Racing for fans: Communication technology, the total experience, and the rise of Nascar

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RACING FOR FANS: COMMUNICATION TECHNOLOGY,
THE TOTAL EXPERIENCE, AND THE RISE OF NASCAR

by

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Bachelor of Arts
James Madison University
1995

A thesis submitted in partial fulfillment
of the requirements for the

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ABSTRACT

Racing for Fans: Communication Technology, the Total Experience, and the Rise of NASCAR

by

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The National Association of Stock Car Auto Racing, or NASCAR, has seen a tremendous popularity surge in the past decade. The sport is attracting record crowds at its events nationwide and its televised broadcasts are gaining audiences rapidly. While there are many reasons why NASCAR has gained an audience recently, this exploratory study examines the role of communication technology in the proliferation of the sport.

Each technology is discussed as it relates to a NASCAR fan's enjoyment of the "total experience," a term that defines the ultimate mediated experience available to a fan using communication technology without his or her presence at the race. This study investigates several communication technologies and their impacts on NASCAR's popularity. Cable television, radio frequency scanners, point-of-view cameras, the Internet, and statistical graphic displays are all components of today's NASCAR broadcast. The uses and gratifications theory is used to explain the sought gratification of the total experience by NASCAR race fans.
# TABLE OF CONTENTS

ABSTRACT .............................................................................................................................. iii

ACKNOWLEDGMENTS .......................................................................................................... v

CHAPTER I  INTRODUCTION ........................................................................................... 1
  Literature Review .............................................................................................................. 9
  Methodology .................................................................................................................... 14
  Preview ........................................................................................................................... 16

CHAPTER II  A BRIEF HISTORY OF NASCAR AND TELEVISION ............... 20
  NASCAR Flourishes With Cable Television ................................................................. 23
  Discussion ....................................................................................................................... 29

CHAPTER III  HOW FAST IS THAT STOCK CAR GOING? .............................. 31
  Real-Time Statistics and Graphs ..................................................................................... 31
  The Internet as Alternative News Source ..................................................................... 39
  Discussion ....................................................................................................................... 43

CHAPTER IV  CAMERAS, CAMERAS, EVERYWHERE ............................... 45
  Mobile Point-of-View Cameras ...................................................................................... 46
  Scanner Technology and Approved Eavesdropping ...................................................... 51
  Discussion ....................................................................................................................... 55

CHAPTER V  IMPLICATIONS AND THOUGHTS .............................................. 57
  A Final Note .................................................................................................................... 62

BIBLIOGRAPHY ............................................................................................................... 64

VITA ................................................................................................................................... 69
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CHAPTER 1

NASCAR’S EMERGENCE AS A MAJOR PLAYER IN THE SPORTS WORLD

“We’re NASCAR people. We raise kids and work hard all week for a nice home. Saturdays are for chores and kids’ soccer and baseball. Sundays are for racing. If we’re not at the track, we’re in front of the television.”

Eddie Atkins (as cited in Center, 1998, p. 106)

NASCAR: The Thunder of America

Introduction

In 1998, the National Association of Stock Car Auto Racing, popularly known as NASCAR\(^1\), announced with much hoopla and fanfare that it was celebrating its fiftieth anniversary. “The Good Ol’ Boys Turn 50” exclaimed a cover story in Popular Mechanics magazine (Oldham, 1998), just one of many periodicals and books marveling at the organization’s durability. The NASCAR public relations team sent scores of red, white and blue fiftieth anniversary logos to media throughout the world, and every media appearance from promotional commercials to the races themselves were awash with the anniversary symbol, a reminder that indeed, NASCAR has come of age.

This project will examine why NASCAR has become dominant in the media when it was once considered an “alternative” sport: a sport that was not popular or interesting enough to capture the air time of major media, such as television or radio. I argue that an important cause of NASCAR’s rise in popularity is due to technology. Technology is progressing rapidly throughout the world. New technologies are visible...
everywhere: TV is estimated to be in 98 percent of American homes, the telephone has improved with digital, cell and interactive capabilities, and the Internet is quickly changing the fundamental way people communicate, receive news and information, and perform business activities. Thus, I will focus in this project on the communication-oriented technological innovations that have caused the rise of NASCAR. I argue that NASCAR's rise in popularity has been explosive because of the technological breakthroughs that have enabled sports fans to enjoy the "total experience" of a sporting event. Video, audio and graphic data have all influenced communication technology's involvement in the growth of NASCAR, and this project will demonstrate how sports fans have embraced the technology and continue to tune in to NASCAR races. Further, with the assistance of communication technology, the concept of achieving the total experience has evolved NASCAR from an alternative sport to a mainstream sport.

While the fiftieth anniversary of NASCAR was aggressively promoted, it was not the first time sports fans took notice of the sport. In fact, business prospectors and city and state governments have taken a gamble in recent years to bring NASCAR to new places throughout the country. In 1995 Richie Clyne, a novice business executive from New Jersey, bought over 150 acres of desert in northern Las Vegas in order to build a NASCAR-friendly speedway (Louderback, 1998). He received over $1 million in incentives from casino executives and City of Las Vegas officials to create a 140,000 seat stadium. At the time, Clyne had no promise from NASCAR or any other racing series that they would even race at the track. Clyne and his investors gambled that if they built the track, the NASCAR series would arrive. In less than a year of completing the facility, NASCAR's flagship Winston Cup series was racing at Las Vegas Motor Speedway in the first annual Las Vegas 400. When all 140,000 tickets to the race sold within 24 hours, Clyne and his investors must have felt that their gamble paid off. To add to the satisfaction of the first sell-out, the 1999 race sold out before tickets went on sale, as
current ticket holders and people on ticket buying waiting lists desired more NASCAR action in Las Vegas.

Any public relations executive would offer a conservative estimate at best on the viability of filling a six-figure seat stadium with little prior market research available on a sport in a particular city. Yet NASCAR has been able to repeat the success of Las Vegas Motor Speedway in city after city, at track after track. Dallas, Los Angeles and Miami have demonstrated NASCAR’s tremendous popularity with these tracks that have opened within the past five years with similar results to Las Vegas. The New York Times reported that New York City, the largest city in the country, and consequently the largest sports market in the country, was about to have its own NASCAR-style speedway (“Trump and NASCAR President Sign Deal,” 1999). None other than outspoken New York billionaire Donald Trump signed a deal with NASCAR president Bill France, Jr. to build a speedway. Additionally, Time’s Adam Cohen reported that NASCAR race attendance has tripled in two decades, and merchandise sales, “have climbed ten-fold, from $60 million to $600 million [annually]” (1996). Almost as an afterthought to the success, restaurants and retail facilities have flourished recently to cash in on the NASCAR phenomenon: Race Rock and NASCAR Cafe restaurants have been built in Orlando, Las Vegas, Atlanta and Charlotte, and Zzoom and NASCAR TNN (The Nashville Network) Thunder retail stores have established themselves in shopping malls and Wal-Mart Supercenters throughout the country.

NASCAR’s influence is clearly growing. Only the most elite of sports, such as football, baseball or hockey, might cause hopeful investors like Richie Clyne to build stadiums on the chance that the sports team will follow. Martin reports in his ironically named article, “From Southern-Fried to Genuine Americana,” that “NASCAR’s television ratings are now equal to, if not better than, those of the NHL” (1999). Over forty percent of NASCAR fans are female, which is a larger percentage than in any other
sport (Weissman, 1999). "Upper-middle class" style advertisers such as Alltel cellular and digital phone company, 3M, Lycos Internet, Yahoo Internet, and BellSouth have all recently advertised through NASCAR because, according to ad agency representatives, NASCAR fans have become a, "diverse, affluent bunch" (Weissman, 1999). With NASCAR, the gamble appears to be paying off, as the series, and the media, have been moving to new tracks and new television deals, around the country.

The above scenarios need further study within the communication discipline because there is already a significant amount of sports programming and to see NASCAR's success story means that something must be setting NASCAR apart. It is common knowledge that the sports media market is glutted with sports programming. Several authors (Abelman, 1998; Seiter, 1999; Shapiro, 1997; Burton, 1999) comment that sporting events have become a colossal portion of overall television programming, and these authors agree that the situation is not likely to change in the future, most likely because of money – also known as advertising. Sporting events attract young, usually male, middle to upper class spenders that advertisers seek to sell products to, and thus sports fatten the pockets of not just athletes but TV executives as well. NASCAR has been no different. In fact, NASCAR has closer ties to big advertising than many other sports because of stock cars. Since stock cars are essentially moving advertisements for various sponsors, these same sponsors also purchase advertising space during race broadcasts. Shapiro (1997) comments that auto racing, along with golf, are the two biggest "industry-driven advertiser participants" in the TV advertising game.

However, there is a myriad of "alternative" sports, and NASCAR is still sometimes considered an alternative sport, although it is the definitive leader of these and even out-gaining current "mainstream" sports. While golf has enjoyed a rise in popularity similar to NASCAR, journalists such as Shapiro (1997), will often agree that it was Tiger Woods alone that has carried the sport on television, with his youth,
exceptional talent and diverse ethnic background. With NASCAR, however, there has been somewhat of a lack of definitive study as to the reasons the sport has excelled beyond any other in the crowded sports media market. I argue that NASCAR’s success has been due to manipulating television, and also utilizing new communication technology to enhance its broadcasts beyond other sports, to stand out among the pack and “scream” at sports fans with a different way to view and appreciate their brand of sport.

The sports media have not overlooked the sport’s success themselves. NASCAR is an ubiquitous feature on sports newscasts and regular programming on television. There are television and radio shows devoted entirely to motorsports; ESPN2’s RPM2NITE and TNN’s This Week in NASCAR appear on television and NASCAR in the News is a feature on the Motorsports Radio Network (MRN). These informational news programs are merely support items for the main event: the actual televised NASCAR race, which is one of the hottest grabs in today’s television market. In 1999, NBC paid a motorsports television record $8 million for broadcasting rights to Miami-Dade Motor Speedway’s inaugural NASCAR race at the track. This price eclipsed the then-record setting $6 million fee ABC shelled out for the inaugural Las Vegas 400 in 1998.

However, it is important to note that until recently, with few exceptions, NASCAR’s credibility rested not with television networks, but with cable television. In fact, NASCAR’s major growth spurts have occurred in spite of network television, not because of it. Throughout the 1980s and early 1990s, the Daytona 500 was the only NASCAR race televised by a network, CBS. Other NASCAR broadcasts were televised by ESPN or The Nashville Network. NASCAR grew, while ESPN was looking for sports programming and the networks banked on football and baseball to pay their bills. The NASCAR fans followed, and brought many more with them. While the CBS
network's pop culture hit The Dukes of Hazzard could be considered a partial attribute to the rise in the popularity of NASCAR in the early 1980s, it is the air time that cable television has awarded NASCAR that has appeared to have had the greatest influence on the growth of the sport. NASCAR may in fact could have precipitated the interest in the TV show. However, cable television made a great influence on NASCAR, more than any attributions from the major television networks. "Just the good ol’ boys meanin’ no harm" from Hazzard County ran from the law "since the day they was born" as only one of a two car chase, often only a police cruiser, while Richard Petty, Cale Yarborough and the men of NASCAR raced three-wide on a low-banked track every week to capture a checkered flag and a trophy. It was not network television, but the development of the technology of cable television, that transformed the Southern tradition into a national sports couch potato staple.

Many critics (Center, 1998; Cohen, 1996; Davis, 1997; Howell, 1997; Schonfeld, 1997; Voegelin, 1993) have aimed to answer, with varying reasons, why NASCAR's popularity has exploded. Some, such as Cohen (1996), speculate that NASCAR has only recently found marketable drivers that don't carry the "redneck" stigma and are identifiable with a wider portion of the population. Other critics cite NASCAR's insistence that their drivers lead "clean" lives, free of drugs, philandering, and addictions that have plagued the credibility of other sports (Murray, 1996). Other NASCAR watchers (Howell, 1997) state that the sport has endlessly promoted itself, through advertisements, public relations promotions and driver-media interaction. Another theory, far more political in nature, states that NASCAR's popularity is due to the revolt of the white male, who has lost his dominance in almost every contact sport to minorities, and has turned to NASCAR because it is still dominated by white men (De Jonge, 1998). This project will not dismiss any of the above theories as to the popularity of the sport.
There is a credible argument for many, if not all, of the above theories, as to NASCAR's rise.

Rather, this study aims to support a different theory, one that has been discussed briefly by the media but has not been entertained seriously by other studies: communication technology is the key to NASCAR's new widespread popularity. Recent innovations including frequency scanners, cable television, remote video cameras and real-time statistical data retrieval systems have made NASCAR a leader in providing the sports fan with a total sporting event experience. Thus, the sports fan enjoys a multi-dimensional sporting event instead of merely watching a TV screen's sideways depiction of a sport. Much like a video game, the participant might utilize a two-dimensional medium like television to facilitate the activity but enjoys several methods of motion and interaction to achieve a more realistic feeling. These alternative media have given NASCAR the edge in sports programming and as the discussion area of this paper will further argue, NASCAR has been the inspiration to other sports to use technology to improve their broadcasts as well, not only visually, but through audio technology and mechanical technology as well.

The speculation of this project states that NASCAR fans use technology to create the "total experience" of their sport. I will define the total experience as the most sensory-stimulating, multi-faceted media produced by television or the sport for the sports fan's use in order to attempt to create the feeling that he or she is completely involved in a sporting event. Cable television, radio frequency scanners, mobile video cameras and the Internet have proven to be invaluable to the proliferation of this sport. This project will demonstrate that an argument can be made that as the television networks have saturated weekend sports programming with depiction of men battling on grass fields no differently in the year 2000 as it was in 1960, the technologically savvy sports fan appreciates the improvements of technology through the automobile and its
varying components, and the way racers can manipulate them to operate at optimal performance through the use of up-to-date, readily available technologically advanced statistical graphics, such as RPM monitors, gas mileage indicators, and temperature-heat indexes. This study will demonstrate how the above communication technology has transformed NASCAR from an American deep South following into another sports lover’s national past time.

NASCAR sports fans tune in to watch their sport with an eye not only on the action on the track but with an eye on the brake pad under the car, monitoring the redness of the brake while going through turns, and with an eye on the driver in his seat, the traffic behind him, and the traffic in front of him. Also, should an accident occur, the sports fan knows exactly which car caused the crash, how many cars were involved, and what part of each car was damaged, even though the cars moving around the track are likely driving well over 100 miles per hour. The technology of using slow motion video from footage recorded by a video camera and the immediate re-play of an incident has caused almost instantaneous gratification for the sports fan who needs to know right away what caused a problem in a race. The sports fan knows that he or she will receive much technologically advanced information because there is a vast network of cameras located in almost every conceivable part of a car, and the cable network broadcasting the event knows that the camera angles are a critical part of the NASCAR fan’s total experience in viewing the race.

This project will further argue that communication technology has had a profound impact on the race attendee’s experience with the development of video screens and radio scanners. The video screens available around the race track draw attention to the action everywhere on the track, not just in the immediate field of view of a particular area of a stadium. Radio frequency scanners have also become an indispensable aspect of a NASCAR race because of the critical race information relayed between driver and race
crew. A NASCAR fan can listen to every problem his or her favorite driver might encounter during the race, and thus be as knowledgeable as a member of the media or a NASCAR official on the aspects of the race. Such communication technology is not available to the fans in any other sport, and further enhances the total experience of the sport.

Finally, this study asserts that the Internet has served as the NASCAR fan's supplement to the lack of mainstream media's interest in the day-to-day operations of the sport. Web sites dealing exclusively with NASCAR have prospered in the last few years and provide the NASCAR fan with the detailed information that newspapers and TV newscasts have overlooked. In fact, through a brief discussion of other activities that have additionally prospered from this alternative media, it will be shown that motorsports enthusiasts share the access to current events about their sport even though it may not be available through main media channels. Enjoying the total experience requires up-to-the-minute information, and the Internet provides it.

Literature Review

Much has been written about NASCAR's recent increase in popularity. Scholarly publications, and scholars themselves, have unfortunately not contributed much to this collection. Popular current events periodicals, however, from general interest magazines such as *Time* and *Insight on the News*, to specialized genre publications, including *Popular Mechanics*, *Sports Illustrated*, *Broadcasting and Cable*, and *Advertising Age*, all have written their version of NASCAR's new found stardom. Even the widely accepted cultural journal of record, *National Geographic*, delved into stock car's impact on the American sports world (De Jonge, 1998). Author Peter De Jonge asserts that, "stock car racing, which began in Southeastern states such as North Carolina, has become the country's biggest spectator sport" (p. 96). Similarly, Martin (1999) has observed that
"NASCAR fans range from the blue-collar worker to the Wall Street investor, from the construction worker to the entrepreneur... it has become a genuine slice of Americana" (p. 72).

NASCAR has escaped the scholarly authors’ radar screens beyond the occasional sociological or marketing strategy case study. Howell (1997) has a study of note, as his was the only scholarly source that devoted writing time to the NASCAR phenomenon, as he wrote in an ethnographic study of the cultural implications surrounding the activities at each race track as he followed the series around to a few races. His observations are sociological in nature, as he asserts that the series has gained immense popularity because it is "real": people can brush elbows with the best in the sport because they are more accessible to the public, due to the only recent surge in media exposure of the drivers and low recognizability by only the most devout of fans (p. 76-84). Howell (1997) does not explain communication technology's impact on the sport and does not linger on the effects of television on the sport. Unfortunately there is a dirth of scholarly information marrying NASCAR with mainstream or alternative media. This study, then, will rely heavily on similarities drawn from other social activities as observed in scholarly journals.

Scholarly journals investigated during the literature review uncovered a few studies of similar trends of note in popular culture. Most especially, Zehr (1995) asserts that motorsports have become popular to the middle-class of America because of the constant struggle such people have against technology. Zehr (1995) studied the phenomenon surrounding demolition derbies, and argues that their popularity with the event coincides directly with people's anxiety regarding technology, and in fact people’s need to control technology by destroying it (p. 501). Zehr (1995) uses the actor/network theory to demonstrate his assertions: demolition derby participants are users, and attempted dominators, of the network of technology symbolized by the car (p. 482-483).
Zehr (1995) states that technology is expensive, and cars especially are a symbol of wealth, and thus, "the demolition derby is an event where less powerful users of the automobile are able to invert their position, both literally and symbolically, through the destruction of this technology" (p. 501). This argument can apply to NASCAR, but in reverse. NASCAR fans can appreciate the immense cost to produce a car that is capable of the speed and horsepower of a stock car. They can also understand the year-long effort that pit crews undergo to perfect an engine, only to see it fluctuate unexpectedly from week to week. Further, they can comprehend the great struggle each driver has with his machine, and that the machine is capable of killing the driver should the driver not properly operate it. Thus, the NASCAR fan is awed by technology, impressed by the power of technology, and is drawn to the sport.

User/network theory is a possible application for this study, but the theory is not complete for the purposes of the study. User/network theory does not proffer a solution, or resolution, to the reasons the user fits into the network. For example, an argument can be made that the NASCAR fan is a user of the network of communication technology. The user/network theory does offer a reason why the NASCAR fan uses the network, however. Uses and gratifications theory is more useful in identifying the reasons behind the users place within a network and specifically takes into account the outcome of communication technology and its relationship with NASCAR. The use and gratification approach "considers consumers of media to be purportive in their choice of media and to actively seek media to fulfill their needs for a variety of uses" (Infante, Rancer & Womack, 1993). The deregulation of the communications industry and the convergence of mass media and digital technology transformed the exposure patterns of mass media users, which enhances the uses and gratification perspective as a preferred method of studying such relationships (Newhagen & Rafaeli, 1996; Rubin & Rubin, 1989).
The uses and gratifications theory is not without some shortcomings. Kubey (1986) asserts that uses and gratifications theory has been used too broadly, which has caused researchers to provide only vague information about media use and the gratifications it provides. Thus, this study attempts to avoid such a pitfall by defining the "total experience" and attaching all findings to the singular gratification therein. Additionally, Blumler (1985) criticizes scholars for using uses and gratifications to identify all social problems related to the media and urges future scholars to expand the theory to identify other gratifications. Other researchers (Finn, 1988; Harpur, Hart & Hare, 1994; Conway & Rubin, 1991; Herzog, 1944) have used the uses and gratification model to draw comparisons between personality traits and media consumption, including social isolation, extroverted behavior, or neuroticism and the amount or type of media used by such subjects. Media have also been linked as a form of escape for the average media consumer (Katz & Foulkes, 1962). Thus, the vast majority of such research has linked communication and the individual consumer. This study will use a more general approach; it aims to not judge the individual consumers of media but consumers as a whole; while some generalizations may occur as a result of such a grouping, the scope of this project will not allow an individualized response. However, it is important to note that it is likely that such psychological factors could be a motivational factor in the media use of NASCAR fans; however, to prove such a theory would require a survey.

Uses and gratifications theory is often used for quantitative, statistical analysis, however the model for uses and gratifications theory created by Katz, Blumler, and Gurevitch (1974) can be applied to a speculation such as the theory asserted in this project. The current speculation states that NASCAR has increased its fan base because communication technology has allowed for the total experience, which people seek in sporting events. Thus, people are drawn to NASCAR because of its focus on capturing the total experience. The uses and gratification theory model contains two parts, of which
only one is needed for the purposes of this study. The model states that, “there are social
and psychological origins of needs which generate expectations of the mass media which
lead to differential patterns of media exposure resulting in need gratification” (Katz, et al.
1974). In the case of the motorsports fan, he or she possesses the social need to enjoy the
total experience of NASCAR. He or she indulges in mass media to fulfill that need, and
the need is gratified. Since the mass media in the most popular forms have not gratified
the need for the total experience, the media user resorts to alternative media, and thus
communication technology, to gratify himself or herself.

The above model does not identify the various gratifications that are possible
through media consumption, as the basic model depends on the entrance of a variable for
a given study. Wenner (1986), however, identified several gratifications that are served
when media use is submitted in the user gratification theory: surveillance, entertainment,
interpersonal utility, or parasocial interaction. This study utilizes gratification for the
purposes of entertainment, as the total experience is designed to provide a fulfilling
entertainment experience for the media user. There are certainly other gratifications to be
obtained from watching NASCAR utilizing communication technology, but this study
focuses on the total experience of an entertaining sporting event.

Palmgreen, Wenner and Rayburn (1981) further assert that there are two main
variables with regard to media consumption: “gratification obtained, or gratification
sought” (p. 473). Such variables prove essential when determining quantitative answers
to a survey, but the research in this thesis shall exclusively focus on the idea that all total
experience media users who watch NASCAR fall under the “gratification sought”
category: they seek the total experience, and communication technology provides it.
Further, uses and gratifications theory argues that the media compete with other forms of
communication to gratify a user. Katz, et al. (1974) discuss the uses of interpersonal or
nonverbal communication as possible gratifications for a media user’s need. However,
this study is not able to determine such other possible gratifications as it is beyond the limit of the speculation – the main speculation will assert the theory as it pertains to mass media and communication technology alone. Thus, as it is important to note the features of the theory, the basic framework of use and gratification theory is further simplified as it applies to the scope of this study.

This project shall use the gratification sought, that people want the total experience, and the uses of communication technology. The result of the uses and gratifications theory with NASCAR is a rise in popularity. People use communication technology to enjoy the total experience, and NASCAR becomes an increasingly popular sport.

Methodology

The current speculation states that NASCAR fans use communication technology because it fulfills their needs, as closely as possible, to create the “total experience” of their sport. The uses and gratification theory will be used to demonstrate that the users of communication technology, NASCAR fans, use the technology to gratify their needs to enjoy a total experience of being a part of a NASCAR race. The theory will be used not quantitatively but qualitatively, to represent a simple form of the Katz, et al. (1974) model. The model contains two theories that explain the consumer’s gratification of a need met by the use of media: consumers need the media to gratify certain psychological needs, and they choose either mass media or another form of communication to satisfy their needs (p. 509). While some researchers, such as Finn (1997), use the model to discern the various types of gratification that are achieved by various media, this study focuses on one gratification only: the desire to enjoy the total experience of a sporting event.
A NASCAR race comprises many media rolled into one, making it impossible to separate each medium and decide the gratifications of each to each consumer. Thus, the NASCAR broadcast shall be viewed as one entity comprising the following elements of study: network television and cable television, video cameras, radio frequency scanners, and the Internet. Statistical graphics will also be studied as they apply to the televised broadcast of the NASCAR race. Each element will be viewed as it applies to meeting the needs of the NASCAR fan to enjoy the total experience, and will again be analyzed at the conclusion of the study as a whole entity.

Some of the components comprising a NASCAR race will be studied as "alternative media." Alternative media shall refer to the communication forms that differ from the "big-three" of mass communication: radio, network television, and newspaper. These alternative media have arisen in the past three decades and have broadened the sport's fan's media consumption abilities tremendously. Newspapers, radio and network television have been until recently the main, and often only, forms of mass media available to the majority of the population. Whether to gain market share, buck the trend of the "big three," or merely to make money, alternative media have mushroomed to not only enhance the major media but also counteract or even usurp media usage.

Communication technology has fundamentally altered the way that the NASCAR fan watches a race. Communication technology creates awareness of alternative sports, and the alternative sports in turn represent the future of many communication technologies. This study will also, then, include discussion of the ways in which NASCAR has influenced not only the sports fan, but inversely, alternative media. The symbiotic relationship between communication technology and NASCAR has caused a proliferation of more new media, which in turn causes NASCAR to utilize such media, and thus create a more technologically-savvy, total experience driven consumer. This
relationship will be studied as it pertains to uses and gratifications theory with each communication technology investigated in this study.

Lastly, the Katz, et al. (1974) model will provide a conclusion to this study with the assertion that with the need of consumers to enjoy the total experience, alternative media will continue to flourish and NASCAR will continue to explore the uses of alternative media. Alternative media is not used by NASCAR alone, however; alternative media will surface as the fundamental link between the total experience and sports fans in all other sports, from “established” media sports like football and hockey, to fledgling media sports such as snowboarding, swimming, skiing, and bobsledding.

Preview

The following will provide a preview as well as give a brief description of the remaining chapters. Chapter Two will focus on the history of NASCAR, including its founding and critical development periods for the sport. The history of NASCAR is a colorful story with a rich tradition in the South, a story that the gentlemen of NASCAR are proud of and that has traveled by word of mouth and through literary outlets as long as the sport has been around. In fact, many of recently retired drivers, such as Richard Petty, Donnie Allison, and Buddy Baker, often brag of their involvement in the past era of the sport. Such cultural background will be explored, but only in minor detail, as the main focus of the chapter will be on television, especially cable television, and its role in NASCAR’s growth.

Cable television, and cable television channels, are the first important aspect surrounding NASCAR’s immense popularity. The proliferation of the Entertainment and Sports Network, The Nashville Network, and the Ted Turner cable channels will be explored in their reference to NASCAR’s rise, and Chapter Two will conclude with a discussion section pointing to other sports that will benefit from cable television’s
influence on the sports world. It is cable television that has attempted to create the “total experience” within a sport. The “total experience,” a new term defined within this chapter, denotes the ultimate virtual experience of a sporting event without actually participating in the event. It is a critical term that will be further developed in the fifth chapter of this project.

Chapter Three will detail other technological breakthroughs that have reflected on NASCAR’s popularity: real-time statistical capabilities and graphics, and car improvements. Until a few years ago, media announcers attempted to convey to the audience away from the track exactly how fast the cars were running and how much stress was being place on the brakes and engine of the cars. Also, announcers were not able to give exact distances between cars to convey how close together cars were, and were not able to provide readings on the heat gauge, fuel mileage, or engine capabilities of each car to the audience. Today, all of the above information is available and is disseminated frequently over television and radio broadcasts. In fact, it is seldom that there is not a statistic of some sort gracing the screen during a NASCAR race.

Additionally, improvements in the cars themselves have played a fundamental role in the technological impact NASCAR has had on its fans. Cars today are able to be manipulated so that they race closer together to ensure exciting finishes and are equipped with state of the art equipment to prevent driver injury, while at the same time being strong yet remarkably lightweight and specialized motor sport machines.

Chapter Four will discuss the actual video and audio enhancements that have created a “total experience” for the NASCAR fan. Innovations including radio frequency scanners and multi-angle, moveable video cameras have been a new and different way for sports media to portray a race. Fans seem to have been drawn to the technology, as other sports broadcasts have begun to follow NASCAR’s lead and take daring approaches to the camera angles used during sporting events. Such technology has clearly already
impacted network television, and a discussion of incorporating new technology into established media sports, such as football, baseball and hockey, has been met with mostly positive results.

Finally, Chapter Five will bind the previous four chapters together with an overall discussion of NASCAR’s technological improvements. The chapter also offers further findings of the study when applied to the broad sports world, implications for further future research in the topic, and limitations present in the current study.
NOTES

1 For purposes of clarity within this thesis, all references to NASCAR shall refer to the NASCAR Winston Cup Series, unless specifically expressed otherwise. As most media and sports enthusiasts interchange the term NASCAR and NASCAR's flagship racing series, the Winston Cup circuit, I have chosen to do the same. There are at least five other supporting stock car or truck circuits that are linked to the NASCAR name, which will be mentioned by the specific series title in the text as occasion arises.

2 There are currently no female drivers in NASCAR's Winston Cup circuit, although there have been ten women who have competed throughout NASCAR's history, such as 1948 Daytona 500 racer Louise Smith. Former NASCAR racer Janet Guthrie remarks in Center (1998), that "it's not a man-woman deal; it's a racing deal. I don't think the car knows if it's a male or female driving." (p. 192). Nonetheless, currently no female drivers race in NASCAR, although there are several successful women drivers in smaller series such as ARCA – the American Race Car Association, and World of Outlaws-style midget and modified racing series.
CHAPTER 2

A BRIEF HISTORY OF NASCAR AND TELEVISION:
FROM THE AMERICAN SOUTH TO THE WORLD

The National Association of Stock Car Auto Racing is actually the by-product of the production of illegal alcohol (Howell, 1997). During Prohibition, Americans relied on two main sources for their illegal thirst quenching alcohol: speakeasies and moonshiners. Speakeasies, or parlors where illegal alcohol was produced and sold much like in a bar, flourished in the North where the population was dense and a common practice of gathering at drinking establishments had flourished before Prohibition. Moonshiners, or illegal alcohol runners, flourished in the South, where product buyers were often many miles, or even states, away from the alcohol producers that often set up shop deep in the woods or in other remote, rural areas to camouflage their activities (Howell, 1997). Moonshiners were so named because these individuals usually drove their cars by the light of the moon, when fewer suspicious eyes would notice the traveler.

Moonshiners spent a significant portion of time in their cars, as their payoffs were usually directly proportional to the amount of alcohol they transported. As they profited from their illegal runs, many of them began tinkering with their cars to make them perform better. The souped-up cars were meant to move so fast that should the police chase after the men, they would never catch them, and would give up trying. Soon enough, these men, such as former NASCAR drivers Lee Petty and Junior Johnson (Oldham, 1998), bragged to each other about the speed of their cars, and the races began.

The cars that the moonshiners drove were typical American-made models seen on the road anywhere in the country. The term “stock car” refers to a car that is in the same
stock as any other in an automaker's fleet in any given model year. For example, a 2000 Chevrolet Monte Carlo is available in any Chevrolet dealership in the country, as the assembly line rolls off car after car. In theory, a racer would buy one of these Chevrolet Montes off the sales floor of a dealership and modify it to create a sportier, faster car. Thus, a stock car is supposed to be merely a tinkered version of a car anyone in the world can purchase. In the early days of NASCAR, this was a true statement. Most moonshiners were not wealthy men; they took regular cars and modified them for racing.

Today, however, drastic changes occur to a stock car before it even leaves the auto manufacturer. In fact, today's stock car is nothing at all like the car it represents; only the shell of the car resembles the factory model. This process, and the implications the process has on technology, will be discussed further in Chapter Three.

News of the car races in the South spread and brought together many moonshiners for contests. Soon after these first races, the Prohibition Amendment was repealed and these men found themselves with more time on their hands and plenty of speed. The men would race in loosely organized events with no promise of money but bragging rights until the next race. Also, the men would establish rules as to the amount of tinkering that was allowed to be performed on the race cars, but it was hard to prove what modifications were made to each car when there was no set standard by which the racers could establish such modifications. Additionally, promoters would often lure racers to a track to hold an event, only to offer no prize money to the winners if ticket sales were soft. The drivers were ready to drive, but they needed organization and structure to flourish.

When race fan Bill France moved to Daytona Beach, Florida to watch these men race, he struck upon the idea to organize the races and offer prize money to the winner. The racers immediately took the chance to become a cohesive, standardized unit. France lured investors and advertisers to contribute prize money to his race winners, and if the
advertisers pulled out, France pulled money from his own account to pay his drivers. He was determined to gain the drivers' trust, and he stood by his races. France also insisted on punishing cheaters. He allowed no room for illegal modifications; he set up a neutral inspection team to investigate the winning cars after each race. Any cheaters were immediately disqualified and their prize money confiscated. Thus, with the backing of a large core of former moonshiners turned professional racers, the National Championship Stock Car Circuit was established in 1946 as the first organizing body to set rules, establish set race dates, and promise sponsorships and prize money to stock car racers (Oldham, 1998). France came up with the catchier acronym NASCAR in 1948 to describe his growing organization and raced a half-dozen races every year for almost five years, profiting a little more every year.

Investors in the South were amazed with the success of France's organization and they paved tracks for his drivers in South Carolina, Alabama, and North Carolina in the early 1950s. The early races were heavily promoted by NASCAR and the track owners with flyers, door-to-door pitches, and advertising at other sporting events in the South. France posted a profit every year he raced at the Daytona Speedway after his first year, mostly because of his endless promotion to advertisers and sports fans throughout the South (Oldham, 1998). Other stock car series attempted to enter the stock car racing circuit, but none were as successful as France, and the best racers followed the fattest win bonuses. Also, since the best racers worked for the fattest paycheck, the fans paid to see the best racers. NASCAR had grown such a following that the Daytona 500 became the premiere race in the stock car racing circuit, with many drivers and fans alike saving all year to attend the event.

A NASCAR race is a spectacle of the senses. To attend an event in person is to hear the deafening roar of the engines, smell the burning rubber and the hot asphalt, taste the dirt and dust that literally whips into the air as the cars race by, and feel the wind of
the cars as they pass the bleachers. The event is much more than that, as further chapters will demonstrate, but first it is necessary to see how television, especially cable television, helped to create a buzz around the sport greater than what NASCAR had ever seen before.

NASCAR Flourishes with Cable Television

NASCAR was still a word-of-mouth sport, however, as television networks and newspapers, mostly based in the North, failed to report on the sport or televise any of the races. France tried to promote his sport through the media, but the media was always second to pursuing money from his advertisers. The media, meanwhile, were entranced with football and baseball in the early years of television sports.

NASCAR and the sports media lead separate lives throughout the 1950s, 1960s and most of the 1970s. This is important to note because, as Abelman (1998) states:

more than any other force since 1945, television has changed the way we experience a sporting event. Until then, most Americans had never seen a live big-league baseball, football, or hockey game because nearly all the major league sport franchises were located in a tier of industrial cities in the Northeast and upper Midwest (p. 249).

The major sports of the Northeast and upper Midwest were football, baseball, hockey, and basketball. Car racing did not catch on in the North the way it did in the South; even in Detroit, where the American auto makers churned out thousands of new vehicles every year, the Michigan Speedway only began construction in the 1960s, and did not host a NASCAR race immediately. The lack of television coverage of NASCAR races was a contributing factor to the lack of interest in the sport. With the men racing in the South, and with television coverage supporting other sports in the North, NASCAR survived
mostly on its ability to attract fans through local newscasts, advertising, and local-interest media coverage.

NASCAR’s day to shine came in February 1979. CBS had decided for the first time to broadcast the Daytona 500, mostly because of the dearth of sporting events during February (McGee, 2000). Football season was over, baseball season had not yet begun, and there were no basketball games that weekend. On a dreary day in the Northeast when many people stayed indoors to avoid the weather, the Daytona 500 was the default viewing choice opposite NBC’s televised golf tournament. The viewers witnessed a fascinating event. On the last turn of the last lap to receive the checkered flag, race co-leaders Cale Yarborough and Donnie Allison crashed into each other and spun out of control while third place driver Richard Petty sailed between the wreckage to win the race (McGee, 2000). Petty’s victory lap was cut off, however, as CBS turned the cameras to the fight between Yarborough and Allison that erupted on the track as the drivers punched each other and tussled in the grass on the infield. The spectacle nabbed a CBS ratings victory and NASCAR received its first major publicity in newspapers. ESPN The Magazine called the 1979 Daytona 500, “the best [Daytona] race ever” (McGee, 2000).

The surge of interest in the sport still did not catch on after the 1979 Daytona 500. It seemed that it was difficult to follow an often three-to-four hour event of cars racing around a track; football, baseball and hockey fit much better into television’s format. With these sports, there are breaks, half-times, and penalty phases where TV producers can show commercials. The physical movement of these sports is more linear and two-dimensional; cameras need only go left to right in a confined space in order to catch most, if not all, of the action. Additionally, football, baseball and hockey already had stadiums and significant fan bases built into profitable urban markets in the North. These sports also share in the “team” concept; eleven men on a field in Washington, DC are
identifiable to everyone in Washington, DC, even if the citizens of the city do not know the names of each player on the team. A large city can create support for a sports team and generate interest in watching a televised game to support their city through their team. This "team" concept is non-existent in NASCAR. The sport is fundamentally individualistic in nature. The battle of who has the better car goes to the best man, not the city he is from. People in the North, viewing NASCAR drivers, often Southern, rural, and speaking with a different accent, probably found it difficult to identify with these men, making the interest in watching the sport difficult as there was no home-town man to cheer for. To someone who has no imbedded interest in auto racing, watching NASCAR on TV in the 1970s and 1980s probably was not much more than watching men drive in circles. Thus, for television to gamble on NASCAR, an event based in the economically disadvantaged South, when there was no guaranteed regular advertising revenue or built-in fan base to support the hefty financial investment a television network might make on a sport, was out of the question.

NASCAR still did not see a widespread fan base increase until the mid-1980s and early 1990s. Suddenly, as if the sport began anew, the publicity and media attention surrounding NASCAR exploded, as races moved further west and fans attended races from a larger geographic area than ever before. Television is the most important cause of this popularity surge. More specifically, the American Broadcasting Company (ABC) and the Entertainment and Sports Programming Network (ESPN) were the two television entities that brought NASCAR to prominence. Abelman (1998) details ABC's desire to grab a piece of the sports television pie:

Because of ABC's historic competitive disadvantage in relation to its older, more established rivals, ABC was virtually forced into a series of long-shot gambles throughout its early history... programming producer Ron Arledge presented the network's programming directors with a long
memo filled with his unique vision of sports coverage. In this startling document, he proposed to completely change the direction of televised sports [by]... incorporat[ing] more, improved, and newly developed technology and... diversify[ing] the audience for sports programming (p. 234-235).

One of these first gambles during ABC's early sports days was Wide World of Sports. “By concentrating on unique and exotic sports – ones that did not attract the attention of the average American sports fan” (Abelman, 1998), the producers were able to create a sports “package:” a two-and-a-half-hour-long, edited, dramatic program detailing a sporting event that would appeal to people on a broader level than just the sports aspect. It was under the Wide World of Sports variety show that NASCAR was given its first semi-regularly appearing role, but the races were edited, packaged to fit a select time frame, and included drama and exaggeration beyond the real. During one auto race, ABC producers had no cameras to cover a dramatic accident that had occurred; “fearing that the crash robbed the story of some of the excitement and drama of the race, a producer put several miniature cars into a flowerpot, set them on fire, and filmed the result” (Abelman, 1998). Nonetheless, NASCAR was receiving coveted television air time. NASCAR was being seen on weekends by not just the fans in the bleachers.

Cable television was available in the 1970s, but due to a variety of economic and technological reasons it was not until the early 1980s that the average American was able to partake in cable TV in the home. ESPN, which billed itself as “The Total Sports Network” (Abelman, 1998), premiered in 1979 without much hype as a daily sports-only network. Within two years the network was able to expand its daily programming from 10 to 24 hours a day and, as ESPN sportscaster Chris Berman said, “We took anything that was sports related and threw it on the air” (Berman, 1999). Not only did ESPN throw anything on the air, it chose not to meddle with the packaging the way ABC had
with *Wide World of Sports*. In most cases, ESPN would arrive with a camera crew and an announcer and allow the entire race on the air. Additionally, ESPN would attempt to interview drivers and provide available statistics for a race. Thus, ESPN allowed a sports fan to decide for him or herself what was important in the sports broadcast and not filter it for the audience. This is critical in a study of the total experience because a person needs to have an entire broadcast to truly have the total experience of a sporting event. Although television still mediates between the actual event and what is seen on TV, the live event is closer to the total experience than an edited, dramatized version. To have editing of salient points of a sporting event may enhance the drama of a sport, it does not provide a total experience to the sports fan.

Indeed, ESPN paved the way for many fledgling or under-represented sports have their days on the air, "*Wide World of Sports*-like programming rejected by the major networks (Abelman, 1998). NASCAR was one of the rejects. Throughout the 1980s, ESPN broadcasted many NASCAR races, and after ABC purchased ESPN in 1984, alternative sports such as NASCAR had not only the eyes of ESPN but also a major network. Burton (1999) remarks, "thanks to cable, alternative sports are already racking up more hours on TV and more viewers... the Wal-Mart FLW bass-fishing tour has become the most popular program on ESPN2... and NASCAR TV ratings are now second only to those of the NFL" (p. 80). ESPN has been known to take "the best of what’s left" (Shapiro, 1997) in sports programming, which has left plenty of room for NASCAR to proliferate. In fact, it appears that cable television has leveled the field, so that every channel has been able to prosper through all varieties of sports broadcasting. People have a broad range of sporting events to enjoy during the weekend; cable television has been able to give more options to those sports fans that may not want to watch the football game or hockey game on the networks. NASCAR has been available every weekend to sports fans thanks to cable television. To further cement the marriage between NASCAR
and ESPN, ESPN announced that this year it will broadcast a special series of programs
and features billed as “NASCAR 2000” (Marchand, 1999). The NASCAR feeder series
have also enjoyed part of the success of cable television and NASCAR; ESPN and
ESPN2 were the exclusive broadcasters of the NASCAR Craftsman Truck series in 1999

Today ESPN is widely regarded as having fulfilled its billing as becoming The
Total Sports Network, and ESPN has been able to spin off ESPN2 for two simultaneous
channels of sports, in addition to a magazine and a web site. ESPN’s success, then, has
been felt by alternative sports such as NASCAR, and fans have followed. NASCAR’s
viewership with ESPN, and subsequently other cable channels, has more than tripled
since the mid-1980s (Cohen, 1996). These other cable channels include: The Nashville
Network (TNN), Turner Network Television (TNT), and Speedvision. In the 1999
NASCAR season, every qualifying race and NASCAR race was televised, if not by a
major network, then by one of these cable networks. NASCAR’s place in the television
broadcasting genre seemed to have been confirmed.

Cable television has transformed the reality of an alternative sport. Alternative
sports have not continued to be alternative at all – they have become mainstream through
cable television. If there is any doubt about alternative sports’ acceptance, the networks
have already solidified the arrival of these alternative sports. The number of races in
NASCAR varies yearly, but hovers around forty races. Network television now televises
25 percent of the races. A further argument can be made for the mainstream acceptance
of alternative sports through other sports. For example, NASCAR parallels the success
of another alternative media sport whose popularity has experienced tremendous growth
– golf.

Although golf is one of the oldest sports, it has only recently seen television
success, thus making it an alternative sport in the eyes of the sports media. ESPN
televised the 1997 Las Vegas Invitational golf tournament. When the golf tournament ran over into programming time slated for an NFL pre-game show, ESPN officials were flustered not knowing whether to stay with the golf match or turn to the NFL pre-game show (Shapiro, 1997). The NFL won, Shapiro noted, but the fact that the broadcasters had even debated the issue demonstrated how far golf broadcasting has come (p. 46). During every available break in NFL action, ESPN returned to golf coverage. Due to increased advertising revenue that has come from increased exposure, networks are fighting over the right to broadcast golf (Shapiro, 1997). NASCAR has enjoyed similar success, as the symbiotic relationship between success and advertising has increased with the exposure granted this alternative sport.

The NASCAR television phenomenon has not ceased; NASCAR proudly reported that 1999 was its most profitable and televised year yet ("NASCAR Makes Most of Business Circles", 1999), and with Donald Trump building a Long Island speedway, all four major networks and at least four cable networks fighting for race rights, and television viewership second only to football, NASCAR’s brightest days may yet be coming.

Discussion

NASCAR would not have received the large amount of publicity that it has were it not for cable television. Cable television is now an established communication technology, rather old and in some cases antiquated, compared with satellite and digital television technology. Yet cable television was the first place that lesser-known programming, especially sports, were given a voice, and a face, so to speak. Had the initial four networks still been the only programming choices for television even today, it is doubtful that alternative sports would have been given the chance to attract new viewers and interest. Thus, cable television has been the instigator of a new flood of
sports that are gaining audiences worldwide. NASCAR has raced in Japan for the past three years as an exhibition race in late November; had the sport remained confined to the American South it may never have met the eyes of the Japanese. Also, NASCAR tracks have moved to new cities throughout the country based on interest generated by television. Fans in Las Vegas would likely be only the new residents that came from other cities had cable television not brought the sport to everyone's living room.

Cable television has enabled the NASCAR fan to enjoy a part of the total experience. She may enjoy her NASCAR races regardless of where she lives, and does not need to buy a ticket or fly to another city. Cable television has moved us beyond the Wide World of Sports, expanded dramatic sporting event to experiencing the entire event, from pre-race interviews to victory lane. The total experience requires as much live, unfiltered, "real" sports coverage imaginable, and cable television has enabled NASCAR fans to become closer to the total experience.
CHAPTER 3

HOW FAST IS THAT STOCK CAR GOING?

One of the most fundamental aspects of watching a NASCAR race is speed. What would be the point of watching a NASCAR race in the first place if the cars moved slowly and predictably around a track? There would be little more excitement than watching rush hour traffic on a freeway if NASCAR drivers did not push their cars to reach the maximum allowable speed, and dangerously close to one another as well. It is the fastest man that wins a race; that fact has not changed since NASCAR began over fifty years ago. Disseminating speed to race fans has always involved communication technology. Since the beginning of televised NASCAR races, or even within the stadium at a track, sports fans have been curious about the role the varying speeds and capabilities their favorite drivers have been capable of. Hand-in-hand with speed, then, is technology.

NASCAR utilizes several technological advances to assist its fans with learning every available aspect of information during a race. This chapter will discuss two of these technological innovations: real-time statistics and graphics and the rise of the Internet. Both of these items have been vital to the improvement of the sports fan’s total experience and have even paved the way for other sports to learn from NASCAR.

Real-Time Statistics and Graphics

It used to be that people watched sporting events on television with a full screen full of a moving picture and nothing else. Even during live sporting events, people only got a graphic representation of a football or basketball score when the television station
took a commercial break. The game announcers would update the score from time to
time, but the sports fan who wanted to actually continually see the score was kept waiting
until a convenient time from the broadcast network. Today, however, a person need only
turn on the television to see how dramatically times have changed, especially in TV
sports. Football’s annual Super Bowl has been accused of creating a new technology for
its television broadcasts every year (Patton, 1984) and indeed, many of the statistical
technologies that NASCAR broadcasts entail were created by football broadcast
innovations.

For example, Mullen and Mazzocco (1999) state that, “for the 1981 Super Bowl,
CBS utilized their ‘reverse-angle’ camera shot ... [they also] pioneered the use of the
telestrator that year” (p. 10). Video camera technologies will be discussed further in
Chapter Four, but it is important to note the many technological innovations that the sport
of football have warranted in TV sports all by itself, as NASCAR has been the recipient
of many of these technologies. Graphics technologies are another football-related TV
improvement for the total experience. Mullen and Mazzocco (1999) further state that:

Casual television viewing of football, or any broadcast sport for that
matter, indicates that the use of graphic information in the form of
statistics, charts, tables, and other forms of information about the game
and its players is an increasingly more important part of the game. (p. 13)

Most, if not all, current NFL broadcasts use a graphics box that the Fox network invented
that sits in the corner of the TV screen and constantly displays the game score and time
remaining in play. This “score box” is ubiquitous during televised sports today; in fact it
seems strange to think how sports fans survived before it. Basketball, baseball, hockey,
and certainly NASCAR races now have some form of a score box displayed at almost all
times during a broadcast.
NASCAR, in fact, has used a twist on the score box that varies a little from one network to the next. NASCAR races display a box with a constantly rotating list of where the drivers are running. The statistical information displayed in the score box is quite complex. Drivers are listed first by their ordinal position in the race: first, second, third, etc. They are then displayed in their current position with regard to where they started the race. For example, Bobby Labonte qualified for the race in eighth place, but he has climbed to second—his starting position is usually placed in parentheses, and his current place will be displayed to the left of his name.

Another feature of the score box is to list the interval, in seconds, among the drivers. This statistic is helpful in determining if there are any gaps developing anywhere in the field, or whether a driver is closing in on another. The score box shows also the actual, real-time speed of each driver. One might think that the first place driver is the one going the fastest, but in reality there are several factors that influence a driver’s speed on any given lap. Thus, Bobby Labonte, currently in second place, could be driving faster than Tony Stewart, who is in first place. This information truly adds to the total experience because the information causes a sports fan to put together a puzzle. What factors have caused Tony Stewart to drop in speed, and Bobby Labonte, who is not first place, to have the fastest speed? Answers may lie in the fact that there is significant traffic in the area where Stewart may be, which would cause him to move slower, or maybe there is a mechanical problem with Stewart’s car. Maybe Labonte was able to “draft,” or use the wind behind a car in front of him, to speed up, causing his increased speed. Whatever the case, the sports fan is part of the action as he or she looks at and thinks about the variables causing such a phenomenon, increasing the total experience. Indeed, before fans were aware of the actual speeds of drivers, they would not have had advance information of a problem with a driver’s car or a potential lead change. The score box provides such information.
The score box used for a NASCAR race provides even more information. It displays the running of the auto manufacturers during a race as well. Pontiac, Chevrolet, and Ford all have several cars on the track at once. The score box shows how the manufacturers are performing and notes if all of the Pontiacs are in the top ten but the Chevrolets are lagging in the rear of the field. As NASCAR fans are often intensely loyal to the manufacturer that represents their drivers, this information assists further with the fans’ total experiences. Some NASCAR score boxes also show how many spaces a driver has improved within a lap-to-lap time frame; the boxes indicate if a driver is moving up in the field or falling behind. CBS chooses to highlight drivers in green that have moved up a spot or more within a lap, and highlight in red those who have fallen one spot or more (Ewert, 2000). Additionally, networks use the score boxes to show how well multiple drivers in a “team” are doing (a car owner, such as Joe Gibbs, owns multiple cars, called a team, and the box will show how both his drivers are doing in relation to other multiple car owners and their teams). The score boxes are finally used to demonstrate how a driver’s performance is affecting his chase for the NASCAR championship, an award given for top performance throughout the year based on the sanctioning body’s points system, and the score box shows how the rookies are performing in their chase for the “rookie of the year” honor. Indeed, NASCAR has taken the score box to new levels with a bevy of statistical information, and it seems that every year there is more information to learn about during a race through the eyes of the score box.

The score box has obviously become a ubiquitous feature in the NASCAR race. The televised Daytona 500 in 2000 contained a score box for almost every minute of the coverage of the race (Ewert, 2000). The technology clearly has found a home with automobile racing, and the uses of the score box have been increasing since their inception by Fox for the Super Bowl. The score box is important for the purposes of this
study because it demonstrates how rapidly communications technology can become necessary to the total experience. Before the development of the score box, sports fans got their information from the sports announcers. Now the fans can get the information for themselves, for whatever driver or situation they are following, without relying on the announcers. The score box has thus empowered the sports fan to create his or her total experience. Since the total experience indeed involves as close a resemblance as possible to a fan watching the race up close or in person, the more information available to the fan, the better the realization of the total experience.

Also important to note is that the score box originally began in football but has seeped into baseball, hockey, basketball, racing, and every other televised sport, including golf. When a communication technology has hit a “hot button,” or a technology is believed to be able to enhance another sport, there is frequent stealing. Since any television network obviously wants to keep its audience, the desire always remains to stay on top of communication technologies to increase the likelihood of the total experience and thereby enhance fan satisfaction.

In addition to the score box, which motorsports borrowed from football, NASCAR has also created some statistical graphics of its own to enhance the broadcasts. The most noticeable of these is the “diagnostics box.” This box demonstrates a particular driver’s speed in miles per hour (mph) and the revolutions per minute (rpm) of the driver’s engine. Since NASCAR cars exceed most cars’ performance on the race track, it is a curious spectacle to see just how fast and hard a NASCAR car can travel. The CBS broadcast of the 2000 Daytona 500 contained a rectangular box, often visible on the television screen simultaneously with the score box, that demonstrated mph readings of 185-195 miles per hour and rpm readings of over 6500 revolutions per minute (Ewert, 2000). Undoubtedly these statistics have been available since the advent of automobiles themselves, but it has been only since the score box made constant on-screen statistics
"normal" that the diagnostics box made its first appearance. Since the inception of the score box, it seems that producers have been looking for all kinds of information to share with the audience. Diagnostics boxes are now a standard feature of all NASCAR broadcasts, and play a critical role in the total experience for fans during a super speedway (a track that is usually more than one mile in length) race, where both the mph and rpm usually climb to extraordinarily high levels on the backstretch or long straightaways of such a track.

Yet another box that NASCAR broadcasts have utilized increasingly in recent years is the "brake box." This box measures the amount of pressure placed on the brake pedal as a driver moves into a turn, and in turn the box also measures the loss in mph as a result of the application of the brake. Often the box reflects a bar graph that demonstrates the inverse relationship between the brake pedal and the speed of the car, and the box is usually accompanied by a change in camera angle. While the brake pedal is being depressed, the television image usually displays one of two images: a picture of the driver from his point-of-view entering the turn in which he is braking, or a view of the brake pads on the wheels of the car, getting red hot with the application of brake pressure. The box, then, serves as a further implication of the total experience when it is shown in conjunction with a television image, as sports fans get an even better understanding of the workings of each car than they would as fans at the track during a race.

Undoubtedly, the amount of brake pressure that a driver would apply during a turn is a statistic that has been available to the media since NASCAR began, but the brake box, too, has been a development since the score box’s appearance. The brake box adds particularly to the total experience during a short track (less than a mile in length) race. In fact, during the two races at Bristol Motor Speedway in Bristol, Tennessee, cars travel in what are essentially two U-turns with a small straightaway meeting on either side. The strict oval shape does not allow cars to reach more than about eighty miles per
hour and frequently requires them to apply their brakes. The brake box during these two races becomes an integral part of the total experience.

NASCAR's influence in the use of statistics has been demonstrated outside the sport. Turner Broadcasting, responsible for the broadcasting of many varying sports, has recently instituted the use of the "SporTVision AIRf/x," a technological device that, "measures the vertical leaps of basketball players and graphically displays them during replays" (Marchand, 1998). Baseball has been able to find new uses for graphs in its broadcasts as well. Recently Fox Sports introduced the "Catcher Cam," which is essentially a point-of-view camera placed in the catcher's mask (Davis, 1997). The Catcher Cam not only shows the baseball pitch from the camera angle revealing the catcher's viewpoint, but the camera is able to indicate the speed and trajectory of the pitch (Davis, 1997). The information is graphically displayed in the same television image as the ball traveling toward the catcher.

Even tennis has entered the foray of enhanced graphics. Dickson (1998) reports that a company called TextLucent Technologies developed a graph program that recorded real-time movements of a tennis player and then graphically displayed the movements in relation to the play of the tennis match. For example, the graph displays how often a tennis player has hit to a certain area of the tennis court, or the preferred area of the court that a tennis player may prefer to stand in (Dickson, 1998). Additionally, the graphics program can record a player's speed in moving about the court, so that if an announcer were to accuse a player of fatigue, the graphics program can immediately graph the speed of the player throughout the match (Dickson, 1998). Thus, the sports fan at home knows more than ever before about the tennis match she or he is observing. Consequently, the advancements in graphics during sports broadcasts have increased the ability for the total experience. Such innovations have truly been able to enhance the ability of the sports fan at home to have as much information, and in some cases more information, than the fan
at the actual sporting event, as the graphics capabilities listed above become important components of the total experience.

NASCAR has been able to use additional graphics that can be seen when occasion arises during a race. For example, prior to the 2000 Daytona 500, CBS took NASCAR fans watching at home on a “virtual lap” around the race track, demonstrating from the driver’s point-of-view where the turns are located, how the banking on the track changes throughout the lap, and how fast the drivers will be able to travel around the track (Ewert, 2000). This graphic is an enhancement for the benefit of the total experience that a sports fan at home can enjoy beyond what the sports fan at the track can enjoy. Thus, the ability to achieve the total experience, in the case of the virtual tour of the Daytona track, is greater for the fan at home.

What is the lesson to be learned from the recent onslaught of graphics and virtual reality simulations that have invaded NASCAR broadcasts? I suggest that television stations, in an increasing desire to make its audiences happy, have developed more and more ways to provide a wealth of information to the audiences. TV executives certainly assume that home viewers would rather be at the actual sporting event than watching the event on television. After all, sporting events typically survive not only on advertising and television but also on the interest of people to see the event in person and purchase tickets. Thus, the TV network would like to make the viewing experience as real as possible. The total experience is what home viewers want, and so a barrage of statistics and graphs will provide a bevy of rich information for the home viewer. More and more information means that the audiences are learning the intricacies of their sport not only while at the track, but also at home. Thus, the home viewer can enjoy a closer and closer semblance of the total experience without buying a ticket to the event.
The Internet as Alternative News Source

It is now common knowledge that the Internet is becoming a vast resource of information beyond current media. The Internet is able to provide specialized information to people in almost any subject they inquire about. Current information-providing media, such as television, radio, and newspapers, choose which information is deemed important, without interaction or feedback from the audience. On the Internet, however, a person may query a search engine or look up a Web site and find out exact information regarding a particular subject anytime. While the information placed on the Internet is filtered by the individual placing that information on the Web, the content of the Internet is so vast that a person can often find a considerable amount of information beyond what TV, radio, or newspapers can usually provide. Thus, the alternative sports fan that cannot find the information she or he is craving in mainstream media outlets but wants the total experience can explore the Internet for the answer.

The Internet has become a vast source for all varieties of news. Naturally, there is plenty of information for alternative sports aficionados. Traditional news Web sites, which are usually derivatives of newspapers or television networks, tend to provide more information than what is able to fit in the daily paper or the thirty minute TV broadcast. CNN has its own Web site, as do all the major networks. Other media, such as newspapers and periodicals like Sports Illustrated and Sporting News magazines, also have Web sites that enable the sports fan to investigate all kinds of sports news. Thus, the alternative sports fan can often find more information about his or her sport through the Internet.

The Internet attracts sports aficionados, black and white, male and female. American Demographics magazine's Jennifer Lach (1999) reports that women are turning to the Internet for sports information in dramatic numbers. Lach (1999) states that women accessing sports Internet sites are of similar demographics to males.
Interestingly, 42 percent of all females visiting sports sites live in the South; the fewest, 13 percent, reside in the Northeast (Lach, 1999). Of those women who access sports, almost twenty percent choose “nascar.com” as their Web site of choice (Lach, 1999), which is second only to the NFL in women’s preferred sports Internet sites.

Additionally, the Internet has been able to provide more specialized information than any media outlet has been able to provide. One of those areas is in direct news dissemination from a sports organization, sports team, or stadium. NASCAR has a Web site, and every track on the NASCAR circuit also has a Web site. When NASCAR visits the Las Vegas Motor Speedway, for example, the NASCAR fan can access NASCAR’s assessment of the upcoming race and the speedway’s assessment as well. The NASCAR fan can use the information to enhance whatever has been reported during TV news or in the newspaper, and can become more educated than ever before. The benefit of such information creates a further step closer to the total experience, as the person has almost as much information as someone who works at a speedway or is part of the NASCAR staff.

Since the Internet personalizes the information gathering process for a person, it creates an ability for a person to become even more knowledgeable of specialized news than ever before. Now, most NASCAR drivers have their own Web sites. Fans can receive current information about a particular driver on the Internet, which is important considering that most media choose only the most popular or local drivers to discuss. NASCAR fans can also find out about special appearances that drivers might make or about the personal habits or even family life of their favorite drivers on the Internet. The personalized information that a fan can receive can go even further, as often there are “chats” that a fan can have with a driver who decides to have an interactive discussion on the Internet. Through an interactive discussion, the NASCAR fan can receive the most personal information available from a driver and eliminate the filter of the media.
representative. In a sense, then, the sports fan becomes the interviewer and is able to pick and choose what information he or she wants to learn.

The Internet can also become a surrogate radio or television. While NASCAR has become mainstream enough to have all of its races broadcast, there is no guarantee that all the races will be shown on network television, or that a particular television market will not pre-empt the race coverage with some other program. The Internet has enabled the NASCAR fan to “watch” the race. NASCAR’s web site, nascar.com, enables fans to watch real-time lap statistics. While the Web site does not show video footage of the race, NASCAR does show a graphic representation of the race track, with moving objects that represent cars moving around the track, showing lap leaders, speed, and caution information. Thus, the NASCAR fan may become detached from television coverage of a race, but she or he is still able to receive real-time, active information about a race. Although the inability to watch the cars move about the race track might inhibit the total experience of the NASCAR fan, the Internet has made it possible to still enjoy a race no matter what the television capabilities might be where she or he lives.

Additionally, the total experience can be enhanced if a race fan chooses to use the Internet in conjunction with television; the statistical information constantly available on the Internet may complement the televised coverage.

Speculation exists about the way the Internet has transformed, or may continue to transform, the media experience surrounding live events. Burton (1999) firmly believes that the Internet will cause TV viewership to decline. He reports that Nielson Media Research, the firm that analyzes television viewership numbers and in turn helps to set advertising rates for networks, has a survey that shows an inverse co-relation between Internet use and television use. Burton (1999) continues to argue that television, especially televised sports, caused the demise of radio, and in turn the Internet, with “the richness of what the computer offers (flexibility, interactivity) and not the simplicity of
live or taped video” (p. 66) will cause the demise of TV. Thus, he thinks that sports fans will turn to the Internet instead of television because fans can personalize their experience. Burton (1999) further adds that TV ratings overall have slipped in the past few years, “due in part to cable proliferation and the introduction of more than 2 million web sites” (p. 67). TV executives, Burton (1999) warns, will not be able to compete with the Internet because they are too busy sustaining the cat-walk-like dance of keeping advertising revenues, and thus viewers, while embracing whatever technology they can as well as fending off battles from other networks. The Internet and its interactivity, and thus personalization possibilities, are more favorable than TV’s filtered, pre-edited material.

The Internet could also in theory, however, become a full interactive supplement to sports television. TV has the visual capabilities to provide real-time graphically complex images while the Internet struggles through cable, digital and phone lines to provide the strongest images it can, still not competitive with television’s abilities. However, the Internet certainly will be able to match TV as technology increases and there is reason to believe that the Internet will produce TV-like images consistently as well as live televised sporting events. However, there are people who use the radio for its expert announcing during sporting events while watching TV, so it is reasonable to suspect that there will be people who use the Internet for specific statistics that may not be a part of the graphics or statistics that a television broadcast uses. Web-TV technology has used this approach, the idea that the Internet will enhance, not take over, the television. While Web-TV sales have not been as dramatic as the actual rise of the Internet, perhaps increased exposure to real-time information about sporting events while watching TV will cause more interest in the capabilities of both media working together.
Discussion

The use of statistics and graphics in NASCAR has impacted the media experience of the sport. The Internet has also had a fundamental effect on the way information about a race is transmitted to the audience. Those fans choosing to become more knowledgeable or learn in-depth information about a race can do so, and fans may also personalize their information gathering. The total experience becomes personal for each individual as each person chooses what aspects of the race she or he would like to learn. While cable TV has allowed for more races to be shown and for the fan base to grow, statistics and the Internet have allowed the total experience to be an individual ideal, with each person deciding which information to seek.
NOTES

1. Banking is the degree of tilt in a track's turns. The banking usually rises in the turns on a racetrack because at the speed the drivers are traveling, a strong tilt in the turns cuts down on spin outs and harsh braking. Super speedways usually have a greater degree of banking because of the higher speeds the drivers reach on the straightaways before entering the turns. Talladega Superspeedway in Alabama, the longest track on the NASCAR circuit, has banking around 33 degrees.

2. Currently NASCAR holds its broadcasting rights with the television network that broadcasts the race. Probably because of advertising and revenue reasons, an actual televised NASCAR race will never make it to the Internet. If advertising dollars are able to move to the Internet with video broadcasts of races, the situation may change.
CHAPTER 4

CAMERAS, CAMERAS EVERYWHERE

Televised sporting events are constantly moving, evolving, and changing with the action of the game. Often the activity of a sporting event is so fast, a single camera has a difficult time catching every move. Thus, for the past few decades TV networks have introduced multiple cameras and more recently, point-of-view, or POV, cameras. The "reverse-angle" camera was introduced by CBS in 1981 (Mullen & Mazzocco, 1999) for use during football games, and it is now common to have far more than two cameras capturing coverage of a sporting event. POV cameras, or cameras that are placed in alternative places other than the main viewing areas for the linear movement of a NASCAR race, have become almost as common, as it is important to "have the fan at home experience what the fan at the stadium is seeing" (Dickson, 1998). These days, however, the fan at home sees far more than the fan at the stadium, especially with NASCAR races.

Multiple cameras are an essential part of the televised NASCAR race. It is exciting to be close to the action of cars whizzing around a track in excess of 100 miles per hour mere inches from a retaining wall and other cars. NASCAR relies heavily on camera technology for its races; it is difficult to capture the action of a typical race, on a track more than a mile in length, with 43 cars racing around it, with only one camera. Therefore, there are usually at least four cameras stationed around the track so that every turn and the straightaways of a race can be covered. However, today the networks don't stop there. POV cameras have infiltrated almost every corner of NASCAR. There are cameras at track level that capture the cars whizzing by a particular spot of the track, such
as the starting line. There are moving cameras located in the infield that can follow the
cars for a short distance as they travel down the backstretch. There are even cameras that
sit on the pavement of the track to watch the “marbles” of rubber that rip off of tires from
the cars as they race.

**Mobile Point-of-View Cameras**

Most exciting, perhaps, in the development of POV cameras for NASCAR races,
however, are those cameras that are attached to moving objects, most notably the cars
themselves. In recent years networks have decided that there is almost no place that a
POV camera cannot enhance NASCAR race footage. POV cameras present in a driver’s
car are positioned usually in the front window or rear window of the car. Thus, the
viewer can watch from the driver’s perspective what the action on the track looks like,
both from the front and as though they were looking in the rearview mirror. Also on the
car there are POV cameras on the side of the car, looking toward a driver that might be
passing or riding next to another car, and another camera inside the car watching the
driver as he grips the steering wheel or shifts the car. POV cameras have also been
installed underneath the car to monitor the redness of the brakes as they become hot from
use, and POV cameras additionally are installed on the rear bumpers of cars to watch
drafting and bumping from other cars. POV cameras, it seems, have become as
important to the NASCAR race as the cameras that are positioned around the track.

POV cameras have also been installed in more unusual spots. An important part
of the NASCAR race is the pit stop. During a pit stop, the lead in the race, and often a
particular car’s spot in the race, is contested. Thus, NASCAR teams and fans pay close
attention to pit stops. TV has highlighted the NASCAR pit stop in many ways, mostly
through the use of POV cameras. ESPN installed a “pit crew” camera on a member of a
pit crew to catch the fast-paced, hectic pit stops during NASCAR races. The camera was
pinned to the stomach area of the crew member's uniform and jittered and jumped as the crew member raced around the car being serviced. Another POV camera was placed on the pit wall to watch a particular car coming in from the angle of someone who might be sitting on the wall. This camera usually shows the pit crew jumping the wall and frantically grabbing gas cans and mechanical jacks to assist the car's service. Another camera has been installed on the gas can lid as it is inserted into the car during a pit stop. The NASCAR fan can see the activity of the pit stop in far better views than the fan in the stands.

Another aspect of the pit stop is timing. Pit stops that involve the changing of four tires, filling the car with two cans worth of gas, and washing the windows of the car usually take less than twenty seconds. Often, the pit stops take 16 to 17 seconds. TV networks have chosen to watch the pit stops as they happen in still another way. Since the pit stops of the leaders of the race are often at the same time, TV networks have chosen to use a split screen to cover the action. The screen shows three panels that monitor the pit stops of the top three race leaders simultaneously. In the corner of the three screens, there is a display that shows seconds and tenths of seconds go by with each driver's pit stop. Then, the cars are viewed as they drive away toward the track, with a follow-up report showing how the drivers fared during their pit stops. Often there is some sort of shake up within the leaders, and the commentators will use instant replay to show why a particular driver's pit stop could have been better.

POV cameras are not only used in NASCAR. In fact, POV cameras have become popular with many alternatives to mainstream sports. The Winter X Games, which are "alternative" winter sports such as snowboarding, mogul skiing, shovel racing, ice climbing, and snow biking, have been televised in recent years by ESPN. These sports have become prime targets for POV cameras because of the action involved in them. Take, for example, the snowboarder who jumps 40-foot lifts while twisting and turning in
the air. Dickson (1997) states from an interview with Jed Drake, ESPN vice president of remote production, that with POV cameras, “when we decide we want to give viewers a snowboarder’s perspective, we take them flying off a jump... we can see the entire mountain [with these cameras]” (p. 78). Other camera technologies are discussed further by Dickson (1997):

The cable network also used a 90-foot Akela crane with a robotic super slo-mo camera to shoot the snowboarding ‘Big Air’ event, snow mountain bike racing, super-modified shovel racing, and a Jimmy Jib with a robotic camera to cover ice climbing. For beauty shots, ESPN used its Valley Cam, a mountaintop camera with a long Sony lens. Another unique camera application was the Chase-Cam, a camera-stabilizing contraption that allowed expert skiers to serve as camera operators for the snowboarding event (p. 79).

It is easy to see how ESPN has allowed for the total experience with each of these POV camera innovations, as even the scenery is considered important by the use of the mountaintop camera. While blimps have often been used in recent years to capture scenery shots, including during NASCAR races, ESPN has chosen to use its own POV cameras to capture the feeling of being there. Feeling like the fan is there is the most important aspect of enjoying the total experience, so obviously scenery cameras play an important role in the televised sport.

ESPN has been involved in the summer version of the X Games as well, and POV camera technology has followed. For a snow-boarding-style event, ESPN even constructed a “100-foot-high by 300-foot-long ramp on the San Diego beach and covered it with snow made from liquid nitrogen” (Suydam, 1997) in order to achieve a realistic effect for the audience at home. For the X-Venture event, which is similar to a triathlon except that the event is carried out for five days, teams carried an ESPN created GPS-
style satellite tracking system, which included POV cameras to show each team's progress (Suydam, 1997). POV cameras have even been placed on street lugers' luge boards, so that viewers at home can see what it is like to travel the same way (Suydam, 1997). This POV camera idea is similar to NASCAR POV cameras that enable fans to see what it is like to travel in race cars while moving. In fact, the X Games demonstrate many of the same POV camera innovations that NASCAR has also used to increase the total experience for its fans.

The use of POV camera technology is significant for the main reason that sports fans want the total experience, and POV cameras take fans closer than ever before to what the actual experience is. Much like the "catcher-cam" that enables a baseball fan to see what life is like as a baseball catcher (Davis, 1997), these other POV cameras give the sports fan a completely unique perspective to a sporting event to what a person sitting in the stands experiences. Arguably, the fans sitting at home get a more personal, behind-the-scenes and thorough representation of the sporting event than those people who are watching the event at the sports facility.

Another development in POV cameras, perhaps still a few years away from its inception by the networks, is virtual reality of a sporting event in 3-D. Kanade created a system that allows a field of play to be entered into a computer, then adds moving objects like players, balls or cars to the computer (Economist, 1997). A person presumably watching TV or on the Internet can call up a particular view they would like to see, and the computer will process and display the POV image as it happens in real-time. While this technology is expensive, it would allow a total experience beyond any that is currently possible for a fan at home. Today, the computer requires five days to process a ten-second POV image (Economist, 1997). In the future, however, interactive POV cameras may allow a sports fan to not only pick a particular point-of-view, but perhaps be a part of history as it happens, should they see a driver win a race or an accident occur.
POV cameras are part of football games and are also a part of basketball, and with
the catcher-cam, baseball, too. Basketball broadcasts already often have "net-cams"
which capture the point-of-view of the basketball as it goes in the net. Football
sometimes uses POV cameras on goal posts to watch some plays near the goal line or for
field goals. Future developments in POV cameras, based on the evidence from NASCAR
and the X Games, seem likely in the traditional television sports.

Another communication technological innovation that has become obligatory in
recent years is instant replay. NASCAR utilizes instant replay the same way that most
sports, such as football, use it. In fact, football is particularly married to instant replay,
given that officials can make play decisions based on video instant replay. NASCAR
uses instant replay for a variety of reasons. When an accident occurs on the track, instant
replay is able to capture in slow motion what a camera taping cars moving over 100 miles
per hour cannot. Slow motion instant replay can show exactly what happened to cause a
 crash, and the number of cars involved. Additionally, instant replay has been able to
 show, through POV cameras, from many drivers’ perspectives, what has happened during
a crash. NASCAR broadcasters do not place a POV camera in every car; they usually
pick a few cars in the front of the race field, a few in the middle of the race field, and a
few drivers that are positioned near the end of the race field. Thus, when an accident
occurs, there are often several perspectives available for instant replay. Usually, the
network will show several different aspects of a crash to the audience.

The manipulation of time that enables the audience to see an accident also applies
to commercials. If the audience should happen to miss a lead change or a significant pit
stop during a commercial break, a television network will often update the audience later
of the occurrence. Instant replay is also able to capture the action that may have occurred
in one part of the track while the main camera was focused on another part of the track.
NASCAR has embraced instant replay and has used the video technique to supplement
the live action displayed during a race. As Zettl (1990) notes, the reality of the television broadcast becomes a dual reality, as live action and taped action become intertwined.

Instant replay and POV cameras have altered the visual experience that NASCAR fans enjoy during a race broadcast. It is unlikely that it would be possible to go back to the days before such innovations without protests from sports fans. As such technology has increased the ability of fans to enjoy the total experience, the innovations now seem obligatory. It would probably be difficult to convince today's NASCAR fan that before the use of POV cameras and instant replay, the total experience would be possible. Indeed, it is likely that as technology increases, the threshold through which a NASCAR fan enjoys the total experience increases.

Scanner Technology and Approved Eavesdropping

Throughout this project, communication technology has been shown to dramatically increase the total experience enjoyment for sports fans that stay at home. Cable television, statistics, instant replay, POV cameras and the Internet all improve the ways that a NASCAR fan can become a part of the total experience. A logical question, then, would be, "Why bother going to the race?" There are some advantages to attending a race in person. It is impossible to experience the actual exhilaration that a person sitting in the bleachers must feel when the cars fly by going over 100 miles per hour, leaving a tail of wind and tire debris, even tire "marbles," flying into the stands. Also, there is a smell and a sound to a NASCAR race that is impossible to experience from television. The asphalt of the track combines with hot engine grease and oil mix in the air to give a garage-like smell to a track, which mixes with the smell of beer and grilling hot dogs and hamburgers coming from the infield as the folks in recreational vehicles cook up their race meals. The cars roaring around the track also have an almost symphonic melodious tone to NASCAR fans; the sound of a NASCAR race is so loud
some fans choose to bring ear plugs, while others wouldn’t wear ear plugs if they were offered free. There is certainly an aesthetic advantage to the true NASCAR fan that brings a case of beer in a cooler, some sandwiches and a race program and plunks herself on a bleacher for the feeling that television cannot replicate in two dimensions.

Fans that choose to pay tickets to the race also have a technological advantage in the way of radio frequency scanners. Scanners have been a part of NASCAR for many years. Any race attendee, for a small fee, can rent a scanner at a race track, or choose to bring her or his own. While other sports may not accept someone that brings in a scanner and attempts to listen to strategic maneuvers that sports teams might pursue, NASCAR welcomes scanners. The reason that radio frequency scanners are so important in a NASCAR race is simple: the only way a driver and his crew can communicate is through a radio. If a driver is having difficulties with his car, he radios in to his crew to try to pinpoint the problem and attempt to find out what to do to rectify the situation. If a driver finds that his car is responding very well, he will also tell his crew that he doesn’t think the car needs any adjustments. Thus, a fan who listens in to the verbal activity occurring during a race between driver and crew, she or he is just as knowledgeable as the members of the race team as to the chances that a driver has to win a race.

Radio frequency scanners have “become a required companion among racing buffs” (Day, 1995) who are seeking the total experience at the race track. Racing Electronics is a company that provides scanners not only to race fans but to the pit crews and media at races as well (Day, 1995). The company provides frequency directories to fans so that they may find the particular driver they are looking for and can program their scanners accordingly. Fans usually listen to the scanners in headset style, with both hands free for whatever programs or libations they may be enjoying as part of their total experience.
It might seem that drivers and crews would become annoyed with the amount of vital information out there for anyone to listen to, but as Day (1995) remarks, “given the fact that car racing’s revenues are largely driven by fan participation, most crews have learned to live with the intrusion” (p. 61). Additionally, drivers and their crews have even been known to discuss personal business on the air-waves, such as dinner or hotel plans (Day, 1995). Thus, the fan seeking the total experience can almost feel like a crew member her or himself.

Scanner technology has been investigated as a viable option for fans of other sports. Stadiums for football and baseball games also have scanners. In fact, the National Football League has had access to radio frequency scanners for many years that are used by coaching staff. Play changes, comments about the opponent and even personal conversation among coaches are all part of the NFL’s scanners (Day, 1995). However, as Day (1995) notes, “The National Football League is not NASCAR, and it doesn’t like eavesdropping” (p. 62). Thus, it would not seem likely that the NFL would become a partaker in scanner technology for the fans anytime soon, even though NASCAR scanners are the main sources of strategic race planning, as they are in the NFL. NASCAR instigated the use of scanners, and the fans in the stands seem to appreciate the extra information.

A logical step for the television network to take, faced with scanner technology and the advantage that a race fan at the race enjoys, would be to join the fun. To some extent, TV has. Now, NASCAR broadcasts include scanner information as well. Most networks these days employ people whose sole job is to listen to frequency scanners and report important information about racers to the broadcast announcers. Thus, in the middle of the race, it is now common to hear an announcer break in with a “scanner report” from a driver. The announcer will usually relay the comments almost verbatim about the condition of the car, how the driver feels about the chances of winning, and the
pit crew’s ideas for improving the car during a pit stop. In theory the TV audience can enjoy the total experience utilizing a scanner without having to be at the track. Unfortunately, listening to a scanner involves far more than few blurbs about a car. Drivers and their pit crews discuss their cars often during a race; it would be impossible for television to capture everything said on a scanner for the audience.

Additionally, TV announcers choose which drivers they want to talk about. Fans of a particular driver may or may not hear the information they want to about their favorite driver. Announcers will also obviously delete any expletives during a broadcast, and while expletives are not necessarily vital in an understanding of a driver’s radio broadcast, they are still part of the total experience. A sports fan listening at home that has been to a race before knows that pit crew members and even drivers are known to swear on their scanners, so if fans know that TV announcers are censoring expletives, what else might they be censoring? Drivers have been known to also complain about a particular driver on the track. Usually TV announcers, to keep a family atmosphere and one of clean sportsmanship, will not mention any complaints about particular drivers. This, too, undermines the total experience of enjoying the frequency scanner and keeps the television audience from partaking in the advantage that fans at the track currently enjoy.

Scanners have considerable potential in the future as part of the total experience in ways they were not before. For example, it would be possible to put scanner information over the Internet, either in real-time audio or as transcribed by someone listening to the scanner. Each driver could place his frequency on his web site, allowing fans to find him and listen to him during a race over the Internet. Since scanners are at frequencies that only allow the information to be heard within a short distance, people near the track would be the only ones to benefit from actually using a scanner without assistance from the Internet. However, in the future it may also be possible for someone
to “dial in” to a frequency using a telephone or digital fiber optic line and listen in to a driver. Since drivers are clearly not in a hurry to expand their frequencies for other people further away from the track to hear their race discussions, the areas of improvement in scanner listenership lie within the technologies listed above.

Scanners may also become marketing tools. In the future it could be possible for advertisers to use the airwaves with audio commercials that would cut in to all NASCAR frequencies during a race. It could be possible to provide advertising messages before or after a race or during red flag times, when the cars are stopped, to subsidize the cost of the scanners. The commercials would not disturb the driver or crew but would be something only those who have track-rented scanners can hear. With advertising revenue, the proliferation of scanners could increase in tracks and even speed up the process of adding scanner information to the Internet. Since NASCAR has obviously embraced advertiser influence in the past, most noticeably with the cars themselves, advertiser-enhanced scanners may very well come to fruition.

Discussion

Point-of-view cameras, instant replay, video technology and radio frequency scanners are communication technologies that have impacted NASCAR broadcasts dramatically. In fact, NASCAR broadcasts have transformed tremendously with these technologies and have increased the ability for fans to enjoy the total experience. Although POV cameras have been a fairly recent innovation, in a short time they have increased the field of vision for a fan far more than multiple or reverse angle cameras could ever hope to achieve. Additionally, POV cameras have enabled the sports fan at home to enjoy a different, and often more in-depth total experience, than a sports fan in the stands.
Instant replay and videotape technology has impacted the information-seeking capabilities of a network. Fans can learn almost every detail of a car accident from beginning to end with the assistance of these technologies. Fans in the stadium are often left without a clear understanding of who may have started an accident or even a clear concept of what happened because they cannot watch the act in slow motion over and over. In fact, although a fan in the stands has the experience of actually viewing the crash live, a fan at home can view the crash over and over again, and learns far more information about the crash.

Radio frequency scanners, however, are one of the last vestiges of the total experience that a fan in the stands enjoys over the fan at home. Scanners allow for the dissemination of driver and crew information so intimately that a fan can know more than even the race announcers about the race from a driver's point-of-view. Fans who choose to use radio frequency scanners increase their ability to be a part of the total experience, as they are likely never to get such detailed information from the announcers during a race.

The above technologies all contribute to the total experience of a NASCAR race, and it is doubtful that the technologies will cease to exist, now that race fans have had a taste of what it feels like to be that much closer to the total experience.
CHAPTER 5

IMPLICATIONS AND THOUGHTS ABOUT COMMUNICATION TECHNOLOGY, THE TOTAL EXPERIENCE, AND NASCAR

This project has demonstrated various ways in which communication technology has dramatically changed the NASCAR broadcast and caused the sport to move from alternative to mainstream in the competitive television sports market. Throughout this project I have noted several communication technologies and their impact on the sport of NASCAR. There is a common theme that ties all of the technologies together – uses and gratifications theory. However, there are other assertions to be made from the information presented in the previous chapters, and this chapter will tie together the themes of the other chapters as well as offer limitations and future directions that this project can take.

The uses and gratifications theory, as presented by Katz, et. al. (1974) was a good indicator, I believe, of the many communication technologies that have influenced the broadcast of NASCAR races recently. NASCAR race viewership has risen tremendously over the last decade as evidenced by the statistics presented in Chapter One, not only because of the wider visibility of the sport through cable television and the Internet, but because these media have also used new, unusual, state-of-the-art technology. With the assumption that a sport’s fan wants to be as close to the action as possible, uses and gratifications theory can demonstrate how millions can turn to a NASCAR broadcast and be satisfied. I have found through interviews with several NASCAR fans that the technology involved in the race broadcasts is at least one impetus to watch the race when they can’t be there in person.
There is a natural assumption that any NASCAR fan wants to feel as though he or she is at the track, and he or she wants to feel all the “senses” of a race, such as the immense speed of the cars, the closeness of the cars as they barrel down the straightaway, and close-up views of the crashes. Throughout this project I chose to entitle these desires “the total experience,” therefore, with this assumption as a “gratification,” various communication technologies that have enabled NASCAR fans to come very close to realizing their goal of feeling as though they are physically present at a race are the “uses.” The theory generated by Katz, et. al. (1974) has shown that when people seek a particular gratification, they use something, namely a communication device, to appease their desires. The theory is particularly useful when determining communication technology’s role in the rise of NASCAR.

Uses and gratifications theory is not without its shortcomings, and other theories may have been able to explain communication technology’s impact on NASCAR’s popularity. The theory of “trigger” innovations, explained by Jeffres and Atkin (1996), states that people are attracted to technology in general, and will seek out activities that satisfy a natural need to learn about and utilize new technology. The theory also states that given a choice, people will abandon an activity that has not developed new technology and gravitate toward another activity that provides new technology and in turn create newer and newer technology to achieve better results from the same need – to have an ultimate media experience (Jeffres & Atkins, 1996). It is not clear, and it would be difficult to determine, what sport or activity NASCAR has “stolen” an audience from. In fact, it is likely that there are several activities that have suffered due to the rise of NASCAR, and only a complex quantitative analysis would truly be able to pinpoint which activities have lost interest. Since I chose not to analyze what sport or past time NASCAR has taken viewership away from, the theory of trigger innovations would have left the study incomplete.
Uses and gratifications theory, however, has also left some doors open for future research within this particular study. I chose not to administer a survey asking why people have become NASCAR fans, but I could have. With my same hypothesis, the theory that people enjoy the total experience and therefore utilize the communication technology of NASCAR broadcasts, I could have included questions asking the impact of communication technology on their viewing habits. Instead, I chose to believe in a basic principle that a sports fan naturally would want to watch or partake in a sport as much as possible in lieu of being an active participant in the sport itself. Thus, the uses and gratifications theory served the purposes of my study. There is, however, more concrete and verifiable evidence in a quantitative analysis of such a hypothesis, and I believe that a survey would be the next logical step to take in further exploration of my hypothesis.

Uses and gratification theory also fails to identify specific uses and gratifications that are the cause or result of an activity. Although the focus of my study was not to delve into the many gratifications other than “the total experience,” I cannot ignore that there are possibly many other reasons that people have turned to NASCAR in the past few years. Some of these reasons may be so complex that the people themselves will not necessarily know. Researchers such as Kubey (1986) have stated that a fundamental flaw in uses and gratifications theory is the inability to accurately determine the specific gratifications that people receive from the use of media. Since I pre-selected the gratification that I believe people achieve from using NASCAR’s communication technology, I attempted to avoid the pitfall of attempting to derive a gratification from the use of media. However, I must admit that although communication technology has caused a surge in NASCAR’s rise, there are certainly other factors that affect the rise of NASCAR, and although I do not know what all of those reasons might be I acknowledge their existence. The communication discipline would perhaps be serviced by creating a
more thorough theory with which to provide a framework beyond the vague abilities of the uses and gratifications theory.

The implications of communication technology’s involvement in the rise of NASCAR are far-reaching and diverse. First of all, there is no reason to believe that there will not be an increasing presence of communication technology in NASCAR in the future. If the past is any indication, there will continue to be a rapid increase in technology with every passing NASCAR season. There are several improvements or modifications that can be made in the audio portion of the race. For example, there could be audio capabilities that would allow a fan to tune in to a particular car’s radio frequency scanner, either on the Internet or through interactive television. USA Today reported on a study that revealed that 2.5 million adults watch sporting events on television while simultaneously surfing the Internet (“Surfing while watching”, 2000), which is more than double the “dual-media” percentage of any other genre of television programming and the Internet. This trend will likely continue and both media will be used as a complement to the other. Also, a person in the future could tune in to any camera anywhere in the field of cars or on the track to get a personalized view of the race. TV cameras have not yet made it to the bottom of the track, looking up at the cars passing overhead – perhaps that perspective will come to a NASCAR broadcast soon. There also are developments possible with additional interactive use of the Internet during NASCAR races, not only with the personalized items listed previously in this project but also in the ability to view up-to-the-minute video coverage even if there is no television nearby, or to watch the real-time movements of a particular driver during the race through a graphic presentation.

Other sports will certainly use the technology that NASCAR has developed for its races and it is a safe assumption that sports will continue to share technological innovations. Like the X Games and several POV camera angles now present in traditional sports, the wave of communication technology has clearly struck other
televised sports. Even sports like figure skating and the ski long-jump, which are more two dimensional in their presentations, have been using POV cameras and statistical analysis to bring new light to the various aspects of the sport. Televised sports seem to have embraced communication technology and the trend will not likely cease.

The rise of communication technology in NASCAR broadcasts will impact the future of sports programming for decades to come. Thus, this project has value in making aware the drastic changes and updates that have come because of technology. Communication scholars, broadcasters, and students of communication should take note of the fact that technology has fundamentally changed the visual, audio and other sensory aspects of sports broadcasting. Developing enhanced technologies to deal with new innovations such as the Internet, interactive television, enhanced digital audio capabilities, and new cameras will assist broadcasters with remaining an integral part of the broadcasting of NASCAR. Television, especially, will be forced to continually study the activities of the Internet in order to keep its market share of NASCAR, or any sport, as the fan who wants the total experience will likely use any medium necessary to achieve his or her goal. Thus, it will be important for scholars who debate contemporary issues and broadcasters who receive paychecks from broadcasting to note communication technology topics.

There were a few limitations to this project. First, as mentioned before, there was no quantitative study through which to measure the exact definition of “gratification” for each NASCAR fan. Thus, I chose to use the total experience as a collective gratification for every NASCAR fan represented in the rise of the sport and in the broadcasting of the sport. Also, it would be difficult to determine concrete gratifications anyway, as people watch television and use media for many diverse and differing, often concurrent reasons. The basic assumption that all sports fans want to feel as though they are part of the actual sporting event is a safe assumption, I believe, but I cannot verify without doubt that every
sports fan truly watches sports to enjoy the total experience. Thus, I can offer an 
educated hypothesis that most people want to be as close to sports action as possible, but 
I cannot blanket the theory to cover every sports fan.

It was also difficult to find direct scholarly validation for NASCAR’s rise in 
popularity due to communication technology. Although many popular periodicals are 
almost saturated with NASCAR coverage and the reasons that NASCAR has exploded in 
popularity, communication scholars have been slow to notice the sport. Perhaps 
increased publicity and curiosity about the omnipresence of the sport in the press will 
cause pause for thought in the scholarly world. Also, it seems in general that sports are 
only recently being noticed by the critical eye of the communication scholar, and thus 
with passing years it is reasonable to assume that more sports studies will begin to appear 
in communication scholarly publications.

One last limitation to this project is the basic obsolescence of technology soon 
after its introduction. This study can only demonstrate current innovations in NASCAR 
broadcasting that have been not only developed but introduced to the public. This study, 
then, will be short-lived in its technological validity. Hopefully, this study can be used as 
a foundation through which future study regarding developing communication 
technologies can influence NASCAR and other sports.

A Final Note

Sadly, while NASCAR has seemed to open the door for the broadcasting of other 
“alternative” sports and become an increasingly recognized major player in the sports 
broadcasting arena, the sport still cannot shake its stigma of being the choice activity for 
“rednecks” and white men from the South. Demographic analysis in recent years has 
demonstrated that to not be the case, as mentioned earlier in this project, especially in the 
female fan base, which is the largest of any major televised sport. During this research, I
encountered many articles that referred to NASCAR drivers and fans as “bubbas,” “rednecks,” “good ol’ boys,” “Southern fried,” or “backwoods.” A mere glance at some of the titles in the reference section of this paper will show some of these articles. This name calling has been primarily presented in print media, but to use blatant discrimination against NASCAR fans and of the Southern origins of the sport is glaring and inappropriate. It seems that NASCAR’s popularity is demanding notice from some press who feel obligated to share their prejudiced opinions. While some sports celebrities are accused of being insensitive to minorities, such as John Rocker, other sports celebrities, namely NASCAR drivers, are themselves the victims of discrimination from the media. I hope that as communication technology continues to demonstrate the enjoyment of a NASCAR race, these prejudicial media will cease their name calling and realize how hurtful such epithets are to people who enjoy the sport.

NASCAR has managed to become a legitimized, mainstream sport, with the influences of communication technologies. The future will likely show further former alternative sports that will become mainstream media events, thanks in part to the ground breaking media improvements made through NASCAR broadcasts. While new innovations will continue to be developed to forever attempt to achieve the total experience for the NASCAR fan, the media, and new mainstream sports of the future, will continually evolve.


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