieces, she was open to serendipitous events while searching. She described how the process of puzzle completion led to unexpected discoveries and changes in plans: "As I'm looking for that greenish tint one, something will catch my eye. 'Oh, I need that one.' And so I'll grab these things in my hand, and I'll be holding them as I'm looking for the other one. And then, okay, things changed enough, now I know where this one goes. I didn't notice

this one before, and I may have spent five minutes looking for it, and now I see it."

Lacey described the predominately flexible process she used to search for pieces in the box (Lacey preferred to keep the pieces in the box rather than lay them out on the table). Note that she did not employ a structured, systematic search of all pieces. Instead, she physically manipulated the loose pieces in several ways, moving them around in the box and turning them over to see as many as possible at once and find those useful to her.

> You kind of just shove all the pieces over to one side and, you know, and kind of push them, turn them up and push them up to the other side. As I go through and try to find them, sometimes kind of randomly, but most of the time I try to do it kind of, you know, organized, so I know what sections I've looked through. . . . Sometimes, especially when there's still a lot in the box so it's kind of hard to sort—which is why we often start with some part that's fairly unique looking. And so we can just kind of spin around and look for the color instead of moving them, and as we go we try to turn them face up so that we see more colors. And sometimes it's just like picking them up and letting them fall through [our fingers]. Lot of ways.

Although most puzzlers would consider much of Barbara's approach very flexible, her practice of beginning by picking up every piece in the puzzle and examining it carefully appeared highly structured. But her process facilitated the serendipitous discovery of useful pieces because she recognized pieces and figured out where they went more quickly and easily.

> We open the box, we pour the stuff out of the plastic bag into the box, and then I physically go through every piece and look at it. And in the process, somehow my brain is storing some kind of memory of those pieces. You know, and in the first sort we get out the edges, and then I like to, you know, whatever captures my interest, whether it's a color, whether, you know, the horizon, you know, where you've got sky breaking into mountains. You can capture those horizon pieces and, you know, collect all those and then fit them together piece by piece. . . . Sometimes I begin to move them to where I think they should be, and a lot of them are out there because I just think they're going to get used. And, oh, I don't know, sometimes that's part of

the random part of it. You know, it just, they just kind of find their location.

This quote also reveals that the random aspect of the puzzle did not trouble Barbara. She did not feel the need to have every piece systematically organized. She could place some loose pieces randomly on the table and simply, as she said, "find their location." When she said she began with "whatever captures my interest," she revealed that the purpose of her process was her enjoyment of it. The source of this enjoyment was at least partly due to her enjoyment of the picture on the pieces. So while Barbara had a fairly structured system for working with and organizing the pieces (e.g., sorting for the edges, capturing the horizon pieces, and so on), she had a high tolerance for incompletion; she often left one part of the puzzle uncompleted to work on another part that more immediately attracted her interest.

Barbara also showed flexibility in her approach to completing the edge of the puzzle. If she failed to find all the edge pieces right away, she simply worked on the interior. She also might abandon the task of completing the edge when more interesting things attracted her attention: "If I'm distracted by, you know, completing the clock face, or finding the flamingo, and assembling that. Or, you know, maybe it says 'The Oregon Coast!' Maybe I'll put all the letters together. . . . If there's something easy to work, then I'll start working on that, you know. So there are times when . . . pieces of the edge do not come together until significant chunks [of the interior] come together."

Linda's process combined both flexibility and rigidity. Although she was open and flexible, her system for completing puzzles involved a strict order for beginning work on the puzzle. She always first found the four corners and then completed the edge of the puzzle. She might start sorting the interior pieces by color as she worked on the edge, but she did not begin to assemble interior pieces of the puzzle until she completed the edge.

In contrast, the excerpts from Elaine's interview illustrate a more rigid and structured process. Elaine's procedures for completing the puzzle impose an additional level of order on the process. While she sometimes found the pieces she needed while working on another part of the puzzle, Elaine never allowed herself to place these serendipitously discovered pieces. Instead, she put them back in the box until she was ready to work on that part of the puzzle.

Elaine typically started working on the interior of the puzzle in its top left corner. She then methodically moved across the puzzle from left to right. "I start

out with the edges. And the straight lines," she described. "And I will discard every other piece until I find all of those. And then I won't look at the other pieces until—so even if I find a piece that fits—I'll discard it. . . . Then I tend to go, I would say from left top to right. I'm very linear."

In sum, puzzlers differ in the degree of openness and flexibility with which they complete puzzles. Though all puzzlers transform chaos into order, they vary in the extent to which they engage, appreciate, and enjoy the randomness of the process and its serendipitous discoveries. A puzzler's approach may not be consistent through the whole puzzle-solving process. A puzzler may have a flexible approach at one stage (e.g., enjoying serendipitous discoveries of pieces he or she was not searching for) and an inflexible approach at another (e.g., insisting on completing the edge before doing anything else). In any case, the differences in procedures puzzlers prefer relate closely to their motivations and the rewards they derive from completing puzzles.

Motivations and Rewards

The interviews revealed two categories of motivation: the process of working on the puzzle and the product created by this work or, rather, the finished puzzle itself. While all puzzlers care about both process and end product to some extent, some interviewees emphasized the quality of their experience of working on the puzzle, while others emphasized the satisfaction they got from putting in the last piece of the puzzle.

Motivating Aspects of the Process of Puzzling
Interviewees who focused primarily on the process of puzzling gave a range of reasons for doing so. Some found problem solving the most rewarding aspect of the experience; while others enjoyed the visual and tactile elements of the work, loved the aesthetics of the picture, or embraced the thrill of discovery.

Some of the interviewees found the visible progress they made in assembling the puzzle a concrete, gratifying accomplishment. This aspect of puzzling contrasts starkly with the work most of the interviewees did in their jobs or careers. Their white-collar, intellectual jobs typically provided few tangible results for their labor. Jean said that completing a puzzle was "very satisfying. Probably like cleaning a house. It is visible progress for one thing." Dianne, an English professor who wrote her dissertation on medieval literature, contrasted

the sense of satisfaction she gets from completing jigsaw puzzles to the process of writing a dissertation—a seemingly endless task with an often insubstantial result. She plaintively asked, "What do you have to show for your work when you're working on your dissertation?" She went on to contrast the process of doing research with a task such as working on a puzzle or painting her house, both of which provided concrete, visible results for her efforts.

Several interviewees describe their enjoyment of problem solving as their motivation. For example, Martha illustrated her mental engagement with the process of problem solving: "Once I start a puzzle, it's hard to stop. I think I'm constantly thinking of strategies. Well, maybe I should work on this particular color, or separate the pieces. Trying to think of different ways to approach it. Finding that one missing piece, of course!" Linda found the problem solving of puzzling satisfying, but she also enjoyed the aesthetics of the picture she was completing: "Probably one of the reasons that I like them is that math is my field. I'm a very analytical person. I like to see things come together. I like to see how things fit together. On the other hand, my family is very artistic, and I also dabble in some art; and I always looked at the combination of math and art as being very interesting. So there's that artistic piece, but then there's the analytical piece that goes with it. So for me it's a perfect combination."

Jean writes about the experience of being absorbed in the completion of the puzzle, and the satisfaction that comes—as you become more knowledgeable about the puzzle—when your investment of time and concentration pay off in faster progress. She describes this experience as "flow," echoing Csikszentmihalyi's (1996) use of the concept: "I think I like . . . when you get into the flow, when you get a bunch of pieces and they fit really fast together so you get on a run or a roll . . . . That's what it is and you get on a roll, and you just keep fitting them together. And, oh yeah, now I can do the whole section. You know that's pretty cool."

In sum, people assemble puzzles for a variety of reasons ranging from enjoying the pleasure of a break from work, to the sense of accomplishment in solving a problem, to coming to appreciate a beautiful picture. However, for some puzzlers, actually assembling a puzzle proves less satisfying than completing it.

Motivating Aspects of Finishing Puzzles

Several of the interviewees found completing the puzzle more satisfying than working on it. For example, Lacey noted that "It's always exciting to get the last piece in—kind of the point in a way." Bella described her ambivalence about

playing at assembling jigsaw puzzles, and explained why she had not done them in a long time. For her, the act of finishing a puzzle (placing the last piece) provided much more satisfaction than the process of assembling the puzzle: "Well, this is probably why I haven't done them so long, because it *is* having done it. So I definitely get a lot of satisfaction out of solving the puzzle, like that last piece is always very gratifying, but the process is not that interesting."

Although Sandy enjoyed both the process of assembling the puzzle and finishing it, she emphasized the importance of the finished product: "I definitely feel great satisfaction in completing it. . . . I do enjoy the process of making it fit together and solving the problem. But definitely, my goal is to finish it. And then I'm done, and I've enjoyed it; but if I don't manage to conquer the puzzle in a reasonable amount of time, I'm very frustrated. It's *not* just a process."

For those who found their motivation in finishing the puzzle, placing that last piece was of prime importance. These puzzlers derived satisfaction in completing the task, in solving the puzzle, rather than finding pleasure in the process of working on the puzzle. Thus my interviewees differ distinctly from one another in their source of satisfaction, from process or from product. Taken together, the ways puzzlers approached and experienced the task of assembling jigsaw puzzles varied in four distinct ways.

Approaches to Puzzling

Four general approaches to completing jigsaw puzzles have emerged from my analysis, and I have labeled them Explorer, Detective, Matchmaker, and Lion Tamer. These approaches fall along a continuum between four general categories: openness to serendipity (flexibility versus rigidity or the toleration of openness as opposed to the desire for structure); the source of aesthetic appeal (the picture versus the shapes of the pieces or the meaning and appeal of the picture as opposed to the challenge provided by the shape of the pieces); the degree of difficulty (work versus play or, in other words, the ease or difficulty of the process of completing the puzzle); and the goal of the activity (process versus product or the extent to which the satisfaction from doing the puzzle comes from the process itself rather than finishing the puzzle). My intention is not to claim that all puzzlers fit into these four categories, but to use the categories to help describe and map the variations in what motivates them.

Explorers

Explorers find motivation in discovering or creating something that did not previously exist. Explorers tend not to look at the picture while completing the puzzle. They find matching loose pieces to the puzzle picture less compelling than trying to figure out what a piece represents; they are content eventually to discover what it is as they complete the puzzle. Explorers tend not to put all the pieces out on the table face up; they prefer to leave all or most of the pieces in the box so that they can confront them and discover them randomly. Explorers tend to be flexible in their approach to puzzling and to prefer a midlevel challenge.

Detectives

Detectives find motivation in the opportunities for problem solving puzzles provide. Detectives tend to be more interested in the shapes of pieces than the pictures on them. When interested in the picture on the puzzle piece, they focus more on patterns in the picture on the puzzle pieces rather than on the colors. The meaning or the appearance of the picture motivates the Detective less than the level of challenge in completing the puzzle. Detectives tend to be fairly structured in their approach to puzzling, and they prefer a relatively high degree of difficulty. They are highly motivated by finishing the puzzle; for them puzzle solving is not just a process.

Matchmakers

Matchmakers find motivation in matching the picture on the box. Matchmakers tend to lay all loose pieces face up on the table and to refer to the picture on the box while assembling the pieces. The content, aesthetics, and complexity of the picture are important to them; the shape of the pieces is less important.

Lion Tamers

Lion Tamers "tame" the puzzle by imposing an even greater degree of order on the process of assembling the puzzle than is necessary to complete it. They do this by creating additional rules for how they allow themselves to work the puzzle. These rules make the process of puzzle completion more difficult. For example, Lion Tamers may insist on completing the puzzle from the left side to the right side, completing one object depicted in the puzzle before beginning another object, placing a number of loose pieces before bringing more pieces out of the box, or turning the pieces upside down before working on the puzzle. Their approach to puzzling is highly structured.

Summary and Discussion

People who like to assemble jigsaw puzzles prefer different ways of working on them and get different kinds of enjoyment from doing so. The techniques and procedures people use to find pieces to place in the puzzle, manage the loose pieces, and sort the pieces intersect with these different preferences and enjoyments. Some prefer to focus on characteristics of the picture depicted in the puzzle, while others have more interest in problem solving. Some prefer working on relatively simple puzzles, while others crave a greater degree of challenge and choose more complex puzzles and more intricate techniques for working on them. Some puzzlers are more flexible, some more rigid in the processes they use to complete puzzles. Finally, puzzlers find their rewards and motivations for assembling jigsaws in different aspects of the puzzling experience. Some gain the most satisfaction from the process of working on the puzzle, while others find rewards in solving the puzzle—that is, in the finished product.

These differences in approaches to puzzles fall into four categories of puzzlers: Explorer, Detective, Matchmaker, and Lion Tamer. The Explorer emphasizes flexibility, creativity, and discovery; the Detective emphasizes problem solving; the Matchmaker emphasizes the aesthetics of the picture and the process of matching pieces to the picture; and the Lion Tamer emphasizes making the process of puzzle completion as challenging as possible.

Previous studies of leisure have identified some of the same components of these four approaches to assembling puzzles in their examination of different types of leisure activities and of leisure in general. Some of these findings may therefore apply to other types of leisure activities. For example, like the amateur chess players Puddephatt (2003) studied, these jigsaw puzzlers had preferred ways of approaching the game and differed in their degree of openness to new approaches. Like the shuffleboard players Snyder (1986) studied, these jigsaw puzzlers had different levels of competitiveness about the game of puzzling and different sources of enjoyment from it. Like the amateur archaeologists Stebbins (1979) studied, jigsaw puzzling requires a combination of skill and serendipity and displays a range of levels of engagement with the activity. Describing amateur archaeologists who distinguish themselves from those who are merely "pothunters," Stebbins writes:

> The pothunter—and at times he is a "treasure hunter"—is, in the theoretical language of this book, a dabbler, or at best, a hobbyist.

He is fundamentally an insensitive collector of artifacts (including old bottles) who disturbs actual or potential sites for his personal aggrandizement. A recent addition to the pothunter set is the collector who operates with a metal detector though, obviously, stone and clay artifacts escape his attention. One interviewee stated the matter for himself and his wife: "We're not collectors. We have no real interest in the artifacts for themselves. We're interested in them only in the sense that these artifacts can communicate to us some aspect of the life-style of the people that used them." (1979, 164)

Investigating how and why people play at assembling jigsaw puzzles may help us understand better the nature, appeal, and goals of leisure activities in general. Specifically, examining play with jigsaw puzzles affords the opportunity to distinguish serious from casual leisure, explore the relationship of work to play, assess the resilience or rigidity of rules that puzzlers play by, discover the relationship between product and process in play, and identify the variety of intrinsic rewards that players seek or expect. As Blumer's (1967) symbolic interactionist perspective would lead us to project, this study revealed that the meaning of assembling a puzzle and solving its various challenges varies for each individual who chooses to play.

References

Anderson, Leon. 2011. "Time Is of the Essence: An Analytic Autoethnography of Family, Work, and Serious Leisure." *Symbolic Interaction* 34:133–57.

Barrett, Frank J. 1998. "Creativity and Improvisation in Jazz and Organizations: Implications for Organizational Learning." *Organization Science* 9:605–22.

Berg, Bruce L. 1989. *Qualitative Research Methods for the Social Sciences*.

Blumer, Herbert. 1969. *Symbolic Interactionism: Perspective and Method*.

———. 2003. "Society as Symbolic Interaction." In *Inner Lives and Social Worlds*, edited by James A. Holstein and Jaber F. Gubrium, 54–60.

Bogardus, Lisa M. 2012. "The Bolt Wars: A Social Worlds Perspective on Rock Climbing and Intragroup Conflict." *Journal of Contemporary Ethnography* 41:283–308.

Burns, Tony, and June Burns. 2002. *Scroll Saw Farm Puzzles*.

Charmaz, Kathy. 2003. "Grounded Theory: Objectivist and Constructivist Methods." In *Strategies of Qualitative Inquiry,* edited by Norman K. Denzin and Yvonna S. Lincoln, 249–91.

———. 2004. "Grounded Theory." In *Approaches to Qualitative Research: A Reader on Theory and Practice*, edited by Sharlene Nagy Hesse-Biber and Patricia Leavy, 496–521.

Cropley, Mark. 2009. "How Do Individuals 'Switch-Off' from Work during Leisure? A Qualitative Description of the Unwinding Process in High and Low Ruminators." *Leisure Studies* 28:333–47.

Csikszentmihalyi, Mihaly. 1996. *Creativity: Flow and the Psychology of Discovery and Invention*.

Davis, Emily C. 1933. "World's Jig-Saw Champions." *Science News Letter* 23:245–46.

De Cristoforo, R. J. 1990. *The Jigsaw/Scroll Saw Book*.

Dempsey, Nicholas P. 2008. "Hook-Ups and Train Wrecks: Contextual Parameters and the Coordination of Jazz Interactions." *Symbolic Interaction* 31:57–75.

Dilley, Rachel Elizabeth, and Sheila Janet Scraton. 2010. "Women, Climbing and Serious Leisure." *Leisure Studies* 29:125–41.

Drabble, Margaret. 2009. *The Pattern in the Carpet: A Personal History with Jigsaws*.

Ellis, Carolyn, and Arthur P. Bochner. 1992. "Telling and Performing Personal Stories: The Constraints of Choice in Abortion." In *Investigating Subjectivity: Research on Lived Experience,* edited by Carolyn Ellis and Michael Flaherty, 79–101.

Fine, Gary Alan. 2003. "Occupational Aesthetics: How Trade School Students Learn to Cook." In *The Cultural Study of Work*, edited by Douglas Harper and Helene M. Lawson, 75–95.

Garcia, Angela Cora. 2007. "Doing Jig Saw Puzzles: An Exploration of the Relevance of Auto-Ethnography for Workplace Studies Research." Paper presented at the Annual Meeting of the American Sociological Association, New York City, August 11.

———. 2008. "An Explorer in a Cardboard Land: Emotion, Memory, and the Embodied Experience of Doing Jig Saw Puzzles." Paper presented at the Canadian Qualitatives 2008 Conference in Fredericton, New Brunswick, Canada, May 23.

Geertz, Clifford. 1973. "Deep Play: Notes on the Balinese Cockfight." In *The Interpretation of Cultures: Selected Essays,* 412–54.

Glaser, Barney, and Anselm Strauss. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*.

Kane, Michael. 2009. *Game Boys: Triumph, Heartbreak, and the Quest for Cash in the Battleground of Competitive Videogaming*.

Kelly, John R. 2009. "Work and Leisure: A Simplified Paradigm." *Journal of Leisure Research* 41:439–51.

Kraus, Rachel. 2010. "'We are Not Strippers': How Belly Dancers Manage a (Soft) Stigmatized Serious Leisure Activity." *Symbolic Interaction* 33:435–55.

Kyle, Gerard, and Garry Chick. 2004. "Enduring Leisure Involvement: The Importance of Personal Relationships." *Leisure Studies* 23:243–66.

Laviolette, Patrick. 2011. *Extreme Landscapes of Leisure: Not a Hap-Hazardous Sport*.

Livingston, Eric. 2008. *Ethnographies of Reason*.

Mead, George H. 1967. *Mind, Self, and Society: From the Standpoint of a Social Behaviorist*. Edited by Charles W. Morris.

Messner, Michael. 2007. *Out of Play: Critical Essays on Gender and Sport*.

Morse, Janice M. 1994. "Emerging from the Data: The Cognitive Processes of Analysis in Qualitative Inquiry." In *Critical Issues in Qualitative Research Methods*, edited by Janice M. Morse, 23–43.

Nemy, Enid. 1966. "Boom in Jigsaw Puzzles: Three Pieces or Enough to Fill a Billiard Table." *The New York Times*, December 24, 22.

Petroski, Henry. 2003. "Engineering: Early Education." *American Scientist* 91:206–209.

Piaget, Jean. 1962. *Play, Dreams, and Imitation in Childhood*.

Puddephatt, Antony James. 2003. "Chess Playing as a Strategic Activity." *Symbolic Interaction* 26:263–84.

Ravenscroft, Neil, and Paul Gilchrist. 2009. "The Emergent Working Society of Leisure." *Journal of Leisure Research* 41:23–39.

Recer, Paul. 2001. "Mind-Exercising Hobbies can Help Protect the Brain against Alzheimer's, Study Says." *St. Louis Post-Dispatch*, March 6, A7.

Rubin, Herbert J., and Irene S. Rubin. 2005. *Qualitative Interviewing: The Art of Hearing Data*.

Sage, George H. 2010. *Globalizing Sport: How Organizations, Corporations, Media, and Politics Are Changing Sports*.

Sanders, Clinton R. 1999. *Understanding Dogs: Living and Working with Canine Companions*.

Schor, Juliet. 1991. *The Overworked American: The Unexpected Decline of Leisure*.

Scott, Susie. 2009. "Reclothing the Emperor: The Swimming Pool as a Negotiated Order." *Symbolic Interaction* 32:123–145.

Snyder, Eldon E. 1986. "The Social World of Shuffleboard: Participation by Senior Citizens." *Urban Life* 15:237–53.

Stebbins, Robert A. 1979. *Amateurs: On the Margin between Work and Leisure*.

———. 1992. *Amateurs, Professionals, and Serious Leisure*.

———. 1994. "The Liberal Arts Hobbies: A Neglected Subtype of Serious Leisure." *Society and Leisure* 17:173–86.

———. 1997. "Casual Leisure: A Conceptual Statement." *Leisure Studies* 16:17–25.

———. 1998. *After Work: The Search for an Optimal Leisure Lifestyle*.

———. 2000. "Obligation as an Aspect of Leisure Experience." *Journal of Leisure Research* 32:152–55.

———. 2001. "Serious Leisure." *Society* 38:53–57.

———. 2005a. "Choice and Experiential Definitions of Leisure." *Leisure Sciences* 27:349–452.

———. 2005b. "Project-Based Leisure: Theoretical Neglect of a Common Use of Free Time." *Leisure Studies* 24:1–11.

———. 2008. *Serious Leisure: A Perspective for Our Time*.

———. 2010. "The Internet as a Scientific Tool for Studying Leisure Activities: Exploratory Internet Data Collection." *Leisure Studies* 29:469–75.

Sudnow, David. (1978) 2001. *Ways of the Hand: A Rewritten Account*.

Thomas, William I., and Dorothy Swaine. 1928. *The Child in America: Behavior Problems and Programs*.

Waskul, Dennis, and Matt Lust. 2004. "Role-Playing and Playing Roles: The Person, Player, and Persona in Fantasy Role-Playing." *Symbolic Interaction* 27:333–56.

Watkins, Michael, and Carol Bond. 2007. "Ways of Experiencing Leisure." *Leisure Sciences* 29: 287–307.

Weber, Evelyn. 1979. "Play Materials in the Curriculum of Early Childhood." In *Educational Toys in America: 1800 to the Present*, edited by Karen Hewitt and Louise Roomet, 25–37.

Wiersma, Lenny D., and Angela M. Fifer. 2008. "The Schedule Has Been Tough but We Think It's Worth It: The Joys, Challenges, and Recommendations of Youth Sport Parents." *Journal of Leisure Research* 40:505–30.

Williams, Anne D. 2004. *The Jigsaw Puzzle: Piecing Together a History*.

Woodward, Kath. 2004. "Rumbles in the Jungle: Boxing, Racialization, and the Performance of Masculinity." *Leisure Studies* 23:5–17.