



(ATINER)

Special Issue:

(ATINER)

Sports, Economy and Media: Sports 4.0 - The Virtual Reality of Sports
Volume 5, Issue 4, December 2018

Articles

Front Pages

JÖRG FÖRSTER, ANDREAS HEBBEL-SEEGER, THOMAS HORKY & HANS-JÜRGEN SCHULKE

Editorial of the Special Issue

CHRISTOPH IGEL, CARSTEN ULLRICH & MILOS KRAVCIK

Using Artificial Intelligence and the Internet of Things to Enable Context-Dependent Recommendations in the Smart City and Smart Factory

FERNANDO VANNIER BORGES

Always Together: How Football Clubs Want Constant Connections with Fans

ANDREAS HEBBEL-SEEGER & THOMAS HORKY

Drones in Academic Apprenticeship. Regarding to Expectations and Consequences for an Up-To-Date Education in Sports Journalism and Media Management

REBECCA GEBLER-BRANCH

“Blended Conference” as Video Supported Event Format in the Educational Marketing Mix of Sports Organizations

TILL WEWER

Budget Constraints as Link between Sports Economics and E-Sports? An Analysis of the Development of Hamburg’s Total Attendance at Professional Sports and Potential Lessons Learned for E-Sports

J. PETER LEMCKE & INA WEH

“eSport Should be played in School”. The Project “eSchool” by DGS Dialogue Lecture

TIMOTHY ROBEERS & HILDE VAN DEN BULCK

Towards an Understanding of Side-Lining Environmental Sustainability in Formula E: Traditional Values and the Emergence of eSports

JOSÉ LUIS ROJAS TORRIJOS & XAVIER RAMON-VEGAS

Accountable Sports Journalism: Creating a Gateway to Showcase Ethical Codes, Stylebooks, Ombudsmen and Beyond



ATHENS INSTITUTE FOR EDUCATION AND RESEARCH

A World Association of Academics and Researchers

8 Valaoritou Str., Kolonaki, 10671 Athens, Greece.

Tel.: 210-36.34.210 Fax: 210-36.34.209 Email: info@atiner.gr URL: www.atiner.gr

Established in 1995



(ATINER)

(ATINER)

Mission

ATINER is a ***World Non-Profit Association*** of Academics and Researchers based in Athens. ATINER is an independent **Association** with a **Mission** to become a forum where Academics and Researchers from all over the world can meet in Athens, exchange ideas on their research and discuss future developments in their disciplines, **as well as engage with professionals from other fields**. Athens was chosen because of its long history of academic gatherings, which go back thousands of years to *Plato's Academy* and *Aristotle's Lyceum*. Both these historic places are within walking distance from ATINER's downtown offices. Since antiquity, Athens was an open city. In the words of Pericles, *Athens "...is open to the world, we never expel a foreigner from learning or seeing"*. ("Pericles' Funeral Oration", in Thucydides, *The History of the Peloponnesian War*). It is ATINER's **mission** to revive the glory of Ancient Athens by inviting the World Academic Community to the city, to learn from each other in an environment of freedom and respect for other people's opinions and beliefs. After all, the free expression of one's opinion formed the basis for the development of democracy, and Athens was its cradle. As it turned out, the Golden Age of Athens was in fact, the Golden Age of the Western Civilization. *Education* and *(Re)searching* for the 'truth' are the pillars of any free (democratic) society. This is the reason why *Education* and *Research* are the two core words in ATINER's name.

The Athens Journal of Sports

ISSN NUMBER: 2241-7915 - DOI: 10.30958/ajspo

Volume 5, Issue 4, December 2018

Download the entire issue ([PDF](#))

<u>Front Pages</u>	i-viii
<u>Editorial of the Special Issue</u>	251
<i>Jörg Förster, Andreas Hebbel-Seeger, Thomas Horky & Hans-Jürgen Schulke</i>	
<u>Using Artificial Intelligence and the Internet of Things to Enable Context-Dependent Recommendations in the Smart City and Smart Factory</u>	253
<i>Christoph Igel, Carsten Ullrich & Milos Kravcik</i>	
<u>Always Together: How Football Clubs Want Constant Connections with Fans</u>	263
<i>Fernando Vannier Borges</i>	
<u>Drones in Academic Apprenticeship. Regarding to Expectations and Consequences for an Up-To-Date Education in Sports Journalism and Media Management</u>	279
<i>Andreas Hebbel-Seeger & Thomas Horky</i>	
<u>“Blended Conference” as Video Supported Event Format in the Educational Marketing Mix of Sports Organizations</u>	293
<i>Rebecca Gebler-Branch</i>	
<u>Budget Constraints as Link between Sports Economics and E-Sports? An Analysis of the Development of Hamburg’s Total Attendance at Professional Sports and Potential Lessons Learned for E-Sports</u>	311
<i>Till Wewer</i>	
<u>“eSport Should be played in School”. The Project “eSchool” by DGS Dialogue Lecture</u>	323
<i>J. Peter Lemcke & Ina Weh</i>	
<u>Towards an Understanding of Side-Lining Environmental Sustainability in Formula E: Traditional Values and the Emergence of eSports</u>	331
<i>Timothy Robeers & Hilde Van Den Bulck</i>	
<u>Accountable Sports Journalism: Creating a Gateway to Showcase Ethical Codes, Stylebooks, Ombudsmen and Beyond</u>	351
<i>José Luis Rojas Torrijos & Xavier Ramon-Vegas</i>	

Athens Journal of Sports

Editorial and Reviewers' Board

Editors

- **Dr. Gregory T. Papanikos**, Honorary Professor, University of Stirling, UK & President of ATINER.
- **Dr. Maria Konstantaki**, Head, [Sport, Exercise, & Kinesiology Unit](#), ATINER & Senior Lecturer, Buckinghamshire New University, U.K.
- **Dr. Christos Anagnostopoulos**, Associate Professor, Molde University College, Norway & Associate Lecturer, University of Central Lancashire, Cyprus.

Editorial Board

- Dr. Panagiota (Nota) Klentrou, Academic Member, ATINER & Professor and Associate Dean Research and Graduate Studies, Brock University, Canada.
- Dr. Margo Apostolos, Academic Member, ATINER, Associate Professor, USC Kaufman School of Dance, & Co-Director, Cedars-Sinai, USC Gloria Kaufman Dance Medicine Center, University of Southern California, USA.
- Dr. Roberta Newman, Academic Member, ATINER & Master Teacher, Liberal Studies Program, New York University, USA.
- Dr. Samuel Honório, Ph.D. Chairman/President of the Ethics Committee, Piaget Superior Institute, Almada, Portugal.
- Dr. Vassilios Ziakas, Academic Member, ATINER & Associate Professor, University of St Mark & St John, UK.
- Dr. Barry Costas, Senior Lecturer, University of Hertfordshire, UK.
- Dr. Seppo Suominen, Senior Lecturer of Economics, Haaga-Helia University of Applied Sciences, Finland.
- Dr. Ruben Goebel, Academic Member, ATINER & Director of the Sport Science Program, Qatar University, Qatar.
- Dr. Nadim Nassif, Academic Member, ATINER & Assistant Professor, Department of Psychology, Education and Physical Education, Notre-Dame University, Lebanon.

Reviewers' Board

[Click Here](#)

- General Managing Editor of all ATINER's Publications: Ms. Afrodete Papanikou
- ICT Managing Editor of all ATINER's Publications: Mr Kostas Spyropoulos
- Managing Editor of this Journal: Ms Fani Balaska

President's Message

All ATINER's publications including the e-journals are open access without any costs (submission, processing, publishing, open access paid by authors, open access paid by readers etc) and is independent of presentations at any of the many small events (conferences, symposiums, forums, colloquiums, courses, roundtable discussions) organized by ATINER throughout the year. The intellectual property rights of the submitting papers remain with the author. Before you submit, please make sure your paper meets the [basic academic standards](#), which includes proper English. Some articles will be selected from the numerous papers that have been presented at the various annual international academic conferences organized by the different divisions and units of the Athens Institute for Education and Research. The plethora of papers presented every year will enable the editorial board of each journal to select the best, and in so doing produce a top quality academic journal. In addition to papers presented, ATINER will encourage the independent submission of papers to be evaluated for publication.

The current issue is the fourth of the fifth volume of the *Athens Journal of Sports, Special Issue: Sports, Economy and Media: Sports 4.0 - The Virtual Reality of Sports*, published by the Sports Unit of the Athens Institute for Education and Research (ATINER) under the auspices of the Panhellenic Association of Sports Economists and Managers (PASEM).

Gregory T. Papanikos, President
Athens Institute for Education and Research



Athens Institute for Education and Research
*A World Association of Academics and
Researchers*

**19th Annual International Conference on Sports: Economic,
Management, Marketing & Social Aspects, 13-16 May 2019, Athens,
Greece**

The [Sport, Exercise, & Kinesiology Unit](#) of ATINER is organizing its 19th Annual International Conference on Sports: Economic, Management, Marketing & Social Aspects, 13-16 May 2019, Athens, Greece sponsored by the [Athens Journal of Sports](#). The aim of the conference is to bring together academics and researchers of all areas of sports. Please submit a proposal using the form available (<https://www.atiner.gr/2019/FORM-SPO.doc>).

Academic Members Responsible for the Conference

Dr. Gregory T. Papanikos | Dr. Maria Konstantaki | Dr. Chris Sakellariou | Dr. Yorgo Pasadeos | Dr. Sharon Claire Bolton | Dr. Valia Kasimati | Dr. Cleopatra Veloutsou | Dr. Christos Anagnostopoulos

Important Dates

- Abstract Submission: **1 April 2019**
- Acceptance of Abstract: 4 Weeks after Submission
- Submission of Paper: **15 April 2019**

Social and Educational Program

The Social Program Emphasizes the Educational Aspect of the Academic Meetings of Atiner.

- Greek Night Entertainment (This is the official dinner of the conference)
- Athens Sightseeing: Old and New-An Educational Urban Walk
- Social Dinner
- Mycenae Visit
- Exploration of the Aegean Islands
- Ancient Corinth and Cape Sounion

More information can be found here: www.atiner.gr/social-program

Conference Fees

Conference fees vary from 400€ to 2000€

Details can be found at: <http://www.atiner.gr/2019fees>



Athens Institute for Education and Research
*A World Association of Academics and
Researchers*

**15th Annual International Conference on Sport & Exercise
Science**

29-31 July & 1 August 2019, Athens, Greece

The [Sport, Exercise, & Kinesiology Unit](#) of ATINER will hold its **15th Annual International Conference on Sport & Exercise Science, 29-31 July & 1 August 2019, Athens, Greece** sponsored by the [Athens Journal of Sports](#). You may participate as stream leader, presenter of one paper, chair a session or observer. Please submit an abstract (email only) to: atiner@atiner.gr, using the abstract submission form (<https://www.atiner.gr/2019/FORM-FIT.doc>).

Important Dates

- Abstract Submission: **1 April 2018**
- Acceptance of Abstract: 4 Weeks after Submission
- Submission of Paper: **1 July 2019**

Academic Member Responsible for the Conference

Dr. Maria Konstantaki, Academic Member, ATINER & Senior Lecturer,
Buckinghamshire New University, UK.

Social and Educational Program

The Social Program Emphasizes the Educational Aspect of the Academic Meetings of Atiner.

- Greek Night Entertainment (This is the official dinner of the conference)
- Athens Sightseeing: Old and New-An Educational Urban Walk
- Social Dinner
- Mycenae Visit
- Exploration of the Aegean Islands
- Delphi Visit
- Ancient Corinth and Cape Sounion

More information can be found here: <https://www.atiner.gr/social-program>

Conference Fees

Conference fees vary from 400€ to 2000€

Details can be found at: <https://www.atiner.gr/2019fees>

Special Issue on Sports, Economy and Media: Sports 4.0 - The Virtual Reality of Sports

Jörg Förster, Andreas Hebbel-Seeger, Thomas Horky & Hans-Jürgen Schulke

Editorial

The dynamically progressing digitalization – keyword for new communication technologies, complex online portals, fast gathering and exchange of data, the usage of independent algorithms, improved sensors and replacement of physical work through robots – all of this accelerates globally controlled processes in employment, infrastructure, education and spare time. This creates an artificial, virtual world – which is only perceived through screens and audio-visual aids. The human being acts less as a physically deciding person, but rather plans, controls, coordinates and manages anonymously. Igel, Ulrich & Kravcik (Educational Technology Lab, DFKI) are looking on these developments with main focus on Artificial Intelligence and the Internet of Things. They show us how these technologies are used in a smart factory and influence the culture of movement and youth.

Digitalization has arrived in the world of sports as well. Controlled training, observation of referees and the competition itself, transmission technologies and rights, new formats of organizations, sports offers, and traditional organizations are changing dramatically – immense databases are developing and international websites are marking their place in the system. Experts expect a radical change in Sports, possibly resulting in competitions, which can only be attend virtually and viewed over a screen, and sports, which are controlled through individualized computer programs. IOC and FIFA as well as health insurance companies and politics, who deal more explicitly with future scientific research and support, discuss this possibility.

Sport clubs and associations use online technologies and thus become media houses that act independently of traditional media channels. Borges (Lusófona University) discusses reasons and consequences for the relationship between clubs and fans with selected examples.

Wherever sporting events and not least the Olympic Games take place, the communication of these events plays an important role. Sports has always had a strong interdependence with the technological development: On the one hand side, the sports benefits from a media technology, which enlarges the communication range but also transport emotional experiences. On the other hand, because of its structure and demand, sports is an ideally object for media-technological

developments and the promotion of its dissemination. Civilian drones are an example here that opens up new possibilities for staging, communication and training within sports. At the same time sports offer a positively occupied object for communication and marketing for drone companies. Hebbel-Seeger & Horky (Macromedia University) describe in this context how drones become an object of higher education.

Gebler-Branch (Ghostthinker) points out how education and training in sports is changing through the use of media technologies. With focus on the usage of video she shows structural change processes in the organized sport and consequences for teaching and training.

eSports, which would not exist without digital technology and is now not just a high economic factor, but also increasingly and self-confidently competing with the organized sports, represents a special kind of interdependence. While initially the organizational and staging styles of traditional sports have been adapted, Wewer (Nordlicht Management Consultants) figures out, eSports has succeeded in developing innovative communication formats in a much more successful way than the organized sports and thus becoming more and more attractive to sponsors outside the digital business. In addition, Lemcke & Weh (Hamburg Institute for Vocational Education) shows that eSports also penetrates into areas that traditional sports has exclusively claimed so far: the promotion of personal and societal valuable and important competencies; from orientation in space to the ability to act successfully under time and precision pressure, up to communication and team skills.

Interdependencies in eSport and Motorsport's coverage of Formula E are the topic of Robeers (University of Antwerp) while Torrijos & Ramon-Vegas (Sevilla University, Pompeu Fabra University) are taking a closer look on the work of sports journalists on the perspective of accountability.

As part of our annual congress, we have always asked questions about digitalization, not at least because the global organization, communication and marketing of sports and sporting events without digital transformation is fundamentally impossible. The rapid development of immersive (especially VR) technologies as well as the importance of eSports has prompted us to place 2017th conference explicitly under the title "Sports Events 4.0 - The virtual reality of sports". As the selected contributions within this Special Issue of the Athens Journal of Sports will show, this will not serve a niche but will illuminate relevant aspects for the organized sports, sports communication and the event sector in total.

Using Artificial Intelligence and the Internet of Things to Enable Context-Dependent Recommendations in the Smart City and Smart Factory¹

By Christoph Igel^{*}
Carsten Ullrich[†]
Milos Kravcik[‡]

Artificial Intelligence and the ongoing digitization of the physical world through the Internet of Things are two trends that will significantly shape the world of learning and training of tomorrow. In this article, we present background information on Artificial Intelligence, with a focus on education, and the Internet of Things, and present two examples from different domains that illustrate how information collected through sensors is used to understand the context of the user (or learner), and, on that basis, to provide context-dependent recommendations and support. The first example covers exercise culture, youth culture and digitization in the Smart City, while the second example is applicable in the domain of Smart Factories.

Keywords: Adaptivity, Artificial Intelligence, Context, Internet of Things

Introduction

What will tomorrow's world of learning and training look like? In this paper, we present two technological developments that have the potential to significantly change the way how people learn, for work and in private. On the one hand, recent years have shown an impressive progress in Artificial Intelligence (AI), whether it is the advent of self-driving cars or the performance in games such as Go, where Google's Alpha Go Zero has learned to beat the best human players by playing against itself. Can we replicate such successes in education? The second major technological development is the Internet of Things, where sensors and actors "digitize" the physical world, and in this way, make it accessible to and actable upon from the digital world. The article starts by giving an introduction into Artificial Intelligence in Education and then into the Internet of Things. We then present two use cases that illustrate the potential of these technologies. The first example covers Smart Cities and shows how the environment can be used to

^{*}Professor, German Research Center for Artificial Intelligence (DFKI), Educational Technology Lab, Scientific Director, Germany.

[†]Senior Researcher, German Research Center for Artificial Intelligence (DFKI), Educational Technology Lab, Germany.

[‡]German Research Center for Artificial Intelligence (DFKI), Educational Technology Lab, Germany.

¹Parts of this article are also published in (Kravcik, Ullrich, & Igel, 2017).

change behavior. The second example goes into the Smart Factory and describes how to enable and upskill human workers.

Artificial Intelligence in Education

The usage of Artificial Intelligence in Education (AIED) has enabled significant flexibility and adaptivity of learning processes with respect to the individual learner. For instance, Active Math (Melis et al. 2001) is a web-based learning environment for Mathematics that creates on the learners' demand courseware adapted with respect to their knowledge state and learning goals. Similarly, the physic tutor Andes generates problems specifically targeted to the individual learner in order to achieve the best possible learning gain (VanLehn et al. 2005). Despite the wide range of domains and functionalities covered by AIED research, the implemented systems follow the same general design pattern, which is based on three components: a domain model, a learner model, and a pedagogical model. The domain model consists of a semantic representation of the concepts of the area to be taught and their relationships. It also contains the learning objects and metadata that provides additional information about the learning objects and links the learning objects to the concepts occurring in the ontology. The learner model represents the current knowledge state of the learner and is used as a basis for adaptivity and personalization. It updates itself according to the learner's progress. The pedagogical model contains the knowledge how to select, adapt, and sequence learning objects, and how to provide support with respect to the information from the learner model. Together, these three components enable a generation of learning environments that achieves flexibility impossible with standard learning managements systems. AI-based environments can analyze processes, diagnose learning problems and opportunities, and address these by selecting or even generating personalized learning materials (Arnold et al. 2012).

Recently, the application of methods from data analytics and machine learning to education has become highly innovation research fields called Educational Datamining (EDM) and Learning Analytics. They have proved valuable; both from a research perspective as a means to better understand effects of learning environments on learners, as well as by supporting human learning through the automatic detection of and reaction to potentially problematic learning behavior. Models generated through mining data-tracks of learners can detect in real time the learning progress, motivation, meta-cognition of a learner and thus enable appropriate automatic reaction, such as suggesting which content to rehearse or actions to take by the learner, e.g. Baker (2014). For instance, by using datamining methods to determine specific advice given to students, average grades can be improved significantly (Greer et al. 2015). EDM techniques are used to find correlations between learner actions and measurable results such as test scores, retention, etc., but also serve as a basis of cognitive models of mental states such as motivation, perseverance, etc., of the learner.

Even if the potential of EDM has been recognized, existing research is characterized by limitation in scope and time. To a large extent, the used data is

focusing on interactions in virtual learning environments such as learning management systems or limited real-life data from smartphone sensors (GPS, Gyroscope) (Sampson and Zervas 2013), despite the evidence that combining several data sources significantly improves the detection of learning-relevant user characteristics (Baker 2014). Thus, most correlations between the digital and "real" world cannot be detected. Also, in university settings, the analyzed data often encompasses one semester or less, meaning long-term effects cannot be modelled nor detected neither. Yet, this might change with the Internet of Things.

The Internet of Things

The Internet of Things (IoT) is "a global infrastructure for the information society, enabling advanced services by interconnecting (physical and virtual) things based on existing and evolving interoperable information and communication technologies" (Union 2012). IoT can improve authenticity of learning experiences, raising the motivation of participants, which has a crucial impact on the efficiency of the learning process. Better personalization and adaptivity of learning can be informed by the information collected through a rich palette of available sensors, like those for environment analysis, for home automation and manufacturing, as well as bio-sensors. It brings a potential for a new quality of personalized learning experiences, based on a better understanding of the users, their current status (including attention, emotions and affects) as well as their context. It also opens new horizons for design and implementation of novel virtual learning environments. Together with wearable technologies (WT) and augmented reality (AR) they can substantially enhance the usage of human senses in order to learn, to acquire new knowledge and train new skills.

From a technical perspective, IoT consists of objects that are identifiable, able to communicate and to interact (Miorandi et al. 2012). Identifiable means that object have a unique digital identifier – Electronic Product Code (EPC), which is typically broadcast using Radio-Frequency Identification (RFID) technology, a very basic way of communication. Further communication, i.e. sending and receiving data to other objects, is enabled by various wireless technologies, realizing the step from single things to a network of things. The objects are not passive, but use sensors to collect information about their environment, and actors to trigger actions. On top of the hardware, software layers enable applications. IoT middleware provides a common way to access heterogeneous IoT devices and simplifies the development of IoT applications. The technical challenges of IoT are not yet solved and its diverse areas are subject of active research. Nevertheless, IoT technology has matured sufficiently to be commercialized and to be used as enabler for research, including educational one (Kravcik et al. 2017).

Early work on IoT for education focuses mostly on using RFID for recognizing an object and presenting a list of information items or activities for that object (Broll et al. 2009), later extended to include social interaction on objects (Yu et al. 2011). Research on using the full IoT potential for learning is still in an early stage, with previous work sketching challenges and opportunities

and describing architectures (Thomas et al. 2012, Atif et al. 2015). Examples of sensor usage outside of IoT are the built-in sensors of smartphones to support learning of manual tasks (Ando et al. 2014). There, a smartphone is attached to a saw used by students for practicing the technique of sawing. They can inspect their performance in different graphs so that they can improve without the help of a teacher. Also, sensors attached to equipment and tools in industrial environments can be used to support training in stonemasonry (Sivanathan et al. 2017) and also in assembly (Aehnelt and Wegner 2015). There, an assembly trolley is equipped with force sensors, infra-red sensors and inertial measuring devices, which enable the detection of the current performed work step and the display of instructions and notes on a touch display.

In the following, we present two examples that illustrate how information collected through sensors is used to understand the context of the user (or learner), and, on that basis, to provide context-dependent recommendations and support.

Example 1: Exercise Culture, Youth Culture and Digitization in the Smart City

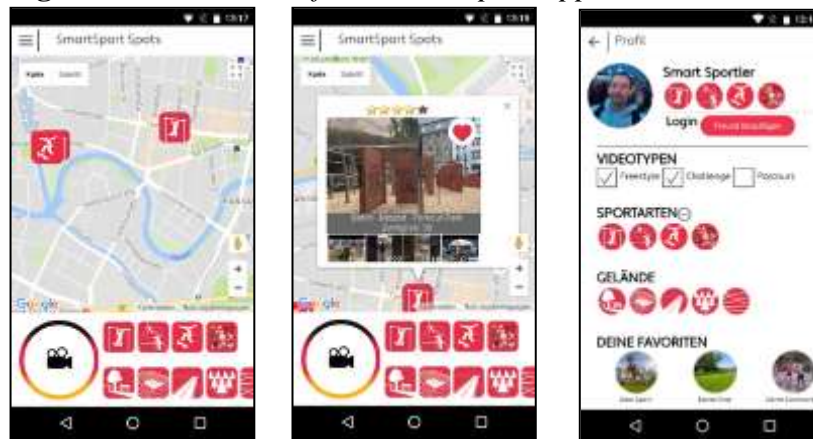
The first example, the Smart Sport project, a joint R&D project with the Deutscher Olympischer Sportbund (German Olympic Sports Confederation), focuses on the Smart City as an educational space for human movement and training, more specifically the exercise culture, youth culture and digitization in urban areas. It aims at stimulating physical exercise in a non-formal setting, i.e., individual and spontaneously with friends, in contrast to the context of a sports club, where more formal sport and competitions are offered, with the help of the Smart Sport app, which uses Artificial Intelligence and sensor technology.

The app supports typical Web 2.0 features and approaches such as community building and sharing of activities within these communities. Young people, the main target audience, can use the app to record, share, and present to others their forms of sport and exercise in public urban spaces. Besides traditional sport, activities include popular sports not yet mainstream, such as parkour, rope skipping or round net (spike ball).

The educational potential focuses on non-formal learning. The app promotes mutual learning in sports through sport videos. Users can upload training materials for others in the form of videos and images, and challenge other players by recording and uploading their performance.

The app uses AI-based technology for adaptivity. It proposes tailored exercise and sports programs in urban and rural areas which take the individual's skills, abilities, interests and goals into account.

Figure 1 contains selected screenshots of the app (version 1.0). The left picture uses a map to display nearby activities that fit the user's profile. The detail view of an activity, i.e. recorded media and ratings, is shown in the middle. The right screenshot shows the profile of the user, namely what media, sports and terrains he prefers.

Figure 1. Screenshots of the Smart Sport App

Source: Authors.

Artificial Intelligence is also used to offer advanced recommendations based on image and video processing and was implemented in version 2.0 of the app. The workflow is shown in Figure 2. Users can take a snapshot of their surroundings or of a specific object, which is analyzed by the app to suggest activities possible depending on the available objects (such as a bank or wall) and terrain type. This functionality is cloud-based: The media recorded by the user is uploaded to an online service for image content analysis (e.g. the Google Cloud Vision), which returns keywords that describe the recorded situation. The Smart Sport server filters the available activities according to the keywords.

Figure 2. AI-Based Object Recognition Workflow.

Source: Authors.

Figure 3 presents an example of the object recognition for the use case of equipment recognition. In the leftmost screenshot, the user takes a photo of the equipment he currently carries (in this case a pair of shoes). Then, the AI-based processing starts (middle) and searches for sports gear in the photo (“Suche Sportgeräte”). Finally, the app returns the list of equipment it did recognize and suggest a list of videos that uses the equipment. This example illustrates that image analysis is still an error prone process, as it returned two results, with one (inline skates) being incorrect. The second returned object (outdoor sport shoes) was correct.

Figure 3. Example of AI-Based Object Recognition

Source: Authors.

A further adaptive feature of the Smart Sports App is enabled by the IoT technology beacons based on ad-hoc Bluetooth technology. Beacons are small-sized transmitter that trigger actions when nearby. Here, beacons are attached to specific locations and e.g. start an application, show a video or a website, trigger an online service in the users' app when they are nearby. They enable a significantly more precise location-based interaction than the GPS data, and thereby enable an interactive exploration of the environment.

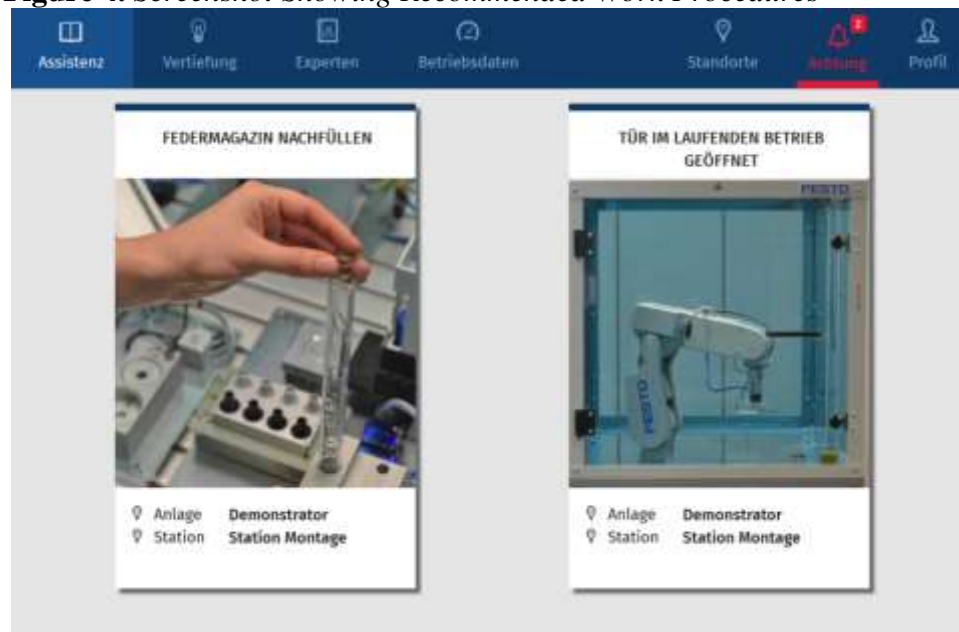
Example 2: Workplace-Integrated Learning in the Smart Factory

To demonstrate intelligent adaptive learning technology that paves the way towards Industry 4.0, we introduce the APPsist system, which represents the first general applicable service-oriented architecture, with company specific specializations (Ullrich et al. 2015). Its smart services include user-centered support of qualification and training of employee, as well as user-adaptive context-based support, exploiting formalized expert knowledge.

APPsist is an example of how data collected from sensors is used for knowledge acquisition and assistance. The goal was to develop a new generation of mobile, context-sensitive and intelligent-adaptive assistance systems for knowledge and action support in smart production. The researchers and developers focused on the skills and competences of the staff and attempts to compensate for any skills that may be lacking with respect to performing tasks at the workplace, i.e. action support. In addition, knowledge-support services facilitate the continuous expansion of staff expertise through the acquisition of knowledge and skills in relation to production, product, and process. Here, the aim was to promote the professional development of the staff so that they can gradually start to perform more demanding tasks and serve as a counterbalance to the demographic change and the shortage of skilled workers. This support includes the setup and operation of a manufacturing unit in the production process, as well as the preventive maintenance, maintenance, and troubleshooting.

The solution offers both assistance and knowledge services for employees. These software components provide specific types of support: assistance services in solving a current problem, while knowledge services support the transfer of knowledge; it means the achievement of individual medium- and long-term development goals (Ullrich, Rules for adaptive learning and assistance on the shop floor, 2016). Such assistance during a particular activity may mean step-by-step instructions or superimposition of information in the field of vision through AR. Contextual recommendations include suitable work activities, but also information relevant in the current context, e.g., from manuals (Figure 4).

Figure 4. Screenshot Showing Recommended Work Procedures



Source: Authors.

The current state of the art is represented by service architectures whose functionality results from the interplay of a large number of services. Each of the services thereby implements a specific, independent functionality and makes these available for other services. The APPsist system is based on a service-oriented architecture that can be applied and connected to an existing machine park. It uses the available sensor data, which serves to monitor and control the production process, to interpret the activities of human operators interacting with the machines and to offer suggestions of what activities to perform. For instance, when APPsist detects a machine state that corresponds to a problem, it checks which maintenance activities can solve the problem and which operators are allowed to perform the maintenance activity. Using a mobile application, it then offers relevant content (instruction manuals, background information) and maintenance procedures to the operators. So APPsist can offer personalized learning and training experiences leading towards acquisition of the target knowledge or skill, recommending appropriate work procedures, but also suitable

learning content. This support takes into account the development goals of the workers as well as their performed work activities.

In the context of using IoT for learning and training in manufacturing it is relevant that APPsist puts machine sensor data into relation with activities of the human operators and uses it to interpret whether the operator's actions were correct or incorrect. Thus, actions performed in the "analogue" world become digitally available, and usable for analysis, interpretation and reaction. With the ongoing digitization of spaces through the IoT technology, the amount of data becoming available for digital processing will further increase. Further research is required to investigate how such data can be used for learning and training, but examples such as APPsist show that this is possible.

Summary

The technology of the Internet of Things to understand the context combined with Artificial Intelligence as a means to encode knowledge about how to use the context, information about the user and about the domain, enables advanced intelligent-adaptive functionalities. Today's research only scratches the surface of what will become possible in the future. The two examples from Smart City and Smart Factory show that already today users can benefit from using context information derived from sensor data. Further research in these areas will profit significantly from the ongoing digitization of further "analogue" environments. This requires improving the state of the art in the following ways:

- Open up longitudinal digital and non-digital data sources: Develop methods to detect, transform, store and make accessible relevant interactions both in the non-digital and in the digital realm spanning over several years, based on mobile device technology and the Internet of Things.
- Big and smart educational data: While today general processing of data in Petabyte range is possible, it is necessary to investigate the specific needs of Big Educational Data. This involves the creation of semantic (smart) data formats to enable re-use of data over and above single studies, the identification of educationally specific data processing functions, and adequate visualizations of analysis results.
- Improve analysis by using deep learning algorithms: In machine learning, the usage of deep learning algorithms has yielded success where other methods failed. In the field of education, deep learning holds a significant potential to detect correlations between learner actions and learning outcomes, for instance the effects and consequences of the learning medium (MOOC, learning nugget) and IT-based tools, or detection of "beneficial" or "harmful" media use.
- For learning purposes it is crucial to provide also clarifications and explanations of machine made decisions and reasoning.

In this article we focused on the technological perspective: the potential that new technologies carry for innovation in education. At least as important as technology is organization and implementation: How is learning and working organized? What new types of learning become possible, e.g., more collaborative, more user-driven? Successful realization of new education has to combine both perspectives.

References

- Aehnel M, Wegner K (2015) Learn but work! Towards self-directed learning at mobile assembly workplaces. In Lindstaedt SN, Ley T, Sack H (Eds), *Proceedings of the 15th International Conference on Knowledge Technologies and Data-driven Business, I-KNOW '15, Graz, Austria, October 21-23, 2015*: 1-17. ACM.
- Ando A, Itagaki S, Takeno H, Torii T, Davis D (2014, 10) Development a Multiple Skill Practice Management and result feedback System for Smart Vocational Learning by using smartphones. *2014 IEEE 3rd Global Conference on Consumer Electronics (GCCE)*. IEEE.
- Arnold KE, Pistilli MD (2012) Course Signals at Purdue: Using Learning Analytics to Increase Student Success. *Proceedings of the 2nd International Conference on Learning Analytics and Knowledge*, 267-270. New York, NY, USA: ACM.
- Atif Y, Mathew SS, Lakas A (2015) Building a smart campus to support ubiquitous learning. *Journal of Ambient Intelligence and Humanized Computing* 6: 223-238.
- Baker RS (2014) Educational Data Mining: An Advance for Intelligent Systems in Education. *IEEE Intelligent Systems* 29: 78-82.
- Broll G, Rukzio E, Paolucci M, Wagner M, Schmidt A, Hussmann H (2009, 11) Perci: Pervasive Service Interaction with the Internet of Things. *IEEE Internet Computing* 13: 74-81.
- Greer JE, Frost S, Banow R, Thompson C, Kuleza S, Wilson K, et al. (2015) The Student Advice Recommender Agent: SARA. In Cristea AI, Masthoff J, Said A, Tintarev N (Eds) *Posters, Demos, Late-breaking Results and Workshop Proceedings of the 23rd Conference on User Modeling, Adaptation, and Personalization (UMAP 2015), Dublin, Ireland, June 29 - July 3, 2015*. 1388. CEUR-WS.org.
- Kravcik M, Ullrich C, Igel C (2017) The Potential of the Internet of Things for Supporting Learning and Training in the Digital Age. In Zlatkin-Troitschanskaia O, Wittum G, Dengel A (Eds) *Positive Learning in the Age of Information (PLATO) - A blessing or a curse?*: 399-412. Wiesbaden: Springer.
- Melis E, Andrès E, Büdenbender J, Frischauf A, Gogvadze G, Libbrecht P, et al. (2001) ActiveMath: A Generic and Adaptive Web-Based Learning Environment. *International Journal of Artificial Intelligence in Education* 12: 385-407.
- Miorandi D, Sicari S, Pellegrini FD, Chlamtac I (2012) Internet of things: Vision, applications and research challenges. *Ad Hoc Networks* 10: 1497-1516.
- Sampson DG, Zervas P (2013) Context-Aware Adaptive and Personalized Mobile Learning Systems. In Sampson DG, Isaias P, Ifenthaler D, Spector JM (Eds) *Ubiquitous and Mobile Learning in the Digital Age*: 3-17. New York: Springer.
- Sivanathan A, McGibbon S, Lim T, Ritchie J, Abdel-Wahab M (2017) A Cyber-Physical Gaming System for Vocational Training. *International Design Engineering Technical Conferences and Computers and Information in Engineering Conference. I. ASME*.

- Thomas AM, Shah H, Moore P, Rayson P, Wilcox AJ, Osman K, et al. (2012, 7) E-Education 3.0: Challenges and Opportunities for the Future of iCampuses. *2012 Sixth International Conference on Complex, Intelligent, and Software Intensive Systems*. IEEE.
- Ullrich C (2016) Rules for adaptive learning and assistance on the shop floor. In Sampson DG, Spector JM, Ifenthaler D, Isaías P (Eds) *Proceedings of 13th International Conference on Cognition and Exploratory Learning in Digital Age* (pp. 261-268). IADIS Press.
- Ullrich C, Aust M, Blach R, Dietrich M, Igel C, Kreggenfeld N, et al. (2015) Assistance- and Knowledge-Services for Smart Production. In Lindstaedt SN, Ley T, Sack H (Eds) *Proceedings of the 15th International Conference on Knowledge Technologies and Data-driven Business* 40: 1-4. Graz: ACM.
- Union IT (2012) *Overview of the Internet of things*. Tech. rep.
- VanLehn K, Lynch C, Schulze KG, Shapiro JA, Shelby R, Taylor L et al. (2005) The Andes Physics Tutoring System: Lessons Learned. *I. J. Artificial Intelligence in Education* 15: 147-204.
- Yu Z, Liang Y, Xu B, Yang Y, Guo B (2011, 10). Towards a Smart Campus with Mobile Social Networking. *2011 International Conference on Internet of Things and 4th International Conference on Cyber, Physical and Social Computing*. IEEE.

Always Together: How Football Clubs Want Constant Connections with Fans

*By Fernando Vannier Borges**

Football clubs represent communities; however, commercialisation and professionalization of the game pushed away these traditional links. At the present, clubs are able to control the flux of communication, employing media consultants, public relations and producing their own content. For the past decades, symbolic elements became important inside organisations: brand building and storytelling tools became key elements for economic success. Thus, sports organisations have to put in place marketing and communication strategies to enhance the fan experience to establish a more perennial connection. Following the digital revolution, direct communication between public and organisations became easier and less expensive. Thus, football clubs invested in their own media and communication channels to reach their fans, in order to enhance their connection. In theoretical terms, we want to frame our research inside mediatisation theory, to understand how media logic is implemented into social institutions. Following the perception that communication and media, especially new digital technologies, are important tools, sports organisations change their structure, becoming more complex, and also their behaviour to match their aspirations. Our field work was done at three different football clubs, Benfica, Botafogo and Paris Saint-Germain, where we use an ethnographical-interview approach to talk to content and media professionals from the club owned media channels. Taking into account the club's viewpoint, we want to discuss the reasons they decided to invest in their own media and communication channels. After our analyses, we identified that football clubs aim to booster the emotional and mediated connection with fans, creating a strong community. Finally, we consider that the media channels owned by the clubs have a phatic function. For the sake of interaction, these channels serve to form and sustain a community of fans.

Keywords: Club owned media, Digitalisation, Fan community, Football clubs, Mediatisation

Introduction

The Sport/Media complex (Wenner 1989) is changing. Many authors have spoken about this symbiotic or parasitic relationship between media and sport (Helland 2007, Rowe 1996). Media – specially TV – have been an essential tool to the growth of sports industry (Boyle and Haynes 2009). Even after digital revolution, Television remains as the main medium for sports (Hutchins and Rowe 2012), due to its capacity to overcome geographical constraints, and broadcast a match all over the planet, maximizing visibility for a sports team.

For the past years, there are three major causes of change on the sports/media landscape: digitalisation; commodification; and globalisation. By digitalisation we

*Junior Researcher, CPES, Lusófona University, Portugal.

mean: the growing importance of digital tools on the work, lowering the entry barriers on the media market and transforming the way people work. Commodification enhances the commercial aspects of sports and media - supporters become customers as much as readers become clients. Revenues and deals become more present over the sports news. Finally, football is the quintessential global sport, labour, viewers and capital are global, with some leagues, competitions, teams and players attracting millions of followers outside their traditional borders (Boyle 2006).

In this paper, we want to go beyond the importance of TV or Media for the Sports Industry, analysing the adoption of a “media logic” (Altheide 2004) inside football clubs. One of the first consequences was connected to the relationship with the press. Due to the promotional nature of the sports press (Lowes 1999), and the consequence for the image of the organization, football clubs employ public relations and other press specialists to invest in this relationship (Montañola et al. 2012). Afterwards, clubs put in place communication and media strategies, so, with time, the professionalization of personnel at football clubs reached media and marketing departments. One ramification of this was that clubs became aware the importance of image and visibility and decided to take a part in this instead of leaving everything to media companies (Boyle and Haynes 2004). So they decide to enter the media market.

Our aim is to analyse in what way and for which reasons football clubs decide to adopt media logic. Based on the research of three clubs – Benfica (Portugal), Botafogo (Brazil), and Paris Saint-Germain (France) – we will analyse the role played by club owned channels to understand how the implementation of media practices are introduced to the routines of football clubs, and why these organisations decided to implement these strategies.

Literature Review: Mediatisation of Football Clubs

Due to the importance of Media to the Sports Industry, Mediatisation (Hjarvard 2008, Hepp 2013) is a significant theoretical framework to study football clubs. Mediatisation is defined “as the influence of media institutions and practices on other fields of social and institutional practice” (Livingstone and Lunt 2014). Mediatisation is about long term structural change on the relationship between media and other social spheres, involving new interactions and social relations, including new patterns of mediated communication. Also, mediatisation depends on the proliferation of the multiple media forms of communication, but what essentially change is the level of access and control over these resources.

Mediatisation is about the interdependency of media, culture and society, being a reciprocal process that affects media as much as other institutions. Furthermore, mediatisation is a process of late modernity, marked by dedifferentiation, specialisation and rationalisation. In this landscape, media plays an important role because it launches institutions into the public sphere where it allows a space of shared experience that enhances the need of differentiation (Hepp 2013).

Frandsen (2015) researched Danish sports federations to evaluate the effects of mediatisation within sports organisations. She highlighted three components on the analysis: perception; structure and behaviour. First, it is perceived that media is an important factor in society. Second, the organisation changes its structure, investing resources – time, money and personnel – to improve its media capacities. Finally, everything converges in actions and media strategies executed by the sports organisation.

The research results on Danish organisations show that despite the importance of media and communication, there are still many amateurs and volunteers on the job; and the more mediatic and more wealthy, more professional the organisations are. She concludes that mediatisation process is not uniform, and the richest organisations are in more advanced stages (Frandsen 2015). So football clubs and American pro sports are in the forefront of the process, since they have more media personnel, scattered through public relations, marketing, communications and media activities.

Historically, boundaries between Media and Sport are very fluid. Firstly, the limits between the sports and media organisations were crossed by media companies who acted as sports promoters (creating competitions and fostering the game) with economic goals being the *Tour de France* an emblematic example. Secondly, sports organisations ventured on the media frontier, creating their own media channels, hiring journalists, and other media personnel, to put in place a more complex media strategic plan.

New economic, technological and cultural circumstances reshaped the relationship between football and TV: free to air television was replaced by cable and satellite services as the primary source for viewers. With consumers open to pay extra for sports content, new economic models, based on subscription, were developed (Boyle and Haynes 2004). Also, digital revolution allowed media companies to invest in ways to interact directly with the audiences, and broadcast rights were sliced into packages target for different platforms.

The digital turn was a big step for the commodification process that was in progress. Football broadcast rights were increasing for years, but digitalisation spiked this growth. In England, between 1992 and 1998, prices went up 126%, in Spain 140%, and in Germany 168% (Boyle and Haynes 2004: 55). Based on evidence found about the English market around the turn of the century, Boyle and Haynes (2004) remarked that these positive outcomes were not guaranteed. During early 2000's, the market was pessimist due to the bankruptcy of some media companies after overpriced broadcast rights purchase, such as ITV Digital and Kirch Media. In general, media companies were finding hard to make a profit after paying so high prices.

Afraid to lose some of their revenue, football clubs started investing in their own intellectual property. First, they decide to exercise more control over their image rights (Boyle and Haynes 2004) and branding. Second, they started to explore broadcasting alternatives, in case of rights sales dropped. Digital technologies allowed clubs to explore new ways to monetize their product. Internet and digital TV increase the spectrum of possible audio-visual services at the same time they lower the barriers to entering the media market for content

producers. Despite elevated production and human resources costs, through digital production, football clubs may integrate vertically their sport, media, and commercial activities. This is possible because new media forms of distribution enable clubs to have more control over their image and brand (Boyle and Haynes 2004).

Manchester United was the first club to launch their TV Channel (MUTV), in 1998, producing content on a daily basis. In an interview on April 2002, the Communication Director spoke about the importance of MUTV for the internationalisation of the club, and maybe, one day, international broadcasting would be done only by MUTV. Peter Kenyon, director of Manchester United, said that the goals of MUTV were: to become more visible; to build relationships and a database; to convert fans into consumers. Other clubs followed Manchester United and created their own channels, despite the different models. MUTV was a pay-tv channel same as Chelsea TV. Arsenal decided for an online-only channel (Boyle and Haynes 2004).

When football clubs create their own TV Channels, they enter the media market. Besides their responsibility to organize sports live events, they also start to explore the sport mediated content, either through match broadcasting or through sports information and content. Uniting match day events and media products, clubs are able to create synergies, increasing their profitability and revenues. However, Television is still the main source of revenue for clubs, and since exclusivity are an important factor for their economic success, most of the broadcast rights continue on traditional media channels (Hutchings and Rowe 2012).

Methodology

This paper is based on the research of Benfica TV, Botafogo TV and PSG TV. We used an ethnographic-interview methodology (Beaud and Weber 2010), as an attempt of understanding the inner parts of the clubs. An ethnographic approach allows for a better opportunity to gain a deeper understanding of the club, to understand its motivations and how the media production is now part of its universe. The choices of those clubs were due to the originality of their media presence. Benfica was the only club in Portugal to have a TV channel and it broadcasted their live matches. Botafogo was praised by specialized media press as a vibrant and creative marketing department. Different than their football rivals, Olympique de Lyon and Marseille, PSG chose to launch a WebTV instead of a pay-tv channel.

At Benfica, a week-long observation period was followed by interviews with seven journalists among the 18 who work at Benfica TV. The period of observation was determined by the Benfica TV direction, but the length of research was defined to cover all aspects of the broadcast, including one Benfica match. At Botafogo and PSG, a period of observation was not allowed, due to the size of the media department, and the negative implications that an outsider presence could bring to the work environment. In order to minimize the lack of

observation, we performed the interviews at their workplace. At Botafogo we spoke with 5 people of a total of 7 staff team. At PSG, we talked to 4 professionals among 6 who work there. The interviews were conducted between December 2013 and July 2014. Also, to enrich the study, the research was complemented with a document analysis such as annual reports and information published in the media – the size of the clubs and its number of supporters is the reason why it appears so often in the news pages, not only figuring in the sports content, but also in the political and business contents.

Findings: Club Owned Media

Football clubs are a very diverse type of organisations. From its Victorian origin, with the global reach of the sports, in each country they might have their own set of rules and they also vary in size, history and business models. The three clubs chosen presents a different model: Benfica is an anonymous society, Botafogo is a not-for-profit organisation with members taking the decisions and Paris Saint-Germain is a limited company owned by a billionaire.

Despite their differences, their approach to communication presents a similar path. As consequence of commodification, clubs went through a rationalisation process, where the non-athletic staff became more professional and specialized (Gasparini 2000). Due to its commercial relevance, football was the starting point for the changes. Marketing departments were created in order to deal with sponsors, and also, a public relations and communications section should deal with the media.

Sports organisations sponsor and the media are responsible to create the sports spectacle. In this scenario, it is understandable that clubs prioritize their relationship with the media and the sponsors. For the media, football is a great content, being able to attract large audiences. For sponsors, football clubs are a very good advertisement platform, due to its visibility and emotional bond with supporters.

The main concern related to the media is to harness “good press”. Despite their ethical and deontological procedures, sports press has a promotional outcome for football clubs (Lowes 1999). So, it is in the interest of clubs to create a good environment for journalists. On one hand, they offer services to facilitate their work routines, with press rooms, food, Wi-Fi and other facilities. On the other hand, clubs try to control the information with press releases and press conferences, minimizing the contact between journalists and athletes.

Part of this control was a consequence of digital revolution. Digitalisation lowered the barriers to enter into the media market, allowing for the multiplication of media outlets and increasing the number journalists covering sports. So clubs had to organise, rationalize and control the access to their facilities and athletes. Also, digitalisation allowed clubs to invest on their own media platforms to communicate directly with the press and the fans.

Among the researched clubs, PSG was the first to create their own TV, in 2007, followed by Benfica in 2008 and Botafogo that have been experimenting

since 2012. PSG.TV is a freemium web-tv channel, where part is free and part is behind a paywall. Benfica TV (or BTV) is a pay-tv channel available for a subscription fee. Botafogo TV is the name given by the club to the use of social media and open platforms, such as Youtube, Facebook, Instagram and Twitter to post videos produced by the club. Based on the interviews, Botafogo TV and PSG.TV had no profitability obligations to reach, while Benfica TV had an important role in Benfica's finances.

Broadcast rights contracts renegotiation are landmarks for the implementation of club owned media. The ability to explore their own image and intellectual property decided by these contracts is essential to produce contents. *Ligue 1* (The French Football League) has a collective agreement, and after 2007, French clubs were allowed to use games highlights, to broadcast games where *Ligue 1* was not offered, and to make available past games on demand.

When Benfica TV was created, they had the rights to broadcast only their amateur and semi-pro sports, such as basketball, hockey, volley and others. But in 2013, after a failed attempt to renew the broadcast deal, Benfica decided to broadcast their home matches on its own TV channel, changing their business model from an open pay-tv channel to a premium pay-tv with a 9.90-euro subscription. Portuguese clubs negotiate individually their broadcast rights, owning all their home matches. So, since 2013/14 season Benfica TV is in charge of broadcasting all Benfica's football encounters at *Estádio da Luz*. They broadcast live games and reprise some matches.

In Brazil, the collective negotiation was replaced by individual agreements. However, this change was unable to provoke actual modifications. TV Globo conglomerate remains the rights holder for every national football competition in their free to air stations and their pay-tv services. Brazilian football clubs have a very fragile financial situation, and they are highly dependent of TV Globo, because the company usually pay in advance the broadcast contract's fee. This unbalanced power, leaves Botafogo in a situation where the club is unable to explore game highlights or broadcast images. Furthermore, Globo pay-tv services agreed with first division Brazilian clubs to produce, in partnership with them, a 30-minute television show about the clubs. In Botafogo's case, they called this program "Botafogo TV".

Constrained by the lack of access to their highlights and games of senior football squad, Botafogo content must adjust to their reality. In this sense, they explore their access and produce behind the scenes videos, with players arriving at the stadium, the locker room talk before or after the games, but this type of content is highly conditioned by results obtained, meaning that in case of defeat there is fewer offers. Also they offer videos and information about youth football and other sports played by the club.

As an online channel, PSG.TV offer videos (an average of 100 per week, in French, English and Spanish) and live streaming. Matches and 10-minute highlights are behind a pay-wall and the other content is free. There are some regular videos – such as match highlights, daily news and a weekly "This is Paris"

show – and some more diverse offer. In general, video content² tends to approach sport through an entertainment lens, putting players in game-type situations, exploring their intimacy and personal tastes, aiming to appeal for young audiences. Usually, PSG live streams some training sessions and press conferences.

Benfica TV programming is structure like traditional television. As a pay-tv channel, they broadcast 24/7, where live events and news are the main content. The most important event is the football match, but they also broadcast hockey, basketball, volleyball, handball and youth football. There are four live daily news (at 10h, 14h, 21h and 24h), documentary and debate shows. BTV cover everything related to the club, not only sports but also the club's social events and fan's associations activities. Their goal is to value the Benfica's image and memory, connecting with fans to reinforce their bond around the club.

Based on our interviews, to be the official media of the club is a very important aspect of the work. To produce content with the organisation's brand means that staff have extra pressure to not make mistakes, because they act as the voice of the club. The zero-margin for errors is the reason why one of Botafogo's media professionals said that he had more responsibility working for the club in comparison with his previous job at a sports newspaper. To be the official channel is the source of credibility for club owned media in contrast with ethical guidelines of traditional press.

As seen in the three organisations, match content and highlights are very relevant for club owned media. Despite the different business models, each club share the same element to create value: senior football squad images. The majority of audience want to see goals, highlights and nice moments, but exclusivity is a key component of broadcast rights fees. Clubs are able to control their training grounds and stadiums – allowing for behind the scenes content – but Television are able to commercialise and target bigger audience than club owned media, so they can pay more than clubs are able to profit.

Club owned media allow clubs to build synergies and verticalize the production in order to maximise profits. With media participation, clubs are able to take part in most of the sports spectacle chain of production, from youth academies to managing the stadium, the sale of merchandise products and content production, covering the team. Club owned media are able to create synergies between the club's departments and to cross-promote club's activities and add value to their most important asset, the match day experience (at the stadium or on TV), increasing ticket sales and marketing opportunities.

For sponsors, club owned media are an extra platform to advertise. Benfica TV has a specific show, where corporate sponsors are invited to showcase their business and talk about their relationship with the club. PSG uses their videos to promote sponsor's activities inside the stadium on matchday. Botafogo creates photo albums and videos highlighting sponsors in the background images. Also, for the three clubs, football sponsors are the main advertisers of their channels.

Like the importance of Television shows, images are very important for sports media. However, club's media activities are not limited to their TV channels.

²PSG TV: <https://www.psg.fr/psg-tv>

Benfica also publish a weekly newspaper and a monthly magazine. PSG.TV team are also in charge to produce magazines and stadium's big screen content. Botafogo also produces for big screens, a matchday magazine and a web radio. Also, the three clubs invest highly on their websites with news and official content.

Clubs are not limited to a variety of media platforms, they also have shown a specialisation in relation to media and communication services. Benfica and Paris Saint-Germain had special teams to work separately with Customer Relationship Management, Social Media, Public Relations and club museums. At Botafogo, the communication team is partially responsible for most of this work, the staff does a little bit of everything, from writing, editing, doing internal and external communications for the club and hosting guests at the visit tour, with the expectation of senior football public relations that is outsourced to a private company. Our research was focused on the content production of club owned media, therefore for both European clubs who have a more specialized division of work, we were unable to access these other sections.

This situation shows that mediatisation and professionalization process of football clubs have different speeds for the clubs. The superior amount of specialized work at Benfica and PSG confirms that they are more developed in management terms than Botafogo. In parallel, this also means that, in Europe, football is more globalised and commodified, thus influencing their relationship with fans and in regards to their communication and media strategies.

The different speed of mediatisation is also reflected on the staff profile and recruitment. Botafogo staffs were hired based on personal connections and senior editors had previous experience as beat reporter of Botafogo football team. Most of Benfica media professionals were young and with little experience in other fields of media work, but after BTV became a premium channel; they hired 4 national well-known journalists to do the broadcasting and to lead the journalistic team. At PSG, every member of the staff speaks more than one language and they all had previous work experience in similar jobs before. Botafogo and PSG had all-male staff, while around one third of content production staff at BTV was composed of women.

With the exception of PSG.TV, all the staff members were also supporters of the club. PSG hiring process seemed to be based more on qualifications and experience skills, thus limiting the talent pool. However, two of the professionals interviewed, said that despite their initial fandom for other clubs, the empathy for PSG grew with time. In general, what we saw was a bond between employee and employer that went beyond usual professionalism. The research showed a group of professionals who were passionate about their jobs, and who saw themselves as part of something bigger. Also, they understood that their work was partially responsible for the success of the club, giving them a double satisfaction: as fans and as workers.

Their affinity and knowledge of the club plays a key role in content production. At Benfica and Botafogo, they understood that it is not possible to work for a club owned media without being supporter of the club. The interviewees saw themselves as part of the audience, because they related with them as fans. In their view, this gives an advantage to get into the psyche of the public to know

what they want and what they feel, thus offering content appropriated to each time of the season.

As virtual means of internationalisation, club owned media might have a strategic role to play. Since Botafogo most important international commodity is the player, the club's efforts focused on youth team tours. Benfica TV is available in nine countries (France, Luxemburg, England, Switzerland, Cape Verde, Angola, Mozambique, USA and Canada) and their partial content is broadcast in partnership with local companies in Belgium and Brazil, in addition to the service of live streaming in dozens of countries spread through all continents. The international strategy is a key aspect for the life of the club because a survey in 2005 showed that there were 14 million Benfica fans in the world, 5 million in Portugal, 500,000 in the rest of Europe and 8.5 million across the rest of the world (Pereira 2013). PSG.TV has an important role in the international strategy for the club. Their website is available in 7 languages (French, English, Portuguese, Spanish, Chinese, Arabic and Indonesian), the play-by-play are available in French, English, and Spanish, as some of the videos. Also, PSG increased their international presence through preseason and mid-season tours, which are highly mediated by the traditional press and by PSG.TV. As a brand, PSG builds its brand in association with the international perception of Paris. Being PSG's hometown, the club wants to borrow the elegant identity to their football team.

Discussion: Connecting with Fans

The recognition as an economic activity justifies the use of Marketing strategies on sports management. Thus, sports organisations put in place new work routines, based on rational and professional procedures, in order to better build the sport spectacle and to connect with their fan base. Taking into consideration the width of Marketing activities, we will focus here on the ones related to Media and Communications.

Due to the connection that Marketing has with client, first of all, we must ponder about the notion of fan base. Football supporters may have different patterns of behaviour and a varied level of identification with a club (Sandvoss 2003, Giulianoti 2002). With the commodification of the game, clubs tend to see them more based on their consumer status (Horne 2006) than their traditional identity. Regardless of this duality, fans must also be seen as television audiences (Rowe 2011), due to the reach of satellite broadcast and the global presence of certain football clubs.

More than compete for the supporter affection, nowadays football clubs must battle for attention. In a busy entertainment market, including different sports options and other type of leisure activities, football clubs must find a way to retain the relation with their fans and consumers. For a die-hard supporter, this connection is not in jeopardy, so organisations invest their resources to attract fans who are in the middle of the spectrum of affection, between the die-hards and those who are disinterested (Rein et al. 2008).

In order to foster this relationship with fans it is vital to build upon the identity and brand of the club. In Marketing, brand equity indicates the brand's value, based on the idea that well-known brands generate more revenue than unknown. In football, brand equity is in the center of the relationship between fans, sponsors and the media: the success of the club means the fans are more satisfied, the media will provide more visibility and the sponsor will profit from the exposure. Also, well-known brands are able to recruit better players and coaches (Guenzi 2007).

As an agonistic activity, there are certain elements that escape the control of the organisation. Victories, defeats, championships play an important role in the capacity to attract fans and revenues for the club, but sometimes they are out of the reach of the club. For sports brands, it is essential to build its brand regardless of the results in the field. Despite its importance for a football team, a club must offer a product independent of victories, allowing every club – on top or at the bottom of the standings – to elaborate a marketing plan. This does not mean that performance is not a key aspect to build a brand, as we see FC Barcelona style as one very important characteristic of its brand.

Athletes, federations and other actors also develop their brands, inside the football industry. Brands may offer a long term message and those clubs that link this with a remarkable experience are able to create a very strong bond with fans (Rein et al. 2008). However, to present a perennial character, a sports brand must remain loyal to its principles and authenticity, because otherwise it may be diluted, opening opportunities to the competition (Desbordes and Richelieu 2011).

Branding has become an important tool for sports organisations. Therefore, for the past years, football clubs have implemented specific strategies to reinforce connection with fans, transforming it in a competitive edge. The importance of this emotional link underlines the need to invest on symbolic elements of sports to link people and institutions. In this sense, the creation of emotions, memories and a vibrant atmosphere is crucial.

As part of the entertainment industry, football is a good example of the Experience Economy (Pine and Gilmour 1998). For the past decades, symbolic elements became important inside organisations: brand building and storytelling tools became key elements for economic success. Thus, sports organisations have to put in place marketing and communication strategies to enhance the fan experience (Desbordes and Richelieu 2011) to establish a more perennial connection. The emphasis on the experience, on brand building and storytelling are strategies of dedifferentiation.

The acceptance of club owned media is related to the changes in journalism and sports media landscape (Boyle 2006, Hutchings and Rowe 2012). As a result of the crisis of traditional media outlets, football clubs occupy a place in the media market to offer exclusive and official information about themselves, communicating directly with the audience. In order to do so, football clubs start to change its structure to echo media companies and to behave according to the media logic.

At the present, it is no longer possible to stay out of the Media. The importance of broadcasting for global markets forces football clubs to have any kind of plan concerning their media presence (Hutchings and Rowe 2012). As late

modernity advances, and also in competitive markets, the need to differentiate grows. Thus, organisations will push different types of mediatisation to achieve its own objectives. For all the many possibilities of big and small clubs, more corporate or more traditional, one thing is certain: there is no success in sports today without a strong presence on the media landscape. Either as revolutionary or more conservative, every sports organisation need a communication strategy and need to be media active.

In general, the power of the media is related to the attention it generates. Hjarvard (2008) states that mediatisation is about the growing influence of public attention in other fields and institutional spaces. Media are social tools to produce attention, but its real asset is the capacity to control how information is represented (either framed or narrated); how relationships are built; and what are goals/effect of any communication process (entertain, inform or persuade).

What we see is the reflection of what Frandsen (2015) stated. Football clubs perceived that media and communications is an important aspect for them, in order to foster relationship with fans, with sponsors, with the media, and to build their brands. So they structure themselves with Communications and Marketing departments, Public Relations staff or even their own TV or Web based channels. In doing so, they start to behave a little bit like a media company and not only as a sport organisation.

Benfica, Botafogo and PSG reinforce this view. Their perception of the importance of media, especially new media, for sports push them into the media landscape. They use their channels to connect directly with their fan base, to provide extra advertisement space for sponsors, and to control and manage the narrative around the club.

Furthermore, these three clubs demonstrate the different speeds in the process of mediatisation. Each one has chosen a different business model suitable to their goals, structure and resources available. Benfica's dominance in Portugal allows the club to profit from a subscription based model, replacing traditional media. Botafogo's poor financial situation and media dependency compels the use of social media platforms and the absence of match highlights. Whereas PSG international squad, including world class talent, provides the room to an international strategy.

Club owned media are strategic tools for a solid marketing and communication plan. First, investing in its own channel is important to manage the content consumption. Sports texts are read in three phases: before, during and after the matches. Media have a key role before and after (with news, game analyses, interviews, etc.) and an accessory role during the game (second screen or Wi-Fi at the stadiums). In general, this type of consumption aggregate value to the live event and it will boost the emotional and mediated connection with fans. Second, club owned media increase the perennial connection with fans, and it is an important factor to build a strong community around your club and brand.

This strategic role is outlined by the lack of profit requirements presented by Botafogo and PSG. The results aimed by the media department are aligned with the overall goals of the institution. Their media channels aim: to increase matchday attendance and season ticket sales; to internationalize the club's brand,

expanding their market and fan base; to grow the visibility of the brand, and through narratives transform this contact into empathy for the club; and to promote club merchandising. Despite Benfica TV's commercial obligations, before the club decided to broadcast their matches, they had the same strategies. BTV profit requirement comes from the need to replace the rights sale for their own production.

Club owned media have a phatic function. These channels serve to form and sustain a community of fans spread over a country or the globe. They identify with a specific club, but this relationship must be nurtured virtually, based on mediated interactions. The media allows for a delocalisation of traditions, where mediated relations replace direct contact, and transform time and space. Thus, local clubs may contact and form a global community with fans who never share the same space, and interact only using media and virtual means.

Based on a content production on demand, it is possible to see a phatic type of journalism. The phatic function concerns the contact between the sender and the receiver, in which certain messages aim to establish, maintain or interrupt the communication between them. The priority is to guarantee the continuity of the connection between every member of the community. Sometimes the relationship with the audience precedes the quality of the messages (Estienne 2007).

The exacerbation of this function is a one of the distinctive traits of a Communication Journalism. According to Brin, Charron and Bonville (2004), the objectives of this type of journalism - to generate attention, to establish and to maintain contact – reinforce the phatic function. In order to reach these goals, every elements of discourse are used to create an illusion of interpersonal communication with the public. The content produced essays to pose as a conversation, and to build an inter-subjectivity relationship.

The same phatic function is seen at club owned media. Relying on the sports aptitude to connect people, the media texts use this power to unite the audience around one entity. It is not just matter of technology or communication techniques, but also ideology. Sports texts have the power to unite audiences into coherent groups, either for a long or short period of time (Rowe 2003). This phatic function can be seen regarding the concern with the public, composed by supporters of the club. It is clear that supporters are already a cohesive group, but the information and content produced serve as a way to unite more people around the club. Club owned media content serves to strengthen the emotional bond, ensuring that the fans remain faithful and invest their time in this club.

This concern with the consumer justifies the recruitment of professionals who are also supporters of the club. In spite of internal variation, as members of the same group, they have a keen understanding of the public's desires. At the same time, it strengthens the sense of community between readers and content producers; hence both sides have the sense of belonging to the same club.

Conclusions

More than match promoters and organizers, sports organisations have become content producer after the creation of club owned media. Thus, they become able to apply more control over the symbolic elements and the narrative around the facts, in order to increase club's visibility and promotion. This ability to shape discourse is essential to build a solid and perennial brand, because it helps to consolidate the club's values and identity.

The entrance of clubs into the media landscape allows them to cover more parts on the chain of production of the sport spectacle. The management of symbolic material reinforce the experiential aspect of the football business, making the manufacture of a good atmosphere and memories associated to the games a priority for clubs. Moreover, club owned media content allow for cross promotion and the enlargement of the contact interval with their fan base.

Through content and other synergies actions, football clubs are able to connect with more people, during a longer period of time. As an official channel, the relationship formed is a direct bond with the club. For scattered audiences, who no longer have a local and direct contact with the club and players, this mediated interaction is a valid substitute in a late modern time. Furthermore, as a media product, a football match is free of any geographical constraints, being available to global audiences.

The content created has a phatic function to maintain the constant contact with fans. 24/7 pay-tv channels or on demand online platforms are available for fans anytime, anywhere in almost any device, giving the possibility of a full time connection between fans and club. The sense of community is reinforced by content that shows intimate moments of players, through their personal lives or sharing behind the scenes images.

The ties among the members of this virtual community are strengthened by the staff profile. Since, the great majority of content producers are also supporters of the club they have a lot in common with the audiences, understanding their moods, sharing feelings, and memories. Likewise, both content producers and audiences have the notion that their work or subscription (paid or not) contribute, directly or indirectly, to the success of the club in the field.

By investing in the production of sports content, football clubs try to engage with fans all the time. There are no professional sports without media and no sports at all without engagement to fans. Regardless of the medium or technology, clubs must connect with fans. The analysis of the content produced (nostalgia videos and past glorious matches, intimate moments for players and staff, dressing rooms and training grounds, youth team matches) may offer a view that the strategy includes past, present and future connection.

References

- Altheide D (2004) Media logic and political communication. *Political Communication* 21 (3): 293-296. DOI=10.1080/10584600490481307.
- Beaud S, Weber F (2010) *Guide de l'enquête de terrain [Guide to the field survey]*. Paris: La Découverte.
- Boyle R (2006) *Sports Journalism: Context and Issues*. London: Sage.
- Boyle R, Haynes R (2004) *Football in the new media age*. London: Routledge.
- Boyle R, Haynes R (2009) *Power Play: Sport, The Media and Popular Culture*. Edinburg: Edinburg University Press.
- Brin C, Charron J, de Bonville J (2004) *Nature et transformation du journalisme. Théorie et recherches empiriques [Nature and transformation of journalism. Theory and empirical research]*. Québec: Presses de l'Université Laval.
- Desbordes M, Richelieu A (2011) *Néo-marketing du sport [Neo-marketing of sport]*. Bruxelles: Editions De Boeck
- Estienne Y (2007) *Le journalisme après Internet [Journalism after the Internet]*. Paris: L'Hartman.
- Frandsen K (2015) Sports Organizations in a New Wave of Mediatization. *Communication & Sport* 4(4): 385-400.
- Gasparini W (2000) *Sociologie de l'organisation sportive [Sociology of sport organization]*. Paris: La Découverte.
- Giulianotti R (2002) Supporters, Followers, Fans, and Flaneurs: A taxonomy of Spectator Identities in Football. *Journal of Sport and Social Issues* 26: 25-46.
- Guenzi P (2007) Sport marketing and facility management: from stadiums to customer-based multipurpose leisure centre. In M. Desbordes (dir.), *Marketing and Football: an international perspective*. Elsevier: Oxford, 130-162.
- Helland K (2007) Changing Sports, Changing Media: Mass Appeal, the Sports/Media Complex and TV Sports Rights. *Nordicom-Information* 29(2): 105-119.
- Hepp A (2013) *Cultures of mediatization*. John Wiley & Sons.
- Hjarvard S (2008) The mediatization of society: A theory of the media as agents of social and cultural change. *Nordicom Review* 29(2): 105-134.
- Horne J (2006) *Sport in Consumer Culture*. Basingstoke: Palgrave.
- Hutchins B, Rowe D (2012) *Sport beyond television: the internet, digital media and the rise of networked media sport*. London: Routledge.
- Livingstone S, Lunt P (2014) Mediatization: an emerging paradigm for media and communication studies In Lundby, K. (Ed.) *Mediatization of communication* (Vol. 21). Berlin: Mouton de Gruyter, 703-724.
- Lowes M (1999) *Inside the Sport Pages: work routines, professional ideologies, and the manufacture of the sports news*. Toronto: University of Toronto Press.
- Montañola S, Romeyer H, Souanef K (2012) Journalistes et communicants: cohabitation «forcée» et co-construction de l'information sportive [Journalists and communicators: "forced" cohabitation and co-construction of sports information]. *Les Enjeux de l'Information et de la Communication* 13(1): 143-157.
- Pereira L (2013) *Luís Felipe Vieira–Missão Benfica [Luís Felipe Vieira - Benfica Mission]*. Lisbon: Prime Books.
- Pine BJ, Gilmore JH (1998) Welcome to the experience economy. *Harvard Business Review* 76(4): 97-105.
- Rein I, Kotler P, Shields B (2008) *Marketing Esportivo: a reinvenção do esporte na busca de torcedores [Sports Marketing: the reinvention of sports in search of fans]*. Porto Alegre: Bookman.

- Rowe D (1996) The global love-match: Sport and Television. *Media, Culture & Society*, 18(4): 565-82.
- Rowe D (2003) *Sport, Culture and the Media: The Unruly Trinity*. Buckingham: Open University.
- Rowe D (2011) Sport and its Audiences. In V. Nightingale (dir.), *The Handbook of Media Audiences*. Oxford: Wiley-Blackwell, 509-527.
- Sandvoss C (2003) *A game of two halves: football, television, and globalization*. New York: Routledge.
- Wenner L (1989) Media, sports, and society: The research agenda. In L. Wenner (ed.) *Media, Sports and Society*. Newbury Park, Calif.: Sage Publications, 13-48.

Drones in Academic Apprenticeship. Regarding to Expectations and Consequences for an Up-To-Date Education in Sports Journalism and Media Management

*By Andreas Hebbel-Seeger**
Thomas Horky†

Video drones not only offer new perspectives but also an extension of the ways in which stories can be told in sports and event communication can be operated. On the one hand perceptual psychological mechanisms, which are already well-known from the production of films (such as, for example, the power and overview suggestive from the top to bottom view), have an effect. On the other hand, the view from the top of a sports event also provides new information that cannot be generated otherwise and whose use significantly changes the staging of sports, sports reporting and sports training. On selected examples from different sports we show that the exploitation of surplus values in the sense mentioned above does not only depend on the increased camera position. Rather it is crucial to capture and understand the domain-specific peculiarities of a sport in order to profitably exploit the freedom degrees of a drone deployment, taking into account the respective profile of requirements and the intended communication target. It is a question of whether a sporting event should unfold below a drone hovering on a fixed position or the drone should follow an athlete or an overall situation. It depends on the extent and distance of the drone deployment, whether and in which angle a movement path is crossed or an event is encircled, etc. An up-to-date education in media management as well as in sports journalism must not only enable students to tap and understand the profile of requirements in sports and their concretization in the competition but also to take into account the possibilities of communication extended with the use of video drones as well as for spectators, for a live audience and for media-mediated communication. In doing so, aesthetic, journalistic and economic aspects must be taken into account as well as data- and security-legal concerns and psychological effects.

Keywords: *Drones, Higher Education, Media Management, Project Studies, Sports Communication, Sports Journalism*

Introduction

The demand for academic training is based on contemporary learning opportunities and is oriented towards current developments in research and application practice. In the course of digitization, higher education training is also to become digital; combined with the goal of increasing the quality and efficiency of teaching (Arnold et al. 2015, Handke 2017). Beyond the question of equipping

*Local Head and Professor, Media School, Germany.

†Professor, Macromedia University, Germany.

and qualifying employees, digitization primarily raises methodological questions in higher education, since digitization cannot “simply” mean transferring previous teaching formats from an analog into a digital environment.

It is certainly no coincidence therefore, that many colleges and universities are again turning to research orientation in teaching; an ideal in the sense of “education through science” (Nieke and von Freytag-Loringhoven 2016). The spectrum of research-oriented formats ranges from genetic learning, in which students use the model to understand how research can be conducted, to forms of teaching research with exercise character, to real student research projects (ibid). The latter although the most desirable, places the highest demands and is most likely to create those moments of tension that university teaching today generally has to cope with: for example, the tension between curious-creative learning and formal assessment or between complex project-oriented learning and scarce support resources (Fung 2017).

Reinmann points out that “the term “research-oriented” ... is just as ambiguous as the related terms problem-, case- or project-oriented.” (Reinmann 2016: 225). And further “What unites problem-, project-, case- and research-oriented learning is that all the forms of learning mentioned are problem-oriented in the broader sense (De Graaff and Kolmos 2006). The addition “in the broader sense” is necessary because one must assume a broad problem term.” (ibid: 228)

There are many prerequisites to providing demanding research projects as part of a higher education. Research-based learning in the sense of an independently conducted and comprehensive research activity provides only one possible solution. Although it would seem to be a particularly valuable solution in theory, in practice it is not possible to offer to all students equally, at all times, for all subject matters or in a manner appropriate for all student settings. Mieg and Lehmann (2017: 62) therefore split research-related learning into four levels: research-led, research-accompanying, research-oriented and research-based learning. In her model of academic teaching, Reimann (2016) designs three levels of research orientation with different degrees of maturity, which she assigns to three ideal-types of learning spaces (cf. Figure 1).

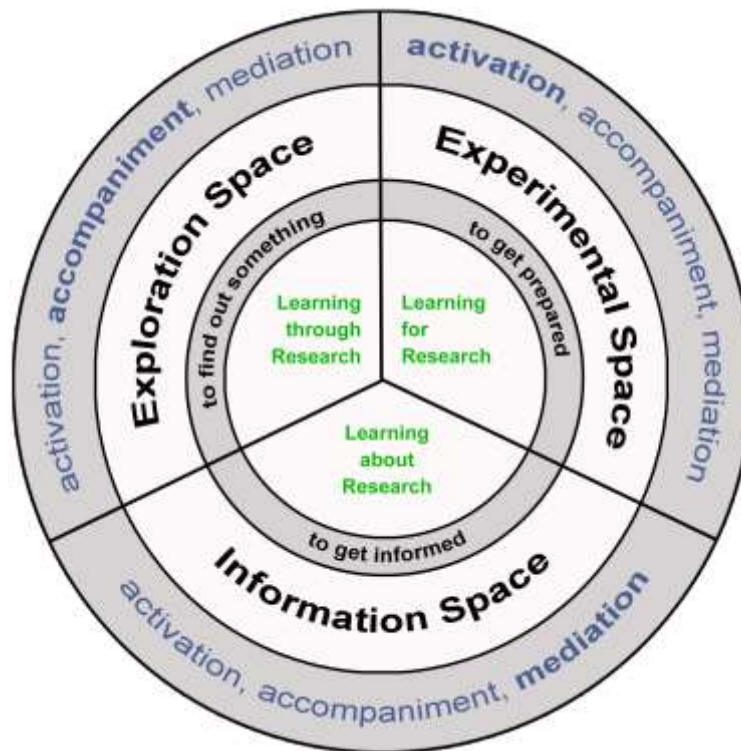
The aim of the Experimental Space is to initiate the development of explorative attitude. Students should learn to recognize problems, formulate research questions, and ask questions in the search for scientific findings and question “discoveries” critically. The aim is to arouse curiosity, motivate students to engage in research and develop their first problem-solving ideas.

In the Information Space, the focus lies on the acquisition of knowledge about the research activity itself. The students have to answer questions in a scientific manner, cope with failure, recognize hurdles as well as tackle some of them, test out research methods and come up with ideas and solutions of one’s own.

Lastly, the Research Space aims to integrate student research activities into a so-called “research stream”. The emergent of this research stream can result in new research questions and ideas, data requiring further processing or advanced

research results and products (artifacts). The output is not only important for students' personal development, but also for third parties.

Figure 1. *Model of Academic Teaching*



Source: Reinmann 2016, S. 236.

The examination of a learning object is based on three different didactic levels, depending on the respective degree of maturity of the research orientation:

1. **Individual level:** Activating a student's interest in research, requires tasks that motivate them to analyze the content conveyed, ask their own questions and look at factual circumstances from different perspectives. Depending on the degree of maturity of the research orientation, this can promote personal development or represent the start of their own (partial or complete) research activities.
2. **Social level:** In the case of larger groups of students, the support of research activities can only be undertaken to a limited extent by teachers. Therefore, various forms of self-evaluation, guided peer review procedures and technical aids (e.g. by evaluating and filtering artifacts) with a feedback function are required (e.g. through the use of collaborative video technology in the sense of a "Social Video Learning"; Vohle 2016).
3. **Organizational level:** The resulting output from research projects (questions, reflections, data, analyses, experiences, artefacts) must be collected, aggregated, potentially collaboratively evaluated and in the best case used in and for "real" research. This requires innovative forms of

controlling research flows as well as open access (in particular as defined by Open Educational Resources, OER), standards as well as a high level of discoverability.

In the course of the project studies at the Hamburg campus of the Macromedia University of Applied Sciences, we made video drones the subject of practical research in different kinds of courses of study (journalism and media management), with students from various fields of study. In general, project studies are based on the approaches of discovery and experimental learning (Huber 2009, Kolb 1984, Reinmann 2011, Scheidewind and Singer-Brodowski 2015).

In this context, discovery learning... means the attempt to develop and provide demanding learning environments on the basis professional, subject-specific and general didactic as well as learning psychology and methodological knowledge” (Schneider 2016: 108).

In the research orientation of this study project, we followed the design-based research approach (Design-Based Research Collective 2003, McKenney and Reeves 2012). In this article we discuss the special suitability and the importance of working with video drones in the sense of research-oriented teaching within the framework of a study project in the courses of study mentioned. While doing so, we rely on selected examples from our own teaching practice.

Video Drones as an Object of Exploratory Learning

Drones are a technological innovation that affects almost all areas of society. The use of drones as a reporting tool is of particular interest in (sports) journalism and media management; from crisis communication to event communication (Chamberlain 2017, Perrit and Sprague 2017). Drones are themselves the subject of reporting, when their use is staged as a competition (Stock 2015). Drones are an intervention factor if, for example, they are used for ambush marketing in the context of major sporting events, for spying on competing athletes or sports teams, or if they are intended to distort competition by acting as a guiding instrument. Examples of this can be found in sailing, running competitions and cycling (Hebbel-Seeger 2016). Furthermore, drones have long since become an object of marketing, which is to be positively charged by a presentation in sporting environments, among other things, in order to promote a penetration of the mass market.

Drones literally open up a new view of movement and sport, based on perceptual psychological findings. A view from above, for example, generally suggests a feeling of complete perspective and power (Hebbel-Seeger 2016). At the same time, the use of video drones provides access to new information via the new perspective on an event. Connections become visible that could not have been generated before, at least not outside the standard sports facilities. However, the additional merits outlined from the use of video drones, by no means present

themselves “automatically”. Rather, a specific situation analysis is required, which includes the framework (and legal) requirements, as well as the specific characteristics of the sport and the organization of the competition. The choice of technology, in terms of camera systems, flight times and speed (including tracking systems, etc.) are also relevant aspects.

The use of drones is by no means undisputed. Drones objectively pose physical hazards in the event of a crash. In operation, drones generate noises that can affect the athletes’ concentration in certain contexts or only superimpose the event experience on the spectator side. Since athletes and spectators on the ground cannot see whether and what an object in the sky is filming, there is also the danger of creating a feeling of insecurity, surveillance and control among outsiders simply by using drones (Hebbel-Seeger et al. 2017).

In summary, video drones currently represent a highly complex field of research that is in particular relevant in the context of sport and sporting events. The field of research covers various topics, such as the stakeholders’ acceptance of the technology, the recording of technological and technical requirements, the integration into and modification of existing forms of event communication and domain-specific analyses of sports, competition formats and communication situations under consideration of legal requirements.

Design-based approaches such as “Design-Based Research” (DBR) are particularly suitable for dealing with this research field within the framework of academic teaching. On the one hand, DBR can provide practical educational benefits for digital higher education (e.g. also in the sense of competence orientation; cf. Schaper 2012, 2014) and, on the other hand, theoretical findings can be gained in the research debate, which in turn promote the development of knowledge which can be applied in a generalized way, and thus directly contribute to the study goal and vocational orientation.

An ideal-typical DBR process is based on a concrete practical (learning) problem for which a solution has to be developed. In the context of a journalism or media management course, this can be, for example, a communication issue that should succeed under specific conditions.

Starting with the analysis of a problem or question, possible solutions are designed in a design phase and tested as prototypes. Following the DBR approach, this process is an inherent part of the research process, i.e. neither upstream, as in evaluation, nor downstream, for example as the application and transfer of study results. The particular creative challenge here is the development of a digital educational space that takes into account the different levels of maturity of research orientation as well as the different methods of knowledge (e.g. in projects with students from different fields of study and semesters and with different stakeholders). Starting with a question outlined above, which is derived from the analysis of a problem, the students design concepts for the use of drone technology, develop prototypes and test these in the respective field. The testing is accompanied analytically, and the knowledge gained flows on the one hand into a further development of the respective pilot and on the other hand manifests itself through abstraction and generalization as contributors to the research stream. All in all, DBR is therefore an empirical approach: problems and challenges are

examined using empirical methods as a starting point; intermediate results are formatively evaluated, if necessary also experimentally investigated and mature solutions are summative analyzed. Empiricism is thus both a reference to reality and to realization for emerging interventions.

Theoretical references arise time and again when working through the first phase of the research, and later on when one's own findings are classified and evaluated against the background of the existing findings. Correspondingly, on the one hand a theory application and on the other hand a theory review up to a modification and theory formation takes place. In the debate about the use of video drones from the perspective of sports journalists and media managers, video drones are combined with communication theory findings, aspects of the perception theory are considered, findings from training science are taken into account and overall (media) economic and sociological theories are looked at.

In a cooperation project with the German Motorsport Federation (Deutscher Motorsport Bund – DMSB) and Ghostthinker GmbH (Hebbel-Seeger and Vohle 2016), for example, we have agreed to optimize the training of marshals in motorsport. The learning and application situation is characterized by comparatively short training periods and high staff turnover. At the same time, marshals in motorsport operate in a highly complex environment, in which the marshals themselves are exposed to a high risk and at the same time have to make decisions under time pressure to certain situations, in coordination with others, in order to avert or at least minimize the physical danger to the athletes in accidents and dangerous situations. The problem to be worked on (and solved) by the students in the context of a study project was thus to professionalize the training of marshals using innovative media technologies. In a first step, the students took on the analysis of the problem: what is the requirement profile for marshals, what are the ideal-typical patterns of action, etc. On the other hand, they dealt with the technological possibilities and the technology of video drones as a tool for the creation of learning materials. In the design phase, concepts for the creation of learning films were developed as different perspectives, implemented in practice, the results reflected and also evaluated with the target group. The results were incorporated into the modification of the concepts for the learning films, which in turn led to new media productions in iterative loops. This work was theory-based, as it were, in that the students acquired domain-specific knowledge in relation to the learning object (motor sports) and the production tools (video drones) and had to deal with familiar media usage behavior as well as learning theory basics, models of perception psychology and the use of video for learning purposes.

Figure 2. *Media Production with the Aim of Professionalizing the Training of Marshals in Motor Sports*



Source: Hebbel-Seeger.

Another study project in cooperation with the German Sailing Association (Deutscher Segler Verband – DSV) focused on the optimization of training processes in sailing using innovative media technologies. The starting point was the analysis of the requirements profile in different boat classes as well as the personnel and material basic conditions in competitive sailing training with the aim of identifying possible optimization potentials (problem definition). Through the theoretical-practical examination of various new media technologies, including video drones, the students conceived and tested the use of these technologies in sailing training (design). The guiding principle here was to find out by means of which visualization the training content could most effectively be presented with the best reflection, for athletes and trainers alike. Time and again, various questions arose. Which aspects of the action situation required a classification into larger spatial contexts (e.g. situational aspects, such as wind or waves, space-constituting objects, such as coastlines or navigation marks, or the position and movement of competing teams)? What could possibly be illustrated with a focus on individual athletes, the interaction of athletes within a team or the observation of the overall system of athletes and boat from what perspective, at what distance and with what spatial paths of camera and object to be depicted? Analogous to the procedure outlined above in motor sports, the (interim) results were reflected with the target groups and incorporated into modifications of the visualization concepts.

Figure 3. *Analysis and Reflection of Videographed Training Units Using the Method of Noisy Thinking (Van Someren et al. 1994)*



Source: Hebbel-Seeger.

This step was accompanied by the application of theories from different scientific disciplines (in particular sports science/training science and (perception) psychology) and resulted in a critical evaluation of theories, which in turn flowed into theory building when experiences of the use of video drones were generalized under different objectives: Alleged conflicts between the film recordings, which are oriented towards the principles of aesthetic image design, and the informative approaches on the part of activists and trainers, hoped for from a visualization of a course of action, called for specific solutions which were translated into ideal-typical solution patterns taking into account existing general theories about the abstraction of situation parameters and training content.

Figure 4. *A View From Above: The Microcosm on Board a Sailing Dinghy, the Room Layout in a Competition Situation and the Complex Space for Action*



Source: Hebbel-Seeger.

Video Drones in Competence-Oriented University Teaching

“In the scientific-academic context, competence must be defined as the ability to act appropriately, responsibly and successfully in areas that are characterized by high complexity, novelty and high demands on solution quality. The ability to act in this way includes integrated bundles of complex knowledge, skills, abilities, motivational orientations and values in relation to the requirements areas.” (Schaper 2014)

Expertise in the fields of study of media management and (sports) journalism are primarily oriented towards events and their media communication. While media managers communicate the event experience and make it tangible for spectators, those present or even participants (sportsmen and sportswomen), sports journalists focus on a discursive, communicative discussion of events that is made understandable for third parties through reporting, argumentation or criticism. Both courses of study are based on media communication. Through these forms of communication, the experimental space event is mediatized (Reinmann 2016, 236).

Video drones can set special accents in many ways in these forms of mediatization and intensify the experience for recipients. In the university environment they are therefore an almost ideal tool for project-oriented studies and the development of competencies. At the same time, it is still very unusual to come across video drones in university training. In Germany, various programs can be found, above all with regard to cinema films or technical requirements, while application- and competence-oriented programs are rarely to be discovered. An analysis of 16 current programs relating to video drones from universities in the USA also shows that most of the offerings are focused on aeronautical skills or specifics, observation or military and civilian surveillance. Only two programs in Missouri and the laboratory for “Drone Journalism” in Nebraska-Lincoln directly deal with media (journalism) expertise in working with video drones.

This denial of possible expertise-oriented teaching with video drones is surprising in the field of media event communication. Video drones offer several application possibilities in various situational contexts, which are suitable for the university education of media managers and journalists, especially in the mediatization of sporting events:

- Shooting in dangerous environments, such as conflicts, disasters or natural phenomena
- Recordings outside standard sports facilities with comparatively large distances and/or distances to the spectator area, e.g. in water or mountain sports.
- Recordings that require an overview (e.g. from a great height) for a domain-specific understanding in order to capture tactical aspects, for example
- Footage that enables the staging of (sporting) events in dialogue with the surrounding space

These are just a few examples in which video drones have proven themselves in all forms of medial communication of events in the past. In university project studies, these forms can be taught to media managers and sports journalists in a competence-oriented manner. Practice-oriented work in groups is initially the prerequisite for learning different techniques (application competence), but at the same time the diverse possibilities of media implementation (meditation competence) are also learned. Building on this, the basis for a practice-based research performance (research competence) can be developed in the groups.

With the goal of these three areas of expertise in practice-oriented teaching, we have started an experimental project at the Macromedia University with the support of the State Media Institute Hamburg/Schleswig-Holstein on the use of video drones in university teaching. After a prelude with experiments on the mobile use of video drones, a lab was initiated in which practical and research-oriented group work with video drones, 360-degree cameras and VR environments are possible.

The importance of video drones in sports communication is undisputed, states Gynnild:

“The innovation of drones for journalistic purposes will most likely replace, or, more precisely, supplement visual news coverage on the ground with new kinds of aerial views as well as options for aerial close-ups that were formerly unseen” (Gynnild 2014: 341).

The use of drones in the field of media management is of great importance at major sporting events, especially due to the spatial effect of the generated images. Goldberg, Corcoran and Picard emphasize in the Reuters Report the advantages of video drones for general journalism, “if the scale of events is too large to perceive from their ground locations” (Goldberg et al. 2013: 21). Consequently, they conclude with a view to sports journalism:

“In addition to breaking news and investigative uses, RPAS can be used in sports coverage of bicycle races, marathons, and football matches where they can provide different visual perspectives than the cable- and track - based robotic cameras” (Ibid).

Furthermore, the Reuters Report points out possible reciprocal effects of video drones in journalistic communication: “Because application of drones in journalism is only just emerging, it is unknown how the public will react to their use.” (Ibid 24).

Other possible applications in sports communication are conceivable. This statement has been tested in various case studies at Macromedia University in group-oriented learning processes. Media Management and Sports Journalism students developed initial results in various project studies, which can be summarized as follows:

- An *aestheticization of the communication space* is to be noted. The use of video drones in sports communication changes the perspectives of space. Particularly during sporting movements, images with a new aesthetic are made possible, which generate a changed effect on reception. This has been tested e.g. with a bird's eye view from a swiss TV channel (Schweizer Fernsehen – SRF) on the Lauberhorn downhill ski run and is now a standard feature at many sporting events. Based on theoretical knowledge, a practice-relevant implementation should be followed in the project study. Various groups filmed an inner-city cycling race and a triathlon using video drones to create aesthetically sophisticated images. This is not only of great interest in the field of event management but is also journalistically relevant. Furthermore, a study project at an event in Timbersports has shown the great attraction of video drone images also in use for sports PR. For example, the use of video drones in the area of local city marketing was successfully tested in a project in cooperation with the then Hamburg Committee for the 2024 Olympic Games.
- The use of video drones can lead to an *expansion of communication possibilities*. With little effort, the variety of camera perspectives is significantly increased. The project-oriented requirement for the group members was to gather practical experience in order to work through these in theory afterwards. In these projects, several perspectives have been tried out in practice, in particular when the drone accompanies the sporting movement (like a rope or train camera) unusual images are made possible. In training with a top-class football club it became clear how video drones can also achieve advantages in sports science applications. The new perspectives broaden sport communication, especially in terms of changing temporal perspective (dynamics vs. slowdown), but also in terms of visual clarity (training control).
- Particularly in sports, a *change in the communication area can be observed*. The use of video drones in sports communication enables new camera perspectives, which were previously not available (e.g. water sports) but can also be limited (indoor sports) due to the changeable position. Two different study projects proved this contradictoriness in practice: On the one hand, in cooperation with the German parakanu silver medal winner Edina Müller, it was shown how very large-area sports can benefit from video drones. This makes the sports space visible to spectators without great effort, e.g. from helicopters, so that the performance can be experienced. Other water sports (sailing) or golf and horse riding would also be conceivable here. On the other hand, in cooperation with a social boxing project, the limits became apparent. The communication area in a hall is not suitable for the use of video drones. The high social impact of working with video drones became clear in these group projects, as the cooperation with the athletes in these sports was very demanding.
- An interesting advantage of the use of video drones can be discovered in the field of media neglected sports by the *change in the organization of*

communication. Video drones offer an opportunity for marginal sports without extensive organizational resources to generate professional images at events. With a drone, for example, visual communication in the management area or up-to-date, journalistic game reporting in sports is possible from a sensible, elevated camera position even without the complex and expensive installation of grandstands or camera stands. This was confirmed by a study project with a team in Australian football: The German marginal sport could be filmed by a video drone with communicatively appealing pictures despite the lack of grandstands or camera frames.

In addition to these exemplarily presented results, two interesting consequences for the use of video drones in sports communication arose. Especially when the drone was used in a hall (boxing), the athletes were distracted by the device and its noises. These reciprocal effects strongly influenced the sporting action. Furthermore, it became clear that the drone's camera work repeatedly followed certain patterns in order to depict the sporting action. In various group works it was therefore suggested to develop different drone camera movements for different sports, similar to the already existing camera work of traditional sports communication.

In summary, the projects have demonstrated the advantages of the use of video drones in sports communication on several levels during their studies. Not only in the visualization of sports events, but also for the sports journalistic communication of these events through current media. Video drones are cheaper and easier to use and implement than comparable helicopter-supported cameras. The use of drones will not replace traditional event communication but will certainly complement it.

The experience gained in the student projects at the individual and organizational level will in future require a research-based discussion in order to systematize the results. The group work in this exciting and interesting technical field has increased the motivation of the students in the academic field.

Summary and Outlook

Drones are no longer just hype. It is not a question of "playing" with the technical possibilities, but of dealing with a significant content of our current media reality from an academic perspective.

The overall objective of a university degree in media management and (sports) journalism is concretized in the understanding, explanation, application and further development of usage options and communication solutions. The acquisition of knowledge about domain-specific peculiarities, alternatives and combinatorial possibilities of the use of video drones, knowledge about and practical observance of legal requirements, the assessment and handling of situational conditions (especially space and weather) as well as the acquisition of a

basic technological and technical understanding form the basis for a hermeneutic understanding and practical use.

"With the concept of situational learning, application-oriented knowledge content is at the center of interest, professional contexts are integrated into the learning situation, experiences are gained, as well as teamwork and the division of knowledge in social groups are promoted." (Reinmann 2009: 41)

These are not only ingredients for research orientation in teaching but also prerequisites for development of expertise that enable students to anticipate and influence future developments in media communication in sport. In perspective of an intensive research achievement, the focus could lie on a kind of textbook for the exemplary use of video drones in sports communication and the academic benefit.

References

- Arnold P, Prey G, Wortmann D (2015) Digitalisierung von Hochschulbildung: E-Learning Strategie(n) noch up to date? [Digitizing Higher Education: E-Learning Strategy (s) Still Up to Date?] In Seufert S, Ebner M, Kopp M, Schlass B (Hrsg.). *E-Learning Strategien für die Hochschullehre*, 51-70. Norderstedt: BoD.
- Chamberlain P (2017) *Drones and Journalism. How the Media is Making Use of Unmanned Aerial Vehicles*. New York: Routledge.
- De Graaff E, Kolmos A (2006) History of problem-based learning and project-based learning. In Graaff ED, Kolmas A (Hrsg.). *Management of change*, 1-8. Boston: Sense Publishers.
- Design-Based Research Collective (2003) Design-based research: An emerging paradigm for educational inquiry. *Educational Researcher* 32 (1): 5-8.
- Fung D (2017) *A connected curriculum for higher education*. London: UCL Press.
- Goldberg D, Corcoran M, Picard RG (2013) *Remotely Piloted Aircraft Systems & Journalism Opportunities and Challenges of Drones in News Gathering*. Report. Reuters Institute for the Study of Journalism, Oxford University, Oxford. Retrieved from <https://bit.ly/2R66b4G>. [Accessed 29 June 2018].
- Gynnild A (2014) The Robot Eye Witness. Extending visual journalism through drone surveillance. *Digital Journalism* 2(3): 334-344.
- Handke J (2017) *Handbuch Hochschullehre Digital. Handbuch für eine moderne und mediengerechte Lehre* (2nd revised edition). Baden-Baden: Tectum.
- Hebbel-Seeger A (2016) Video drohnen in der Event kommunikation [Video drones in event communication]. In Hebbel-Seeger A, Horky T, Schulke HJ (Hrsg.). *Sport als Bühne. Mediatisierung von Sport und Sport großveranstaltungen*, 326-345. Aachen: Meyer&Meyer.
- Hebbel-Seeger A, Horky T, Theobalt C (2017) Usage of Drones in Sports Communication – New Aesthetics and Enlargement of Space. *Athens Journal of Sports* 4 (2): 89-105. Retrieved from <https://bit.ly/2R3hQB2>.
- Hebbel-Seeger A, Vohle F (2016) *Innovative Videoformate im Sport zwischen Training and Marketing [Innovative video formats in sports between training and marketing]*. Retrieved from <https://adobe.ly/2NWoS8M>.

- Huber L (2009) Warum Forschendes Lernen nötig und möglich ist[Why research learning is necessary and possible]. In Huber L, Hellmer J, Schneider F (Hrsg.). *Forschendes Lernen im Studium. Aktuelle Konzepte und Erfahrungen*, 9-35. Bielefeld: Webler.
- Kolb DA (1984) *Experiential Learning*. Englewood Cliffs, NJ: Prentice Hall.
- McKenney S, Reeves T (2012) *Conducting educational design research*. London: Routledge.
- Mieg HA, Lehmann J (2017) *Forschendes Lernen: Wie die Lehre in Universität und Fachhochschule erneuert werden kann*[Research Learning: How Teaching in Universities and Colleges Can Be Renewed]. Frankfurt am Main: Campus.
- Nieke W, von Freytag-Loringhoven K (2016) *Wissenschaftsdidaktik vor neuen Aufgaben: Bildung durch Wissenschaft*[Science didactics facing new challenges: education through science]. Wiesbaden: Springer.
- Perrit HH, Sprague EU (2017) *Domesticating Drones. The Technology, Law and Economics of Unmanned Aircraft*. New York: Routledge.
- Reinmann G (2009) Wie praktisch ist die Universität? Vom situierten zum Forschenden Lernen mit digitalen Medien[How convenient is the university? From situated to research learning with digital media]. In Huber L, Hellmer J, Schneider F (Hrsg.) *Forschendes Lernen im Studium*, 36-51. Bielefeld: Webler.
- Reinmann G (2011) Forschendes Lernen und wissenschaftliches Prüfen: die potentielle und faktische Rolle der digitalen Medien[Research-based learning and scientific testing: the potential and factual role of digital media]. In Meyer T, Han-Tan W, Schwalbe C, Appelt R (Hrsg.). *Medien & Bildung. Institutionelle Kontexte und kultureller Wandel*, 291-306. Wiesbaden: VS.
- Reinmann G (2016) Gestaltung akademischer Lehre: semantische Klärungen und theoretische Impulse zwischen Problem- und Forschungsorientierung[Design of academic teaching: semantic clarifications and theoretical impulses between problem and research orientation]. *ZFHE, Zeitschrift für Hochschulentwicklung* 11(5): 225-244.
- Schaper N (2012) *Fachgutachten zur Kompetenzorientierung in Studium und Lehre* [Expert report on competence orientation in study and teaching]. Bonn: HRK. Retrieved from <https://bit.ly/2p0OqIQ>. [Accessed 18 June 2018].
- Schaper N (2014) Kompetenzorientierung in der Lehre [Competence orientation in teaching]. *duz – Deutsche Universitätszeitung* 3. Retrieved from <https://bit.ly/2OHYDZ6> [Accessed 18 June 2018].
- Scheidewind U, Singer-Brodowski M (2015) Vom experimentellen Lernen zum transformativen Experimentieren. Reallabore als Katalysator für eine lernende Gesellschaft auf dem Weg zu einer Nachhaltigen Entwicklung[From experimental learning to transformative experimentation. Real laboratories as a catalyst for a learning society on the way to sustainable development]. *Zeitschrift für Wirtschafts- und Unternehmensethik* 16(1): 10-23.
- Schneider R (2016) Vom entdeckenden zum forschenden Lernen. In Schude S, Bosse D, Klusmeyer J (Hrsg.). *Studienwerkstätten in der Lehrerbildung*, 107-118. Heidelberg: Springer.
- Stock D (2015) Fast and Furious. *New Scientist* 228: 60-61.
- Van Someren MW, Barnard YF, Sandber JAC (1994) *The think aloud method: a practical approach to modelling cognitive Processes*. London: Academic Press.
- Vohle F (2016) Social Video Learning. Eine didaktische Zäsur. In Scheer AW, Wahter C (Hrsg.). *Digitale Bildungslandschaften*, 175-185. Saarbrücken: IMC.

“Blended Conference” as Video Supported Event Format in the Educational Marketing Mix of Sports Organizations

*By Rebecca Gebler-Branch**

The question whether the “event” is an effective marketing tool or not has been extensively discussed and demonstrated in recent years. In particular in the case of brand messages, the event has become absolutely indispensable in the tool mix. Also in the field of educational marketing, the messages must also be brought to life. As a partner for sports organizations in the digital education sector we accompany our clients in the introduction and implementation of new formats in education and training. This also includes support in the process of making known the plan primarily within the organization itself, for example an association. In this connection over the past years we have worked intensively on the development of strategies and marketing tools which assist our clients to bring alive the message of the new approach to education. In this article the innovative event format “Blended Conference” is presented by means of a real example and discussed in relation to its development potential in sports sector educational marketing. The format is based on the concept structure of Blended Learning as known in the education sector. By enlarging the physical event space with a virtual one, many new possibilities open up on a variety of levels of multi-sensual perception by the recipients. The event, which comprises online and presence times, can be placed in the category of “hybrid events”. The combination of online, presence and online wrap phase, places great focus on the continuous involvement of the recipient. This gives rise to three central dimensions served by this format: Information, interaction and inspiration. In each phase the focus lies on another dimension. Thanks to this blended approach, those taking part at the event, can experience the staged message in various and intense ways.

Keywords: *Blended Conference, Conference Format, Education Marketing, Sport, Social Collaboration*

Introduction

Since 2000 the EU-Commission campaigns in its memorandum for the concept of “lifelong learning” in order to improve living conditions within a society of knowledge (Kommission 2000). The idea of “lifelong learning” contains for instance new basic qualifications for active citizens who want to participate in a knowledge society, higher investments in human resources, innovative learning and teaching methods, new assessment concepts in education and the acknowledgement of informal education processes (Schüller-Zwierlein and Stang, 2011). For considerable time, society has recognized that education and learning take place not only in classical education establishments such as schools, universities or further education and training institutes. If I want to learn,

*Head Marketing and Sales, Ghostthinker Gmbh, Germany.

nowadays I have a variety of offers and providers to choose from. The spectrum of free possibilities, for example, YouTube or (private) Blogs, through to fee-based programs (online) universities or further training institutes. Marketing of such offers is known as education marketing (Bernecker 2007).

Many agencies and marketing managers in the education sector today rely on events as a central measure in the classic marketing mix in order to communicate their message to the target group. “Events take their special quality of communication from multi-sensuality, i.e. experiencing with all the senses and from personal, face-to-face contact of those attending the event with the companies who organized it” (Zanger 2013, according to Zanger and Sistenich 1996, Zanger 2001, 2010).

The high level effectiveness of this instrument, in particular “experiencing” the message, has been looked into over recent years and is here not the subject for discussion.

This article deals with (a) how the classic concept, i.e. presence-based event format in an educational context, can be extended through media-supported forms of communication and collaboration (conception), (b) what form could the implementation of such an event in a sport organization take for the provider of the education (implementation) and (c) how do those taking part and the organizers assess the results (evaluation). Following this introduction, in section 2 I outline the context “German Sports Organization” with focus on the theme of education marketing, before then in section 3, compiling the fundamental concept principles for a “Blended Conference” as a new event format. Section 4 gives insight into the implementation of the Blended Conference in the case of the German Rugby Association and the first German Rugby Forum 2018. Section 5 summarizes the most important evaluation results. The article ends with a summarized conclusion.

Education Marketing in German Sport

Organized sport makes a substantial contribution to the general feeling of wellbeing in Germany in that “sport clubs allow the local people to have a part in society as well as making a great contribution to education, health, social integration and inclusion in and through sport (DOSB 2018). Through its qualification system and the granting of licenses the German Olympic Sport Association as the umbrella organization for organized sports ensures, for example, those trainers (coaches) are enabled to gain the competences to teach sports with the needed expertise and oriented to the respective target group. In order to receive such a license, interested parties must be appropriately qualified and provide proof of further educational training (DOSB 2013).

This process is supervised by the German Olympic Sport Association as the umbrella organization for all its 101 member associations and the reason why it is considered as one of the major education providers in Germany. Together these organizations educate approximately 45,000 men and women as coaches, youth leaders and club managers etc. (DOSB 2013). In these professional training courses it is not always just about pure theory but also themes beyond this, such as

building up method and social competence. The spectrum of offers provided by these organizations is huge and diverse. Nevertheless, as the DOSB report 2013 “Das habe ich im Sport gelernt” shows, many of these organizations, especially the smaller ones are facing different challenges. Due to the lack of people who are working as instructors, it is not always possible to offer a licensing program that pleases the potential target group especially in rural regions. There are a few reasons for this: In the case of the target group “future coaches” outlined here, these are for the most part *voluntary workers*, in other words, not only do they give up their free time but are also expected to take part in further training courses. It often is the case that these persons *have to take a vacation from work* in order to take part in training courses, which sometimes take several weeks. This applies not only to the people who want to become a coach (or participate in a further training) but also to the teachers themselves. Depending on the size and strength of the association, it is possible that those responsible for the educational program are also often working on a voluntary base. The result is a decreasing amount of registered coaches with an official DOSB license (DOSB 2013).

One of the causes certainly lies in the development of society over the last years. Whereas up to the middle of the last century, commitment on a voluntary basis was part and parcel of urban and rural life, today it is very difficult to get people, especially younger people, interested in an honorary office (Braun 2014). Sport organizations today are in competition with many other leisure time opportunities for their members. Presumably it is then also difficult to win people over, to undertake further training courses in their free time. The study “Freiwilliges Engagement in Deutschland” done in 2014 shows, that voluntary commitment still plays an important role in German society, however it increases very slowly (Simonson, Vogel, Tesch-Römer 2014). Knowing this trend, the DOSB department for education points out, that sport organizations have to be aware that the motivation to become a coach has shifted. To be just active on a voluntary base sometimes is no longer enough. They emphasize, that sports organizations should promote as well their staff environment, their teams and the possibilities to grow personally by using the advantage that comes along with the various education programs. This applies to the education programs for future coaches as well to those who want or have to take part in a further training (Netzathleten 2017).

These explanations show that the mind-set in terms of coaches’ education needs to be shifted from “just a non-arguable part” of being a coach towards a “beneficial and valuable chance” through which one can develop various and recognized competences. Therefore it is important for sports organizations to give more consideration to the state of the art of tools and methods in education in order to be able to offer programs that develop various competences (see 1. Introduction the concept of lifelong learning). In addition to this however, education departments in sports organizations have to incorporate adequate marketing activities as an inherent component of their work in order to be able to promote their programs effectively and to support the mental shift.

We have been partnering with sports organizations in the field of digital education for many years. During this period we have been witnessing the various

challenges many of them are facing on their journey to implement a new education format in their organization. This motivated us to create an advertising format with which firstly optimum use of the limited resources of the organizations can be attained and secondly, to reach the target group with the appropriate effectiveness. From this arose the three following objectives: to create state of the art marketing instruments which reach the target group, make the new education approach come alive and this at the same time with manageable financial and personnel costs.

One marketing tool which meets these requirements and which is extremely compatible with the sports sector is the instrument "Event".

"Blended Conference": Conception Principles from the Marketing Viewpoint

How we spend our free and leisure time generally depends on our interests as well as the amount of time that we have available. As most members of the target group "potential coaches" are carrying out their commitment towards their sports organization in their leisure time, the educational programs have to fit two components: interest and time invest. In other words, educational programs in sports at least on a voluntary base have to compete with fun activities. Therefore, in order to be sure of gaining the attention of the desired target group, the department for education in each organization that offers educational programs must take appropriately convincing measures to make the offers visible.

Research in the field of marketing has shown that the "Event" is of major significance in the mix of marketing tools (Zanger 1996, 2007). Due to its special orchestration of messages, the visitor to a marketing event can be immersed in the brand world, experience it fully and be able to escape from everyday life (Drengner 2007, Schäfer –Mehdi 2009). The objectives of a marketing event therefore include the creation of a new reality for all those taking part.

The brand world created at events differs mostly from all-embracing social reality, the daily reality and daily experience as described by Berger and Luckmann in their treatise "Society's Construction of Reality" (Berger and Luckmann 1969). It is the possibility of escape from reality in which everything is regulated and with predetermined values, which fascinates people at events. Moreover, the concept is interactive and promotes dialogue. An event plans various roles for its visitors. Erving Goffman examined how these are designed, justified and developed in his treatise "We all put on an act" from the year 1959. The role is always connected with expectations and duties, where dialogue and progress arise and which can lead to this new reality becoming reality.

Zanger (2007) defined the following features, which characterize a marketing event:

- Multi-sensual address to those taking part at the event
- Intensive activation of those addressed with emotional anchoring of the message
- Creation of brand worlds and events actually experienced (brands)
- Long-lasting influence on public attitude

- Creation of brand worlds as a change from daily life, but emotions experienced there are taken over by the recipient back in daily life.
- Marketing events are designed as very oriented to target group such that the individuality demands of the recipient are fulfilled, thus increasing contact intensity between customer and potential buyer.

The main objective of a marketing event is to convey a message specifically of the respective brand/organization/company and to anchor it with the recipient. The multi-sensual, interactive and dialogue-based direct address to the visitor enables this transporting or experiencing of messages, ideas or brands at a different level.

In the conception of our new event format we have concentrated on the features which characterize the event and have translated these into the requirements of (sport) education marketing. This is elementary as in the field of education marketing and our special context, it is all about the spreading of the message that further education in the sport sector is innovative and valuable.

Blended Conference makes use of the organizational structure (Illustration 1) known in the education sector as Blended Learning, with alternating online and presence phases as already postulated also in the sports sector since 2009 (Vohle 2009). Blended Learning is defined as “learning with various media and methods with the incorporation of virtual and physical arenas” (Reinmann 2011).

The extension of the physical event by means of interaction in the digital arena puts Blended Conference in the category of “hybrid events” (Zanger 2013).

Our concept of the Blended Conference as a rule provides three event phases: An introductory online phase in an online environment, the physical meeting at the location and a wrap-up online phase also in the online environment. These phases can be repeated practically as often as wished although in this case the challenge of maintaining the suspense curve will not be easier.

Illustration 1. *Structure of Blended Conference*



Source: Ghostthinker GmbH 2018.

The event is therefore structured in the same way as a training course-unit in the Blended Learning format. Exactly the format that many education managers in their associations would like to introduce under the framework, for example, of a new organization of coaches training and which must also be advertised. Whereas

the idea of “blended” and digital media in the context of education may for some people give rise to uncertainty and sometimes even fear that one does not know how to use these media, the use of digital media in the context of events is, although still regarded as new, seen as interesting and fully accepted. Under the framework of a Blended Conference the participants enjoy the experience in a quite natural way and without a direct focus on “education” which is what a mixture of online and presence means. If one considers that many education departments are facing the challenge of convincing not only their members but also the functionaries of the association of the necessity for digital media, then it soon becomes clear just how suitable this format is in order to make the message of the education managers come to life.

Each of the three phases makes its specific contribution to information, interaction and inspiration amongst participants. These are also the three central dimensions, which serve this innovative event format. In the introductory phase the focus is firstly on information for the participants in respect of the theme of the event. In this way all those involved (students and teachers) are able to experience a more intensive and most of all, a more interactive program on the day of the personal meeting. The format allows the individual event contents (presentations, workshops etc.) to be recorded on video and entered in the online environment. Those taking part in the Blended Conference then have the opportunity in the wrap-up online phase to review the event or even to look in on other offers in which they were unable to take part (e.g. parallel workshops). Further, discussions, which began at the event, can be continued online. In this way visitors to the event are able to gain inspiration for their own activities. The mixed format alone means that participants can be addressed multi-sensually at different points of time in the events. An essential characteristic of a marketing event is therefore already fulfilled.

In the following section 4, the above-described elements of the Blended Conference are now presented in the form of a practical example, which was implemented by the German Rugby Association (DRV) earlier in 2018.

Implementation of the Blended Conference by the DRV

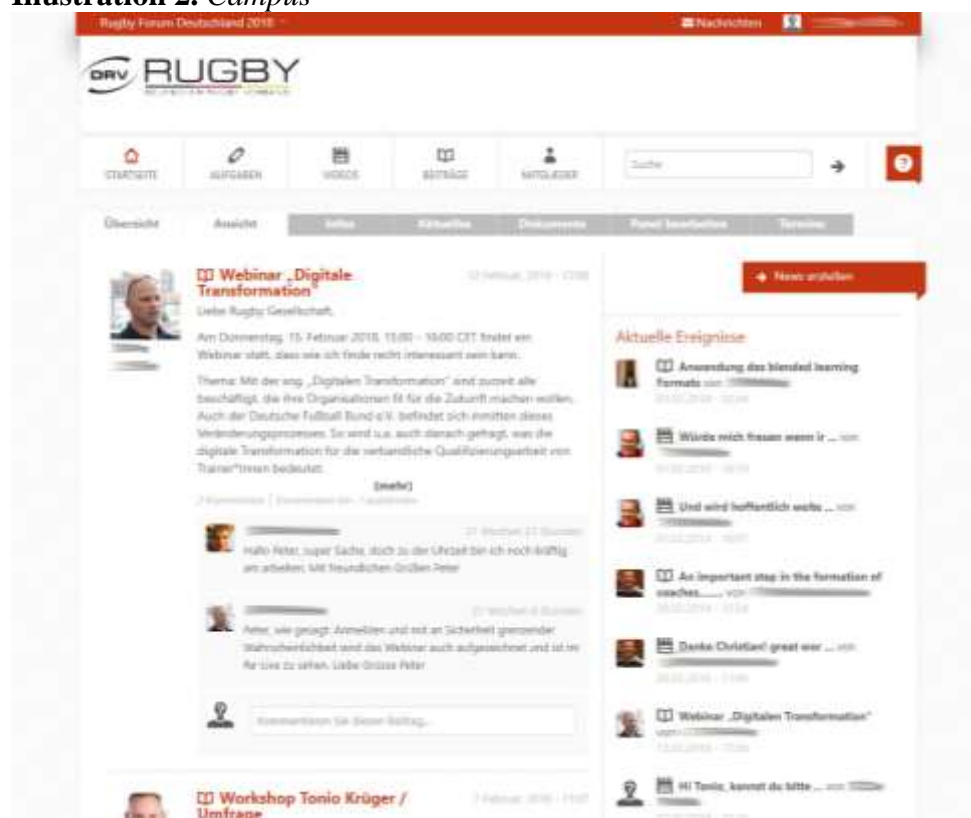
The DRV is a rugby association within the DOSB. With its 13 regional associations and 124 clubs it is a relatively smaller association in the German sports landscape. The sector for education and training of trainers in a professional association has been managed alone since 2016 by Peter Smutna, the former Austrian national team trainer and has institutional connections with the German Rugby Academy (DRA). This is responsible both for the content and concepts for the teaching courses and also for carrying them out.

In 2017 the DRV applied for an allowance from the Innovation Fund of the DOSB with the project “Introduction of Social Video Learning and Digital Media in the Training of Trainers and Referees” and was granted this as one of 22 project applications. With these financial means the DRV was able to design, develop and carry out a new concept for the training of trainers for an “A” License. As well as

developing the concept for a training program, it was also necessary to advertise this accordingly and to make sure of broad acceptance of this new approach in the association. Peter Smutna's team decided on the organization of the "First German Rugby Forum" as a Blended Conference in order to achieve exactly this effectiveness in marketing.

First online phase (15th Jan. – 27th Jan. 2018): Start of a Blended Conference begins between two and four weeks prior to the personal meeting at the location and this was an online conference. Online means that the participants who have registered for the event are invited to an online environment via e-mail. A total of 100 participants were invited to the Campus (Illustration 2).

Illustration 2. Campus



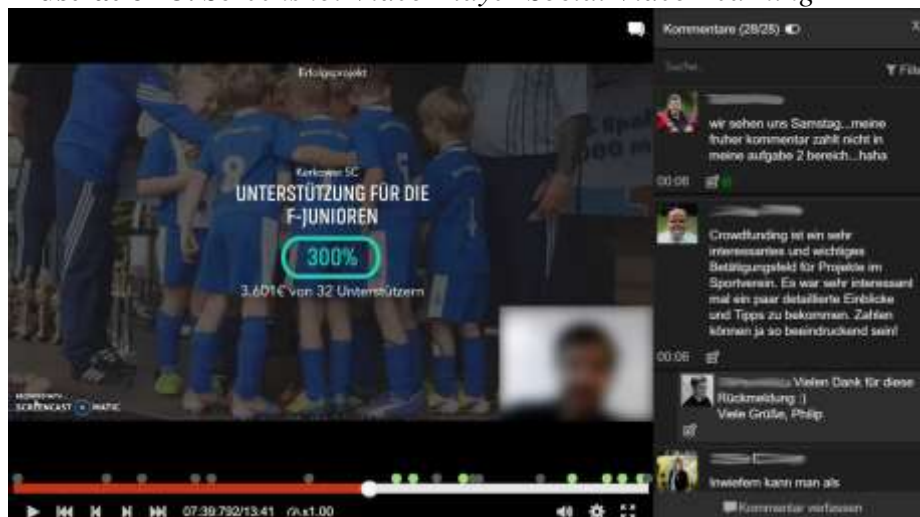
Source: Ghostthinker GmbH 2018.

This environment functions as the virtual event location. Participants enter here regardless of time or place. This introductory online phase has two specific aims: a) to introduce the participants to the subject of the event and b) to capture the needs and questions in this respect of those taking part. The participants are asked to submit their personal profile to the environment, which results in a practical side effect, namely, that the participants are already able to get to know a little about one another. In general the use of an online environment is recommended when this is designed for exchange and interaction.

For the implementation of its further training offers, the DRV uses the online learning environment **edubreak®**. For this reason it therefore also made sense to

use this this too, for the Blended Conference. **edubreak**[®] is characterized primarily by special technical and didactic possibilities under the framework of social interaction and communication in videos (Illustration 3). Each person taking part can integrate video commentaries in a video with text and drawings and can enter an asynchronous discussion with a third party, and known as “Social Video Learning” (Vohle and Reinmann 2014).

Illustration 3. Screenshot Video Player Social Video Learning



Source: Ghostthinker GmbH 2018.

All the people who were invited to the first German Rugby Forum (RF) were informed already in their invitation about the special format of the event. With the confirmation of registration they were then informed of the exact date (ca. two weeks prior to the personal meeting) when the e-mails with the invitations were sent out in the online environment. In order to make the event as attractive as possible for the desired target group, mostly holders of a B or A License, the program was designed such that the visitors could offset with credits for their license renewal. The introductory online phase of the event has an asynchronous setting. This means that following the invitation, the participants can enter the online environment regardless of time and place and can familiarize themselves with the inputs to be found there. In particular, this format enables a high level of flexibility in respect of the initially described time restraints with which nowadays we are confronted.

As mentioned above, in this first part of the event the aim is to introduce the participants to the theme of the event more intensively than is the case in classic formats. When working at the Blended Conference with the online learning environment **edubreak**[®], to a great extent the solution is by means of the use of videos. This is how it was done at DRV. The instructors of the keynote lectures introduced their subjects in a short video. In addition they also presented their points of focus. In the form of a small assignment the participants were then required to contribute their specific questions or thoughts relating to their own experiences as written comments to the videos. This feedback to the instructors is

a central element of the Blended Conference. In this way prior subjective knowledge and opinions of the participants are then visible to the instructor for the first time. The target group thus becomes more tangible and the contents of the presentations can be more clearly adapted to their specific needs. Right from the start the participants are made to understand the possible active involvement on their part: "You are part of this event and you have the possibility of taking part in the form of contents and the way it develops". This possibility of interactive participation in an event with the objective of direct contact with the organization or similar and being "a part of the whole" mostly has an influence on the attitude of the visitor and in the end leads to loyalty towards the brand, the idea or the organization (Zanger 2007). With this step therefore, a further quality feature of a marketing event is fulfilled, namely, the event is held with target group orientation and increased involvement of the recipients. When feedback has been received it is important that the instructors have access to this input and thus work it into their presentations accordingly. In respect of the content of the presentations, this of course demands certain flexibility on the part of the instructors but at the same time can also provide them with valuable knowledge.

In addition to the keynote lectures, the RF also offered two sessions each with three parallel workshops. These were also presented in a video in the introductory phase. Especially when offers run parallel it is very valuable for participants if they are able to deal with the themes more intensively in advance. Of course here too, it was possible for the participants to ask specific questions or contribute thoughts directly on video. From the viewpoint of the organizers and those holding the workshops, this is a very efficient way of working. As well as information transfer, the participants can also be asked to register right away for one of the workshops as this for example, makes room planning much easier. Through feedback the workshop leaders can also be better prepared for their students. Further, the workshops can be arranged on a much more practical basis if the introduction to the theoretical background has already taken place online.

From a marketing viewpoint, this way of working means especially that the program is oriented ideally to the needs of those taking part and the positive feelings incurred in this way are passed on to third parties.

Physical Event (27th Jan. 2018): On 08.04.2018 all the participants of the first German Rugby Forum met at the Hanover location of the State Sports Federation of Lower Saxony. This meeting, however, did not have the same character as a classic congress or conference. At a Blended Conference those taking part all know one another beforehand from their online profiles in the online environment. The exchange of a profile photo and short description of activities carried out at which club or organization is helpful not only during the online time but also means that in the face-to-face event the participants quickly start up conversations together, even though they did not know each other before. The quick connection with the group usually leads to a relaxed atmosphere but at the same time motivational and with positive effects for taking in further information (Greder-Specht 2009).

Through the information transfer during the introductory online phase the participants are well prepared when they come to the presence meeting and this

state of preparation leads to greater activation in respect of the day's program. Moreover, the participants are interested to find out how their own feedback on the lectures and workshops has been received and integrated by the instructors. The moment in which those taking part recognize the added value of the introductory online phase shows the way of everything that can be implemented in future in this organization in Blended Learning format. It begins when in their lectures and workshops the instructors incorporate the input received from the students during the online phase in the form of video commentaries. The message "You can co-design, you play an important role and we value your expertise" is totally effective at this point and leads to even greater activation amongst the recipients. Moreover, the common state of knowledge generated through the preparatory information in the group enables a substantially more in-depth analysis of the subject matter. This is equally valuable to both instructors and participants. For the participants this means that the exchange has already begun at a significantly higher level although the composition of the group taking part is possibly rather diverse. This was also the case at RF. The program was therefore accordingly also wide-ranging in themes.

Each of the six keynote lectures was recorded on video and subsequently entered online. This type of documentation has numerous benefits not only for the participants and instructors but also for those people who despite their registration were not able to take part. Instructors benefit from the possibilities for reflecting on their own performance, which also "pays into" their personal quality development. For participants the recording is a valuable and long-lasting source of information and anyone who was unfortunately not able to take part in person in this way nevertheless has the opportunity to assimilate the input. Generally the documentation of individual program points on video is a central feature of the Blended Conference format. Only continuous documentation and critical reflection of the contents from various perspectives lead to the further development of the themes. In addition, this also leads little by little to the establishment of a new form of communication and culture of quality.

During the face-to-face meeting of the Blended Conference there is also a focus on interaction amongst the learners and the experts. Information, which in the form of interactive elements comes alive to the individual or in the group, results in long-lasting learning success (Lasslop et al. 2007). For this reason it is recommended that the program is designed in such a way that the theory units alternate with the practice elements. These practice elements could be implemented for example, as interactive workshops or in the form of exercises or games, which make the theme or themes of the event a physical experience. The more creative the units, the longer they remain anchored in the memory of the participants. There is also definitely no harm in practice work with humor. The better the participants feel at the event the more positive will be the judgment about the whole of the event. Moreover, "being active together" as a rule triggers a feeling of "it was worth it". The day of the personal meeting should offer the participants exactly that which is not possible during the online times: laughing together, physical activity, experience of the community in real terms. The quantity and quality of processing the messages provided at the event increase in direct proportion to the

quantity and quality of the emotional experience” (Lasslop et al. 2007). Affective constructs include emotions and moods. Drengner (2007) writes that positive emotions experienced during an event have positive effects on the overall judgment of the event.

The organizers also acknowledge the online preparation positively. The more informed the participants are, the easier it is to maintain the planned schedule. Particular for workshops there is a danger that valuable time is lost on site, for example, through a lack of orientation on the part of the attendees. With prior information about the subject matter and the questions or comments beforehand the practical sessions at the Blended Conference of the DRV were successfully planned. In the DRV program there were two workshop blocks, each with three parallel themes. Like the keynote lectures, the workshops are also recorded on video. The above-mentioned advantages resulting from documentation in this form also apply here. When the program has parallel teaching units then the decision in favor of a workshop does not mean that other elements are neglected. Thanks to the recording, the participants also have asynchronous access and can view at a different time.

Second Online Phase (28th Jan. – 28th Feb. 2018): The third and wrap-up phase of a Blended Conference again takes place entirely in the online environment. This should also comprise at least two weeks but can last up to four weeks, as shown in this example. As a rule the organizers begin to put the recordings of lectures and workshops online either during or immediately after the personal meeting. Now the energy and suspense of the presence day must be transferred to the online phase. Here the challenge should be met especially by the central figures of the event. It is in their hands by means of a motivational presentation for example, to revive discussions, which have begun at the location, or to instigate inspirational reflection through the recordings. This is a further central difference to classic event formats. The Blended Conference offers the possibility to continue talking together online and to bring lines of thought to a conclusion.

An extremely effective instrument in this phase is the assignment of small work tasks to the participants to be carried out analogous to the introductory online phase. These are helpful in revising everything learned and experienced and enables reflection from different perspectives. In the third phase the focus is also on the dimension “Inspiration”. Through the recordings, everything learned and experienced by the participants themselves stays longer in one owns memory (Bruner 2008, Barrett 2005). Mental processing can therefore be more intensive and sustainable. In this way the individual has more time to process the subject matter and its importance in respect of one owns context, thus gaining inspiration for his own implementation.

Also from the point of view of organization the wrap-up phase in the online environment especially brings added value in respect of assuring quality and for further development. Questionnaires can be processed online and the recordings of the teaching units (lectures and workshops) evaluated. Of particular value is the asynchronous and therefore delayed time factor between the actual meeting and the filling out of the survey assessment.

Depending on how good the presenters are in this online phase and to what extent the subjects of the event have motivated the recipients to active thought, in the concluding online phase there can be a very exciting effect, namely, that by means of the video commentaries the lectures and workshops are not only considered individually but further thoughts developed jointly. Moreover, here too, anyone who is unable to attend the personal meeting can nevertheless have a say.

For the step from the presence phase to the online world the organizers of the RF used the instrument "Newsmeldung" in **edubreak**[®]. In this way they remind again about the wrap-up online phase and point out specifically their own anchors for reflection in the videos, which have been incorporated by the instructors or the workshop supervisors under the framework of self-analysis. Furthermore, the DRV used the third phase of the event in order to call for a transparent feedback process for the individual event elements. Very important amongst other things of course, are also the wishes for the next RF.

At the end of the two weeks, the official end of the event was announced and the online arena was closed for further modifications. Closed in this case does not mean that participants no longer have access to the contents and resources, but only that no new material can be added. This is of great significance in the sense of long-term securement of documentation and a continuous life-long learning process.

With regard to the effect of this phase on a marketing level, what counts is the contribution to long-term influence on the public. To experience how this combination of online and presence feels, where the benefits lie and what other possibilities there are both for the individual but also for the whole group is fundamental to an internal association "advertising campaign" for a new form of educational training.

The example of the RF, which was implemented as a Blended Conference clearly demonstrates the possibilities, contained within the format from a marketing and organizational view. Point five shows an evaluation of the first results of the questionnaire. This is the questionnaire to participants in the third online phase as described above. Through input from the online phase the participants have a similar level of knowledge, such that the event for everyone involved becomes a more intensive experience and richer in content.

Findings/Results

In terms of method the approach outlined here has an explorative aim, namely to present the new design of an event format under a marketing framework and to collect first experiences in a practical context so that in a follow-up step it can be customized to the requirements in context. For this reason, at the end of the RF we started an online survey amongst the participants to discover how satisfied they were. The following overview contains the respective items and the results.

Illustration 4. Evaluation Overview

1. Overall impression of the Rugby Forum 2018?	1 - 35 % 2 - 50 % 3 - 10 % 4 - 5 % 5 - 0 %
2. How did you like the choice of topics?	1 - 25 % 2 - 50 % 3 - 20 % 4 - 5 % 5 - 0 %
3. How did you like the Landessportbund Niedersachsen as the event location?	1 - 70 % 2 - 25 % 3 - 0 % 4 - 0 % 5 - 5 %
4. How do you rate the catering?	1 - 25 % 2 - 40 % 3 - 30 % 4 - 5 % 5 - 0 %
5. How did you like the moderation?	1 - 70 % 2 - 25 % 3 - 0 % 4 - 5 % 5 - 0 %
6. What is your opinion towards value for money?	1 - 30 % 2 - 20 % 3 - 40 % 4 - 10 % 5 - 0 %
7. Especially interesting for me has been:	Event marketing - 20 % Offspring - 35 % Coaching - 20 % Digital learning - 25 %
8. In your opinion - when should the Rugby Forum take place?	Winter break - 95 % Summer break - 5% Other Date - 0 %
9. How long should the event be?	One day (Saturday) - 80 % One day (Sunday) - 0 % One and a half day (Saturday + Sunday) - 20 %
10. Additional opinions and suggestions?	Answers towards the topic "Pricing" - 18 % Answers towards the topic "Practice" - 30 % Answers towards the topic "Agenda" - 17 % Answers towards the topic "Organization" - 35 %
11. Further thoughts?	<ul style="list-style-type: none"> • "A phantastic event however the costs were quite high for just one day." • "There should me more cake", 4x • "More interaction within the workshops and the possibility to choose more than one." • "The workshops should be double the time to force interaction between participants." • "Less impulse presentation, more practice as well on the pitch if possible."

Source: DRV 2018.

Right from the start (Illustration 4) it is conspicuous that the evaluation of the Rugby Forum is extremely positive. 50% evaluate the event as grade 2 and 35% even as grade 1. This can certainly be deemed as the first very positive result but which, however, should still be regarded with caution. Drengner (2007) and Trommersdorfer (2004) write that in order to get a positive attitude towards an

event or the object of an event, then first it is necessary that several events are attended. They assume that "in the case of a one-off visit to an event there cannot yet be a long-lasting reaction in the sense of the common understanding of attitude as the result of inner learning, the relatively long-lasting readiness of an individual to react consistently positively or negatively to environmental stimuli or objects" and therefore they talk about an event evaluation.

The questionnaire shows quite clearly that the date selected by the organizers was considered ideal. 95% of persons asked were in favor that the next RF should again take place in the winter break. Further, the organizers obviously also got the duration of the personal meeting right. For the coming year too, 80% of the participants would like a one-day event.

The selection of topics also met with a positive evaluation. Even though this was not asked explicitly in the questionnaire, it can be assumed that the broad spectrum of offers led to this evaluation. The heterogeneity of the recipients is also reflected in the selection of topics, entirely in line with the saying "something for everybody".

This assumption is also confirmed by the answers to question 07: "What was particularly interesting for me?" Each of the subjects offered was evaluated at least once as "especially interesting". Overall it can also be ascertained that the keynote lectures and the workshops were both predominantly evaluated positively. If one considers the scope of the one-day program this is significant because this was calculated and the units scheduled in a very tight timeframe. Unfortunately at this point it can only be speculated as to whether the full program was so well received because the attendees were well prepared.

Also in question 07: "What was especially interesting for me?" it is clear that both the learners and the instructors found the use of the accompanying online environment to be valuable. So, for example "the interchange amongst participants outside the frame (online)" was mentioned specifically as being interesting. On the part of the instructors "the possibility as an instructor to advertise my particular theme for the workshop" was claimed to be extremely interesting and contributing to successful execution of work.

Response to the question of what wishes for improvement should be considered for the following year quickly showed quite clearly that the participants place a major focus on practical elements of the event. This makes the significance for the attendees of these interactive elements quite clear. More practical time spent and the use of time spent actively together was one of the core statements of the survey.

It is interesting that very often "the lack of cake and a further coffee break" was criticized. This seemingly insignificant detail however, shows what is important to the attendees and at the same time what they remember, namely, "enough cake".

Conclusions

Through the example of the First German Rugby Forum the concept of the new event format Blended Conference could be clearly demonstrated together with how this can be put into practice. From our point of view this new format is of particular interest for the instrument mix of education marketing as at its core is the use of state-of-the-art education technology. The “Blended” format gains in importance in particular in respect of the latest developments in the education sector of organized sports.

Extending the quality of the event arena by means of an introductory and a wrap-up online phase opens up completely new possibilities both for the organization and also and especially for the content-related design of the program and presentation of the messages. The personal involvement of the participants during the first online phase and the subsequent development of the program in orientation to their requirements has a positive effect on the attitude of the participants towards the event. This was also made clear in the evaluation of the RF. In this preliminary phase the active participation of the students increases, intensifying their willingness to participate at the face-to-face meeting and also their willingness to learn.

The evaluation of the RF questionnaire clearly shows the importance of common practical experience for the target group of sport trainers. The format Blended Conference enables the combining of theoretical background knowledge with experience in practice such that respective specific requirements are optimally met. For the next RF the organizers should bear in mind that an even greater focus should be set here. The purpose of the virtual wrap-up phase is the joint review and discussion of the video results from the presence day. We are talking about generating through this continuity a problem-solving experience in the education field both for the individual but at the same time for the community. Once the participants experience this feeling, this can be compared with the so-called “flow experience”. A flow, also known as “the zone” is a state of feelings that is used within motivation psychology (Macht 2004, Csikszentmihalyi 1992). The feedback from participants on the DRV event was very positive. Since it was carried out for the first time there are still countless improvements, which were desired especially on the part of the participants. Nevertheless the implementation of the event in Blended Format proved to be the right decision for the organizers, as is shown by this statement by one of the people taking part: “It was an inspirational event with super lectures and good possibilities to exchange views with other rugby enthusiasts. It would be great if such an event could take place again next year!” (Steve Harris, rugby trainer and instructor in Cologne).

In summary it can be said that through this event format, a low-threshold experience of the still relatively new and complex education format “Blended Learning” becomes possible. In the case of a positive experience this leads to long-lasting openness and understanding in respect of this new education format and makes the changeover process and the purchase of the appropriate technological systems probable in the education sector.

Acknowledgments

Our thanks to Peter Smutna from the DRV, who gave us access to the insights and results of the inquiry after the event. Further to Wiebke Fabinski DOSB who supported us with the newest numbers.

References

- Barett H (2005) Digital Story Telling Research Design. Retrieved from <https://bit.ly/2DmtJiQ>.
- Berger Peter L, Luckmann T (1969) *Die gesellschaftliche Konstruktion der Wirklichkeit. Eine Theorie der Wissenssoziologie* [The social construction of reality. A theory of knowledge sociology]. Frankfurt/Main: Fischer Taschenbuch Verlag.
- Bernecker M (2007) Bildungsmarketing, 3rd edition, Cologne: Johanna-Verlag 2007.
- Braun S (2014) Ehrenamtliches und freiwilliges Engagement im Sportverein. Befunde, Herausforderungen, Handlungsbedarfe [Voluntary and voluntary commitment in the sports club. Findings, challenges, needs for action]. *For the 1st Berlin Honorary Office Dialogue of the Berlin Sports and Leisure Sports Association*. Retrieved from <https://bit.ly/2PH3Gsr>.
- Bruner J (2008) *Oxford Review of Education 34(3) Teacher Education, the University, and the Schools*: Papers for Harry Judge, 287-290.
- Csikszentmihalyi M (1992) *Flow - Das Geheimnis des Glücks* [Flow - The secret of happiness]. Klett: Stuttgart.
- DOSB (2013) *Das habe ich im Sport gelernt! - Die Leistungen des Sports für lebenslanges Lernen* [I learned that in sports! - The achievements of sport for lifelong learning]. Retrieved from <https://bit.ly/2ztnkd9>.
- Drengner J (2007) State of the Art der Wirkungs und Erfolgsforschung im Eventmarketing. In Nickel O (ed). *Eventmarketing*, 135 - 147. Munich: Franz Vahlen.
- EU-Kommission der Europäischen Gemeinschaften (2000) *Arbeitsdokument der Kommissionsdienststellen, Memorandum über Lebenslanges Lernen* [Commission staff working document, Memorandum on Lifelong Learning]. Brüssel, den 30.10.2000 SEK (2000) 1832. Retrieved from <https://bit.ly/2CceFMD>.
- Greder-Specht Ch (2009) Emotionen im Lernprozess. Eine qualitative Studie zur Erkundung der Beziehung zwischen Emotionen und Wirkungseinschätzungen von Teilnehmenden einer Weiterbildung basierend auf einem entwickelten Instrument zur Abbildung emotionaler Lernverfassungen [Emotions in the learning process. A qualitative study exploring the relationship between emotions and impact assessments of participants in continuing education based on a developed tool for mapping emotional learning behaviors]. In *Wissen und Lernen in Organisationen* (7). Hamburg: Dr. Krovac.
- Lasslop I, Burmann Ch, Nitschke A(2007) Erfolgsbeurteilung von Events. In *Eventmarketing*, by Oliver Nickel, 117 - 134. Munich: Franz Vahlen Verlag.
- Netzathleten (2017) *Die Basis des Sports ist das Ehrenamt – Interview mit Boris Rump* [The basis of the sport is the honorary office - interview with Boris Rump]. Retrieved from <https://bit.ly/2ANEecF>.
- Reinmann G (2011) Blended Learning in der Lehrerbildung: Didaktische Grundlagen am Beispiel der Lehrkompetenzförderung [Blended Learning in Teacher Education:

- Didactic Basics on the Example of Teaching Competence]. In *BAK Quarterly Seminar* 4 (2011). Retrieved from <https://bit.ly/2yU2WGL>.
- Schäfer-Mehdi S (2009) *Event-Marketing. Kommunikationsstrategie Konzeption und Umsetzung Dramaturgie und Inszenierung [Event marketing. Communication strategy Conception and realization Dramaturgy and staging]*. Berlin: Cornelsen.
- Schüller-Zwierlein A, Stang R (2011) Bibliotheken als Supportstrukturen für ein Lebenslanges lernen [Libraries as support structures for a lifelong learning]. In: *Rudolf Tioppel und Aiga von Tippelt (Hrsg), Handbuch Erwachsenenbildung/ Weiterbildung 5 Auflage*, 515-526. VS Verlag: Wiesbaden.
- Simonson J, Vogel C, Tesch-Römer C (2014) Freiwilliges Engagement in Deutschland Zusammenfassung zentraler Ergebnisse des Vierten Deutschen Freiwilligensurveys [Voluntary engagement in Germany Summary of key findings of the Fourth German Volunteer Survey]. Retrieved from <https://bit.ly/2umyq3E>.
- Vohle F (2009) Cognitive Tools 2.0 in Trainer Education. *International Journal of Sports Science and Coaching* 4 (4): 583-595.
- Vohle F, Reinmann G (2014) Social video learning and social change in German sports trainer education. *International Journal of Excellence in Education* 6(2): 1-11.
- Zanger C (2013) Events im Zeitalter von Social Media – Ein Überblick. In Zanger C (ed). *Events im Zeitalter von Social Media – Stand und Perspektiven der Eventforschung*. Springer Gabler: Wiesbaden: 2013.
- Zanger C (2007) Eventmarketing als Kommunikationsinstrument - Entwicklungsstand in Wissenschaft und Praxis [Event marketing as a communication tool - state of development in science and practice]. Publisher: Oliver Nickel. Munich: Franz Vahlen.
- Zanger C, Sistenich F (1996) Eventmarketing- Bestandsaufnahme, Standortbestimmung und ausgewählte theoretische Ansätze zur Erklärung eines innovativen Kommunikationsinstruments. [Event marketing inventory, positioning and selected theoretical approaches to explain an innovative communication tool]. *Marketing ZfP*, 4 (1996): 233 - 242.

Budget Constraints as Link between Sports Economics and E-Sports? An Analysis of the Development of Hamburg's Total Attendance at Professional Sports and Potential Lessons Learned for E-Sports

*By Till Wewer**

The aim of this research is to initiate a knowledge transfer from sports economics to upcoming e-sports research. Sports economics has shown, especially for the USA, that there is an overall budget constraint for leisure time activities and thus for spending not only on sports events. Therefore, an increase in stadium capacities will possibly lead to a shift from other activities, i. e. cinemas and restaurant, but not to an increase in overall spending and employment. This research tries to show this shift effect for the attendance volume at professional sports' events in Hamburg. Hamburg is an interesting case because within the reviewed decade three professional teams have vanished, two new were established and football stadium capacities were increased. The results show that especially the increase of St. Pauli's stadium capacities but as well the establishing of the basketball team Towers probably had a significant (in) direct influence on attendance at HSV Handball crowd. Furthermore, after the first teams of HSV Handball and Hamburg Freezers Ice Hockey were withdrawn from professional sports competition a massive increase in attendance to their amateur alternatives occurred. The effects on HSV football and the American football team "Huskies" would need further research. The results indicate that upcoming e-sports will have an effect on the established leisure activities, probably including traditional professional sports. Thus, further research is required to analyse the effect of upcoming e-sports upon traditional sports, but as well cinemas, restaurants and concerts, before considering subsidies for e-sports.

Keywords: *e-sports, Hamburg Sports, Public Subsidies, Sports Economics, Total Attendance*

Introduction: Linking Sports Economics and E-Sports

E-sports is a comparably new phenomenon but at the same time well recognized in the world of professional sports. It might become the next big thing in sports entertainment. E-sports might be a part of its future or even the future of professional sports entertainment. Thus, the idea of this contribution is to link - in line with the history of the International Hamburg Congress on Sports, Economy and Media - Sports Economics and E-sport research. Furthermore, the piece also

*M.A. (Public Economics, Law & Politics), Consultant (Public Sector), C/O Nordlicht Management Consultants, Germany.

seeks to initiate a knowledge transfer due to various similarities not only from an economic perspective.

For sixteen years, the International Hamburg Congress on Sports, Economy and Media has discussed different perspectives on, chances, possibilities but as well disadvantages of mega sports events. From the start, practitioners, scholars and officials discussed chances and effects of Hamburg's application for Olympia 2012. In 2015, the discussion focused on the city's application to host the games in 2024. In addition, in 2016 the question why it was rejected in a referendum was analysed with the findings showing that the public were sensitive about costs and possible negative effects, i.e. on rents (Wewer 2017, 110ff.) as the supporters had expected. The Congress 2017 moved on to the potential future of sports: E-sports. Since E-sports are a comparably new phenomenon, the idea of this contribution is to initiate a knowledge transfer from 16 years of congress history as a starting impulse for E-sports research.

Professional sports and E-sports share many similarities. Sports Economics focusses mainly on the effects of professional sports on the (local) economy. Thus, on those events that attracts many visitors, sponsors and public subsidies. For example, in case of increasing stadium capacities and its effects on mega sports events like the Olympia or the FIFA World-Cup. E-Sports is already attracting many visitors in parts of Asia (Schneider/Yin 2016), its number of fans is increasing in most western countries and might even become Olympic. Furthermore, e-sports are based on a competition similar to popular sports. However, even if someone might argue, that e-sport is no sports there is a strong link between all, not only sports events: They compete for leisure time and money. Sports Economics has shown, especially for the USA, that the budget for leisure time and spending is limited. Thus, that an in- or decrease in capacities will rather lead to a shift from one activity to another than to increase in total demand.

This analysis will briefly review the key findings and argumentation from sports economics. Afterwards, the development of the Total Attendance to professional sports teams in Hamburg between 2006 and 2016 will be analysed by descriptive statistics to outline this effect for this German case. Finally, questions for upcoming e-sports will be derived from those findings to start a knowledge transfer from sports economics and to initiate the scientific discussion about e-sports.

Public Subsidies to Professional Sports – Literature Review from Public Economics

If professional sport is discussed in public economics, it usually is all about public subsidies for building or increasing stadium capacities in favour of professional sports teams. One of the reasons is the sheer amount. In the USA and between 1994 and 2006 over 60% of the costs of building professional sports stadiums were public financed resulting in one billion dollars per years average of public subsidies (Rappaport and Wilkinson 2001, Fort 2006, Tresch 2016: 1)

For simplification, the basic assumption of public economics that a subsidy can only be economically justified if a market failure is proven. However, it is more than doubtful that professional sports or e-sports will ever be able to prove this market failure (cf. Tresch 2016). Thus, public subsidies are in most cases not economically justifiable and only a gift to the sports club or owner from a rational, economic perspective.

Unfortunately, in public it is generally assumed that the construction of the stadium and the running of the (enlarged) stadium will create additional jobs, increase aggregate spending in entertainment and the per capita income level (cf. Tresch 2016: 4). Tierney (2005) called this deep-rooted believe and over-estimation of a full stadium a “circus Maximus syndrome”. The assumption is that for increasing capacity (local) construction workers will be hired (labour game). In addition, that this will increase local spending because they spend their wages for rent, food or leisure time activities. Secondly, due to increased capacities, more people buy tickets and spend money on food and beverages (direct spending). The suppliers will order more food and drinks but as well more employees to be able to fulfil the increased demand around the match (indirect spending). Moreover, the additionally hired employee receives an income that he or she will spend in advance in the local economy (induced spending). This common public argumentation concentrates on the *impact* of the increased capacities (cf. Tresch 2016).

However, an impact analysis is an inadequate measure to justify subsidies or measure the overall effects on a local economy by a stadium construction. The adequate measure would be a cost-benefit-analysis that does not focus only on the construction but as well on what would have happened without it.

At first, any public investment in construction, in a school, street or office, would have had the same effect on the local economy (Tresch 2016, Coates and Humphrey 2000). Thus, the simple impact of building a stadium does not justify subsidies. Actually, this could even have negative effects on the economy, because infrastructure or university cannot be built at the same time as the arena is under construction due to limitations in workforce or money. Furthermore, it will most certainly not create many additional jobs. This could only occur, if construction workers were unemployed otherwise. However, this is not true nowadays. In the 21st century, skilled workers would be hired for other construction jobs instead. Thus, increasing stadium capacities does not lead to more wages for construction specialist that could possibly be spent. In conclusion, it would be rather surprising if public subsidies to construct sport arenas are able to have a possible effect on the local employment rate. Schwester (2007: 93) and Miller (2002) concluded for construction jobs “*in short (...) the effect was zero.*”

Secondary, the running of the increased or constructed stadium will not simply increase local spending, but only generate a shift. Commonly it is assumed that a new arena will lead to additional spending for tickets and beverages and this to more ordered supply and suppliers. If we attend a baseball match, we will not watch a movie in the theatre, attend a baseball match or visit an opera (cf. Leeds 2005: 402, Tresch 2016, Coates and Humphrey 2000). The time limitation is obvious. Furthermore, our budget is limited as well. Of course, it might happen

that we will spend more than planned in our leisure time, but most people will limit their budget in the next days or weeks. Thus, the additional spending for professional sports will lead to decreased spending in other sectors.

Hamilton and Kane (1997) concluded even a loss in the state-wide economy due to the construction of Baltimore Oriole Park. Coates and Humphrey (2000, 2003) concluded an overall negative, “*harmful effect*” on earnings due to stadium construction for 36 metropolitan areas over the time of 27 analysed years. “*Spending as a function of sports merely displaces other spending*” (Baade and Sanderson 1997, cf. Schweser 2007: 93). Sport spending does not have an overall, but only a “*substitution*” effect (Rosentraub 1997, Baade 1996).

The *effect* of a professional sports arena is different from the *impact*. The reason is the overall budget constraint due to time and money limitations. The reasons why this effect was shown for even more cases in the US is that it is simpler to show this effect for US sports, because in most US sports it is possible to transfer teams from town to town almost from one day to another and occurs comparably often. Or those lockouts occurred in a few cases. Lockouts are less likely in German professional sports as well as the transfer of teams to different cities, although this has happened in other sports as football due to different traditions and less big sports and therefore less possibly transferred teams. Thus, it is possible to compare spending almost without a lack in time by comparing the day before the teams has transferred or locked out with the day after. In these cases interference of other effects on spending behaviour, i.e. in the long run, are less effective.

For the US, the shift effect cannot be denied. Thus, this analysis takes a closer look, if it can as well be found for the case of Hamburg.

The Hamburg Case: Development of Hamburg’s Total Attendance in Professional Sport

In the following, it will be examined, if this shift in attendance can as well be seen in the city of Hamburg’s Total Attendance to various professional sports between 2006 and 2016. Based on the findings from US sports it shall be possible to find the same shift effect in Hamburg due to three effects within this decade. An increase in stadium capacities in football. Three teams going out of business in Handball, Ice Hockey and Volleyball. In addition, the starting of two completely new teams in Football and Basketball. Thus, the research question, in this case, shall be: Can an interconnected Budget Constraint be derived from the Total Attendance to Professional Sports Teams in Hamburg between 2006 and 2016?

Research Design: Descriptive Statistics of Total Attendance

For this purpose the Total Attendance of eight professional teams from six sports from Hamburg from 2007 to 2017 is compared by descriptive statistics. The Total Attendance per season, thus, from summer to summer, is compared based on the average attendance times regular league matches. Friendly matches, relegation

(HSV football) and Cup-matches are excluded for all teams, since it is very difficult to get this data ex-ante for all the teams especially in minor interested sports.

Overview: Increased Capacity and Decreased Number of Teams?

This research aims to compare the last ten year total attendance to Hamburg's professional sports with a special focus upon the shift in recent year due to the drop out of business of one handball and one hockey team in 2015. Additionally, in the last years a new basketball and American football team were established in Hamburg and St. Pauli, the second biggest football team, increased its stadium capacity until 2015.

The biggest football (US: soccer) team in Hamburg in terms of attendance is the Hamburger Sport Verein (HSV). The team USP was the only remaining founding member of German Bundesliga (1. Division) until 2018. The team did very well until 2010 including international semi-finals (Haider 2013, 461; 469). Nevertheless, ever since, the performance of the team got worse and worse, climaxing in avoiding second league only by winning relegation matches twice. Moreover, it lost its USP final in 2018. The biggest sports stadium in Hamburg is theirs. It is the *Volksparkstadion* with a capacity of 57,000 (cf. NDR 2017). In 2009, the club announced plans to increase the capacity to 61,000 visitors (cf. Kicker 2009), but the plan was stopped due to financial and manpower limitations (cf. Abendblatt 2009), but probably as well due to a decreasing average and probably due to decreasing success.

The second biggest sports team in Hamburg in terms of attendance is St. Pauli. This football team of 2. Bundesliga, besides the season 2010/2011 for one year in Bundesliga, is worldwide known for the skull in front of two bones as their symbol. In addition, for rather homogenous, left supporters and for its active fight against commercialism and xenophobia (cf. The Guardian 2015). The stadium *Millerntor*'s capacities were increased step-by-step from 19,800 in 2009 to 29,546 in 2015 (cf. Stadium Guide 2018). Since the increase in capacity was based on expectations of additional visitors, we will have a special look on the situation at *Millerntor* and possibly interconnected demand in other sports.

The Hamburg Freezers were an Ice Hockey team in the first German division located in Hamburg from 2002-2016 (cf. Der Tagesspiegel 2016). In 2014 they made it to the semi-final of the German championship (ibid.). After the season 2015-2016 the team was taken out of business officially due to the increasing budget deficit (ibid.). For the aim of this research the Crocodiles, the second best Ice Hockey team in Hamburg, are taken into account as well. This team is an amateur team in the third German division North (cf. crocodiles-eishockey.de).

The HSV Handball played in the same indoor arena as the Freezers, which are located opposite of the HSV football stadium. The team was transferred from the city of Lübeck to Hamburg in 2002 and was only a cooperation with the classic HSV (cf. Abendblatt 2018). The team has won the German championship in 2011 and the European Champions League in 2013 (cf. Abendblatt 2016a). The cooperation with HSV was ended after the professional team was taken out of

business following the season 2015/2016 due to the permanent deficit (ibid.). The name had to be changed to Handball Sport Verein Hamburg instead of Hamburger Sport Verein Handball and the logo and the initials of the more traditional football club are not allowed to be used anymore (ibid.). To observe if this had led to a shift we will take the former second, amateur team into account as well.

Since 2014/2015 Hamburg has furthermore a second division basketball team, the Hamburg Towers (cf. Die Zeit 2014), and since 2015/2016 the Hamburg Huskies re-established first division American football in Hamburg (cf. www.gohuskies.de). We will have a special focus upon the development in Total Attendance in those teams that have been taken out of business and as well those that have been newly established.

There are many factors, which influence the total attendance to a professional sports event, i.e. economic, sociodemographic, quality and insecurity (cf. Heinemann 1995, cited from Radtke 2017: 266). For the purpose of this research, those will be left aside. They are only taken into broader account for discussing the results per season.

Research, Questions & Results: Attendance Seems to Have Shifted

In the last years, St. Pauli increased its capacity, two teams dropped out of business and two new sports appeared on the Hamburg's sports supply map. This setting should give us the chance to observe a shift that indicates an interconnected demand within total attendance in professional sports in Hamburg. From a scientific perspective the Null-hypothesis - the assumption of an interconnected demand, which shall be rejected - would be that this research will show no indications for the shift of attendance from one professional sport team to another.

Table 1. *Results: Total Attendance in Hamburg's Professional Sports 2006-2016 (per thousand)*

	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
HS V	949.7	941.3	933.0	939.1	925.6	908.4	899.6	880.1	905.3	912.9	889.8
St.P auli	302.1	314.7	379.8	358.4	414.0	394.7	411.4	482.3	416.8	498.7	499.8
Free zes	265.8	223.7	201.3	181.8	183.0	239.3	203.6	227.5	233.7	234.6	X
HS V Hnd b	136.3	147.8	167.1	176.7	181.7	176.5	147.1	150.4	113.8	108.1	54.9
Tow ers	X	X	X	X	X	X	X	X	42.6	43	45.7
Cro- codi les	X	2.3	2.6	2.6	1.7	1.7	3.7	5	6.5	6.7	45
Hus kies	X	X	X	X	X	X	X	X	X	1	1

Source: transfermarkt.de (HSV; St. Pauli), eishockeypedia.de (Freezers); dkb-handball-bundesliga.de (HSV Handball), Abendblatt 2017 (Towers), eishockey-online.com (Crocodiles), Radtke 2017, 265 (Huskies 2015/2016, estimated for 2016/2017).

Thus, this situation indicates four questions:

1. Does Hamburg's total attendance from season 2006/2007 to 2016/2017 indicate a shift of demand as an indicator for an interconnected demand?
2. Did the attendance at HSV Handball and Freezers decrease after St. Pauli stadium capacity was increased? Alternatively, after Towers and Huskies appeared?
3. Which teams seemed to have profited from the defunct of the first division Handball and Ice Hockey teams?
4. Where all supports of those teams "taken over" by other teams or is there professional sports potential left fallow?

HSV Handball: Decrease due to St. Pauli & Towers? Shift to 3rd Division!

For the development in total attendance at HSV Handball we can observe two major steps of decrease. The first in season 2012/2013 at the same time when St. Pauli increased its capacity and sold over 400,000 tickets (cf. dkb-handball-bundesliga.de/ transfermarkt.de). The total attendance decreased from around 180,000 to 150,000 per season. And this happened although HSV Handball won the European Champions League at the same season and St. Pauli's one year in Bundesliga had been two years ago (cf. transfermarkt.de). Thus, this shift cannot be explained by the success of one of the teams, HSV Handball was not able to reach the former level of support later again. The second significant decrease down too little above 100,000 occurred in the season 2014/2015. The same season that the new basketball team "Towers" appeared (cf. Die Zeit 2014). This team is doing ok, but not great and is still in the second division. Again, this cannot be explained by the success, but rather by an alternative, more interesting leisure time offer.

The last massive increase occurred when in 2016/2017 the professional team was taken out of business. The former second team became the first team in 3rd division north, which immediately led to a few attendance records in the third handball division (Abendblatt 2018). It is most likely to assume a shift here since not only a few officials, smaller sponsors, but as well older players decided to remain with the club. However, the average of attendance dropped from around 6,500 to 3,500. The team moved from the modern arena with a capacity of 13,296 to the municipal Sporthalle Hamburg with a maximum 4,144 visitors. Thus, this could partially be explained by a smaller arena, but not completely. Another shift seems to have occurred.

St. Pauli matches are sold out almost any time. Economic theory implies furthermore that an increase in its stadium capacity should have an influence on other leisure activities. The results of this analysis indicate that this might have led to a decrease in attendance for Hamburg Handball. A theoretic explanation for this could be, that HSV Handball was attended by many people who did want to attend sports, but either for coolness, financial or other reasons decided to choose something else than the biggest team HSV (football). As soon as it was possible, at

least a certain part decided to leave Handball in advance of the Millerntor-Stadium. Similar, the emergence of Towers basketball in Hamburg gave the chance to move on to the new and cool other sport, which could have led another part of the audience to shift. Furthermore, the increase in third division in Handball after the professional teams dropped out indicates, that there is still a remaining core of fans, who wants to see handball independent of the league.

Freezer: Shift to Crocodiles

It seems like a similar shift occurred in Hamburg's Ice Hockey after the Freezers dropped out of business in the same year. When the Freezers vanished, the number of season passes sold at Crocodiles increased from 17 in 2015/2016 to over 1,000 in 2016/2017 (Abendblatt 2016b). The average attendance increased from 467 to 1,783 (eishockey-online.com). Furthermore, similar a prominent player and a few smaller sponsors moved on (cf. Die Zeit 2016), which underlines the assumption that many fans that wanted to support ice hockey in their city have shifted from 1st to 3rd division.

Huskies & HSV (Football): Further Research Necessary

Until now, it seems that American football Huskies (cf. Radtke 2017: 265) was not able to profit from the vanishing of Freezers and 1st league handball. The HSV football shows a decreasing tendency (cf. transfermarkt.de) at the same time as St. Pauli increased its capacity. However, as mentioned before in the same years the HSV returned to play its cliché style of football: Horrible and worse. Thus, to derive an indication from this further research would be necessary.

Concluded Result: Interconnected Demand/Shift of Audience Heavily Indicated

This leads to the following results to the four raised questions (cf. section 3.3):

1. This analysis heavily indicates an interconnected demand for professional sports within Hamburg's professional teams within the last ten years. Thus, the null hypothesis is rejected. A shift most certainly occurred.
2. The Total Attendance of HSV Handball seems to have been influenced by the increase of St. Pauli's stadium capacity as well as the appearance of the Tower basketball team. The appearance of the Huskies, the football team, does not seem to have been influential.
3. It is most likely that the third division amateur teams in handball and ice hockey mainly profited from the disappearance of the first league teams in the same sport.
4. However, until now not all "fans" seemed to have been taken over. HSV (football) and Huskies seemed not to have profited and as well the named

amateur clubs show a significantly lower average. Further research would be needed to find out whether bars, cinemas, restaurants or other amateur sports (volleyball) or teams (Altona 93, 4th division football) have profited or if this indicates a potential for e-sports, robo-cup or dron-wars.

Lessons Learned For E-Sports: Who will be disadvantaged by the Shift of Audience?

The findings of this analysis strongly indicated the demand for Professional Sports is interconnected for the case of Hamburg 2006 to 2016. This is another argument for the economic theory of budget constraints due to limitations in time and money for a case outside of the USA. Thus, the basis of further discussion shall be that additional supply in leisure time activities will not lead to additional demand, but only to a shift.

This means for upcoming e-sports that it needs to be discussed not only from a scientific perspective in which relation e-sports are to already established entertainment, like professional sports, theatres or restaurants. This contribution aims to initiate the knowledge transfer of findings from sports economics for the e-sport discussion. Moreover, to keep in mind, that economically it is not only important who gains but as well who loses.

For the start of the discussion of economic effects, more precise the economic *impact*, of e-sports the following questions should be taken into account for further research:

If interest in e-sports will increase

- Does this lead to a shift away from established professional sports, i.e. from Formula One or Formula E (cf. Robeers in this edition), from Bundesliga to E-Bundesliga or from Olympia to E-Olympia?
- Does the shift of attendance mainly occur from other, less popular sport or lower leagues or amateur sports?
- Are other leisure time activities like cinemas, theatres or concerts? In addition, will this disadvantage small theatres (Abaton) and local shopping, since larger companies (Cinemaxx) are able to react faster due to large capacities and participate in the shift by offering e-sports shows?
- What is the effect on restaurants and wages, if e-sports are becoming more and more popular?
- What will be the effects on classic television and media?

Conclusion: Discuss Negative Effects as Well to Successfully Promote Large Events

These questions shall be taken into account if advantages and disadvantages of upcoming e-sports are discussed. In theory, these shall even be answered before it is discussed if e-sports receive public subsidies or support. The Olympic

Referendum in Hamburg 2015 and International Hamburg Congress on Sports, Economy and Media 2016 have shown that the public is much more aware of the disadvantage and those who lose as most officials were able to imagine. The findings of this contribution to the Congress 2017 indicate that the shift in demand exists not only in the USA but as well for a European setting like the case of Hamburg. A successful, additional leisure time offer, like e-sports, will lead to a decreased interest in other fields, possibly in professional sports, theatres or restaurants. The reasons are traceable to the limitations in time and money. Simplified, we cannot attend or factually watch two events at the same time. The reason is an economic budget constraint. This constraint needs to be kept in mind for the starting discussion of upcoming e-sports. An honest discussion about chances of not only e-sports cannot leave aside these negative effects if it takes place in 21st century.

References

- Baade R (1996) Professional Sports as Catalyst for Metropolitan Economic Development. *Journal of Urban Affairs*, 1-17.
- Baade R, Sanderson A (1997) The Employment Effect of Teams and Sports Facilities. In Noll R, Zimbalist A (eds) *Sports, Jobs and Taxes: The Economic Impact of Sports Teams and Stadiums*.
- Coates D, Humphreys B (2000) *The Stadium Gambit and local Economic Development, Regulation*, 15-20.
- Coates D, Humphreys B (2003) *The Effect of Professional Sports on Earnings and Employment in the Service and Retail Sector in U. S. cities, Regional Sciences and Urban Economics*, 175-198.
- Fort R (2006) *Sport Economics*, 2nd Edition. Upper Saddle River, NJ: Prentice Hall.
- Haider L (Ed) 2013. *HSV – Ein Verein, eine Stadt, immer dabei [HSV - A club, a city, always with you]*.
- Hamilton B, Kahn P (1997) Baltimores's Camden Yards Ballpark. In Noll R, Zimbalist A (eds) *Sports, obs and taxes: The Economic Impact of Sports teams and Stadiums*.
- Miller PA (2002) The Economic Impact of Sport Stadium Construction: The case of the Construction Industry in St. Louis MO. *Journal of Urban Affairs*, 159-173.
- Leeds M (2005) Sieger und Verlierer im Spiel der Stadien. Die ökonomische Bedeutung von Sportstätten in den USA [Winners and losers in the game of stadiums. The economic importance of sports facilities in the USA]. In: Marschik M, Müllner R, Spitaler G, Zinganel M (eds) *Das Stadion. Geschichte. Architektur. Politik. Ökonomie*.
- Radtke T (2017) Potenzielle Erfolgsfaktoren bei der Vermarktung der German Fottball League am Beispiel der Hamburger Huskies [Potential success factors in the marketing of the German Football League on the example of the Hamburg Huskies]. In Förster J, Hebbel-Seeger A, Horky T, Schulke HJ (eds) *Sport und Stadtentwicklung*, 260-291.
- Rappaport J, Wilkerson C (2001) What are the Benefits of Hosting a Major League Sport Franchise? *Economic Review* 2001. Kansas City Federal Reserve Bank.
- Rosentraub M (1997) *Major League Losers: The Real Cost of Sports and Who's Paying for It*. New York: Basic Books.
- Schneider F, Yin DY (1996) The dynamics of digital play in Asia. *Asiascape: Digital Asia* 2016(3): 1-2, 5-15.

- Schwester RW (2007) An Examination of the Public Good Externalities of Professional Athletic Venues: Justification for Public Financing? *Public Budgeting & Finance*, 89-109.
- Tresch RW (2016) *Example 20.3 Justifying Public Subsidies to Professional Sports Teams with Economic Impact Analysis*. Retrieved from <https://bit.ly/2Q5qsdB>.
- Tierney J (2005) The Circus Maximus Syndrome, *The New York Times*, June 11th.
- Wewer T (2017) Nimby & (N)Olympia – An Analysis of the Olympic Referendum in Hamburg 2015. In Förster J, Hebbel-Seeger, Andreas H, Thomas SHJ (eds) *Sport und Stadtentwicklung*, 110-131.

Newspaper Articles Online Sources

- Abendblatt (2009) *HSV verschiebt Stadionausbau mangels Geld und Personal*. Retrieved from <https://bit.ly/2BfidDt>. [Accessed 21 October 2018, cited as Abendblatt 2009].
- Abendblatt (2016a) *Der Aufstieg und der Fall der HSV-Handballer*. Retrieved from <https://bit.ly/2A43YQ9>. [Accessed 21 October 2018, cited as Abendblatt 2016].
- Abendblatt (2016b) *Crocodiles starten in neue Ära*. Retrieved from <https://bit.ly/2FwPhvb>. [Accessed 28 October 2018].
- Abendblatt (2017) *Wer sind die Zuschauer der Hamburg Towers?* Retrieved from <https://bit.ly/2BgaBka>. [Accessed 28 October 2018].
- Abendblatt (2018) *Handball Sport Verein Hamburg: Aufgerichtet aus den Ruinen* Retrieved from <https://bit.ly/2BgxfJb>. [Accessed 21 October 2018].
- Der Tagesspiegel (2016) *Hamburg Freezers - Ende eines Abenteuers?* Retrieved from <https://bit.ly/2Bgu18P>. [Accessed 21 October 2018].
- Die Zeit (2014) *Ball her*. Retrieved from <https://bit.ly/2Fs2u8w>. [Accessed 21 October 2018].
- Die Zeit (2016) *Die Krokodile greifen an*. <https://bit.ly/2A3FXca>. [Accessed 28 October 2018].
- Kicker (2009) *HSV baut Stadion aus*. Retrieved from <https://bit.ly/2QSLWaJ>. [Accessed 21 October 2018].
- NDR (2017) *Volksparkstadion: Geliebt wird nur der Name*. Retrieved from <https://bit.ly/2Q6X8U6>. [Accessed 21.10.2018]
- The Guardian (2015) *St Pauli: the club that stands for all the right things ... except winning* <https://bit.ly/2Fs91Qf>. [Accessed 21 October 2018].
- The Stadiumguide. *Millerntor-Stadion* (2018) Retrieved from <https://bit.ly/2Kfjrlb>. [Accessed 21 October 2018].

Sources for Total Attendance in Hamburg's Professional Sports 2006-2016

transfermarkt.de (HSV; St. Pauli), eishockeypedia.de (Freezers); dkb-handball-bundesliga.de (HSV Handball), Abendblatt (2017) (Towers), eishockey-online.com (Crocodiles), Radtke 2017, 265 (Huskies 2015/2016, estimated for 2016/2017). Please note that Total Attendance to amateur but as well professional sports is in Germany not included into statistics for example from the central bureau of statistics. Thus, additional online sources had to be taken into account.

“eSport Should be played in School”. The Project “eSchool” by DGS Dialogue Lecture

By J. Peter Lemcke*
Ina Weh†

In an interconnected, free and global world, eSport is steadily gaining momentum. Unlike Sweden, the US and Asia, Germany has so far been hesitant to declare eSport as an official sport as well as recognizing its societal benefits. The “eSchool-project” aims to bring awareness to the games potential and added value for education system, as future competitiveness in a peaceful digital community relies on education and a sportsmanlike mind-set. The DGS (Deutsche Games Schulmeisterschaft UG) Hamburg serves as an initiator to create a better understanding of eSport beyond commercial intentions. In order to give more insight into the general idea of “eSchool” J. Peter Lemcke will be holding a presentation in dialogue with Dr Ina Weh about its operative aspects, research background and prospects.

Keywords: Attribute of Play, Education, eSport, Schools Championship.

Figure 1. ESL Arena (German Schoolmasters 2017 on the Right)



Source: W. Lehnert.

*CEO, German Games School Championship DGS (U.G.), Germany.

†Teacher, Schools Consultant, Hamburg Institute for Vocational Education, Germany.

Introduction

Our kids spend so much time playing computer games – why should we offer those esports at school? There are reasons: Playing promotes the development of competences as self-confidence, the ability to orientate in difficult situations or fair play. Schools mission is to support young people to establish these competences as a premise for learning processes and to navigate in daily life. Therefore, we have to get these kids out of their insulated digital “echo-chamber” at home up on a cultural stage for familiar faces. We should integrate the passion for esports into the daily routine of education.

J. Peter Lemcke

The photographic collage you see gives an impression about the passion and force of free, globally-networked play. The particular of this picture is that it includes non-professionals: the German Games Schools Champions 2017. The final round was held during the Gamescom in Cologne, at the Cologne Polytechnic game lab. And there is no difference in cheer and enthusiasm!

This is an encouraging fact where energy and regeneration are concerned for the society that has grown out of this movement. Anyone observing esports can only notice how games have their own particular seriousness, to which generations of young people are dedicated – effortlessly and with a high degree of technical and communicative complexity. Hence this sport should be played in school too!

Complex societies have complex games. This is borne out in the genealogy of games. They are always a manifestation of their times and their mutual interaction can only cause a win-win situation for humanity. And it is an unchallenged fact that we all benefit from interaction in games and sports in everyday reality, because the reality of the game opens the door to "paradoxical interventions" in actual areas of conflict – i.e. they make it possible to approach actions from a new and unexpected perspective. This dialogue of antagonism equilibrates and opens humans to pass our daily games in a fair play – according to Arthur Schnitzler's words: "We always play – to know this is wise."

Also it's the Motto of the Deutsche Spiel museum - the German Games Museum – that I founded 1986 in Hamburg. It was the first place in the world where the public could play traditional and electronic games every day.

In 2002 I was invited by the South Korean Football Association and the Goethe Institute to exhibit my collection of historical and modern football games during the World Championship. A journalist dragged me to a full soccer stadium with 30,000 spectators, all under 25. A platform had been set up on the pitch, surrounded by TV cameras filming two players in combat for the 2002 Fifa World Championship. In all four corners of the stadium there were gigantic video split-screens, on which fans could follow every move of the games. It was just like soccer, but the spectators cheered every good move the two players made. As a spectator, player and sportsman, this impressed me.

As a convinced ambassador for cultural awareness of games it reminds me of the way soccer developed: it lost its stigma after being introduced as a school sport and issued a change of image. Nowadays all generations and cultural backgrounds are united in their enthusiasm. Therefore in 2006 I founded the first amateur championship in Germany, the German Games Schools Championship. With the support of ESL/Turtle, they are running since 2007. Over 1,200 schools from the whole of Germany have participated since then. Students register online at their own initiative. Relatives, friends - even whole schools share the thrill and cheer them up online when the games are staged. This raises the number of contacts to 4.5 million per annum. We promote to establish this non-commercial movement in the school sector to attach more values for cultural and educational aspects. We are requested for Regio-games from all over Germany, but further implementations calls for more personal aid and sponsorship.

On the other hand we still face scepticism and confrontation: particularly from the schools authorities, partly from teachers and parents, sometimes even from politicians. The main arguments to avoid esports in schools are the following:

1. Encouragement of consumer behaviour, especially triggered by war games and combat sports sectors.
2. Accompanied educational measures are lacking.
3. Influence of advertising, especially by commercial games.

For the most part it leads to the maxim: "In school at least, students should be learning something rational."

Ina Weh

And that shouldn't come as a surprise: As educators, we should create a foundation of reason and knowledge that can be measured by behaviour.

Games are not particularly suited for that purpose. Research has shown this again and again. Even cats don't catch fewer mice when they are being kept from playing. But the example of a teenager with pronounced ASS (autism) – let's call him Tom – shows what games can achieve:

Despite the optimum of individual support, he remained cut off from the outside world – he even had trouble with non-verbal communication. And because teenagers aren't prone to talk about their passion for gaming at school anyway, it only came out by coincidence that it was him who moderated online tournaments. A competence - nobody at school- would have deemed possible with Tom.

Games and normal life are two different realities that are for sure. Gaming is reality without meaning – that's the result of my empirical studies (Weh 2010). And it may be comforting to know, that because of this the respective experiences are attributed to different neurological networks of communication. But it is not senseless.

Intuitively, we already know this at school. Quite naturally, we use it for "reasonable" learning because it recharges the battery with energy, confidence and

curiosity. In other words, always when blockades need to be overcome and when interest for a new subject needs to be piqued, when we need to build a team or simply when the students need to wake up.

At its core, gaming as a method is an absurd polarisation. But it causes a strong experience of difference (Bette 2011). And that's what gets the neurological system going. There are many methods: distorted norms, changing roles, riddles or artificial resistance. Always with the promise of liberty of everyone that pressing the reset button at the end. This way, one can reinvent oneself, continue down along paths previously thought of, stare into the abyss, and laugh about fear and failure. Sports competitions are so popular because they strongly stimulate our system of rewards (Waelti et al. 2001).

The effect of this on education could be summarised with Francis Scott Fitzgerald:

“Intelligence is the ability to hold two opposed ideas in mind at the same time and still retain the ability to function.”

A further result of my study shows that people with a lot of gaming experience are able to assess themselves and their environment better. (Weh 2010) Right now we are trying to assess exactly that in the eSchool-project with regards to emotional competence and there is a clear tendency for an increased tolerance range in those who play. The result of a study by the Max-Planck-Institute supports it: Especially video gaming causes increases in the brain regions responsible for spatial orientation, memory formation and strategic planning (Kühn et al. 2013).

In any case, teenagers like Tom use the different reality to experience their hidden strengths. It is a place where they can hold their own. They experience self-efficacy which sets off constructive learning processes.

Now we increasingly find the important opposing ideas in global digital networks. Instinctively, teenagers thus look for the right challenge. But many online games can lead to a problem: The challenge rises over a long period of time and with high frequency. Particularly during the sensitive phase of their youth, players can get hooked by motivation and can no longer find the reset button. In these cases, it's important that the teenagers have an environment in which they feel understood and where their potential is recognised. They need the prospect of alternative success in the other reality and sensitive guidance for a transfer into that other reality – a responsible education, in other words.

There are certainly several reasons why schools are reluctant when it comes to digital games - despite calls for the inclusion of teenagers' living environment: uncertainty due to discussions about “shoot 'em up” games, parental concerns because the children already spend so much time in front of the computer at home, and our insufficient know-how.

Most of our colleagues don't even know what esports is.

J. Peter Lemcke

Facing this we raised a documentation competition at first step together with the Stiftung Digitale Spielkultur (the foundation for digital games as leisure sports). Students can document the process of play: their training and communication about esports with teachers, parents and friends. It targets to make esports more acquainted and demount scepticisms from teachers, parents and specific members of public authorities.

For the DGS, however, it was evident that we have to establish direct contact with the schools, also in order to support those children who aim at playing in teams at school. That's the reason why we set up the PlayeS Regio Championship.

Its first events took place in 2016 in Duisburg – supported by the local youth welfare services there - and in Hamburg together with the BMK (college for media and communications) under patronage of the HIBB (Hamburger Institut für Berufliche Bildung). Both types of championship cause intensive work. But meanwhile the teachers at BMK offer suggestions and ideas, how students could take an active part in the management of PlayeS Regio Championship:

- Developing a brand concept and marketing action as marketing communicators
- Concerning for corporate web and print design, video documentation of events as media designers (both digital and print),
- Systematic evaluations as qualified market or social researchers - for instance relating to levels of awareness for the DGS
- Organising public relations and events at schools, as media agents and media assistants

This framework enables students at school to try out and discover which intrinsic skills they got and might use later for a successful working life. For Gee they become "pro-ams".

Pro-ams are amateurs becoming experts via developing a passion for a certain object (Gee 2008). This knowledge goes deep rather than wide. They are pooling their skills and knowledge with other pro-ams to accomplish bigger or better tasks or to solve larger problems. If society wants to participate from these expertises pro-ams need an entry to the everyday world and their arising challenges. If schools offer an interface for communication between games and everyday – challenges they prepare a ground that can lead to responsible solutions in professional fields.

Ina Weh

Scientists also warn of the following: without challenges, human beings and societies will perish. Societies that gain their strength in diversity, that strive for peaceful coexistence, need internal alternatives as a kind of incubator for new development. The chaotic nature of games especially teaches how to cope with

rearrangement. The more experiences we have available in our neuronal network, the easier it is for our mind to rearrange and manage these changes. So it is less about performance, but rather about competence and resilience. It can be regarded as a root system of perceptions that frees us of other judgements, enables us to learn and grounds us in the face of irritations.

Esport as a part in schools curriculum offers suitable challenges even for those students, who are not that much successful in schools daily life. As we don't know today what will be needed tomorrow, it is important that both worlds remain in contact and in balance with each other.

Peter Lemcke

I would like to make a final, personal comment on violence in computer-games:

Many people are still haunted by an idealistic notion of games – one that is prone to ignore their cruel sides – or disregard them altogether.

In 1945, when I was a young boy, I became an opponent of war while playing with disposed ore concealed weapons by the German Army. We taught ourselves how to handle them, learning in practice how dangerous they really were. At that time, one village gang warned the other not to go into the woods if they were going to practice firing at night. Facing the risk, and uncertainty we learned to value certainty and reliability. Computer games generate similar effects.

I am a follower of Brian Sutton Smith, the American anthropologist and obvious most respected play researcher in the last decades. I invited him to Germany several times and we became friends. He calls these characteristics "dark play". And in his "conflict-enculturation hypothesis" (Sutton-Smith 1997) he calls to learn to deal with conflict by playing through antitheses: clashes between order and anarchy, proximity and avoidance, success and failure. These basic conflicts are insoluble in our daily lives, but within the game framework of games, they can be remodelled through dynamic interaction. It is Brian's conviction that humans have to create artificial enemies to detect and set up limits – an essential requirement to defend within the scope of the new person they have to become.

Summary

We stated in this article reasons from two perspectives, why esport can help schools to fulfill their mission. We have to realize: The fascination of young people with esport won't go away. There is no alternative offer for teenagers with an equal amount of challenge, thrill and fascination. On the other hand, we see an open minded next generation of teachers for esport. Digital gaming is part of their lives. They will integrate esport quite naturally in their curriculum for a benefit of

education. It would be wise to use of this energetic potential now and steer it towards an update of our schools.

References

- Bette KH (2011) Sportsoziologische Aufklärung – Studien zum Sport der modernen Gesellschaft [Sports Sociological Enlightenment - studies on the sport of modern society]. *Transcript Bielefeld*, 90.
- Gee JP (2008) Cats and Portals – Video games, Learning, and Play. In Dyson P (ed): *American Journal of Play* 1(2): 229-243.
- Sutton-Smith B (1997) *The ambiguity of play*. Cambridge, Mass.: Harvard University Press.
- Weh I (2010) Limitierte symbolische Generalisierungen als Kennzeichen des Spiels [Limited symbolic generalizations as a hallmark of the game]. *Quqosa TU Chemnitz*.
- Kühn S, Gleich T, Lorenz RC, Lindenberger U, Gallinat J (2013) *Playing Super Mario induces structural brain plasticity: Grey matter changes resulting from training with a commercial video game. Molecular Psychiatry*. Advance online publication. Doi=10.1038/mp.2013.120. Retrieved from <https://go.nature.com/2DG5dJF>.
- Waelti P, Dickinson A, Schultz W (2001) Dopamine responses comply with basic assumptions of formal learning theory. *Nature* 412(6842): 43-48.

Towards an Understanding of Side-Lining Environmental Sustainability in Formula E: Traditional Values and the Emergence of eSports

By Timothy Robeers^{}
Hilde Van Den Bulck[†]*

The electric racing series of Formula E is the motor sport's governing body's latest initiative to promote and generate more sustainable transport. The question remains however if its attempt to go "green" is simply a smokescreen for yet another commodity spectacle. By means of a mixed method approach, this study investigates the self-representation of Formula E in relation to environmental sustainability and factors of commodification. Results suggest that Formula E makes use of marketing and educational advantages that come with adopting an environmentally sustainable approach to motor sport. Although this means Formula E does not escape the grasp of commodification, much like Formula One, it also implies that, probably for the first time ever, motor sport has taken a significant initiative to become more environmentally and socially sustainable.

Keywords: *Commodification, Environmental Sustainability, Formula E, Mixed Method Analysis, Political Economy, Representation*

Introduction: Motor Sport Meets Environmental Sustainability

Environmental sustainability (hereafter: ES), described in the United Nations' Brundtland report as developments that meet the needs of the present whilst ensuring future generations meet theirs (United Nations 1988), for several decades has been high on the agenda of governments, international and social-profit organizations and industries alike, including those related to the motoring industry. As such, the Fédération Internationale de l'Automobile (FIA), which functions as motor sport's governing body, puts great emphasis on its efforts to monitor and improve the environmental, socio-economic and safety aspects of motor sport and motoring in general (Dingle 2009). Besides actively participating in the United Nation's Sustainable Development Agenda and in the ongoing global debate on climate change, where it cooperates with the Global Fuel Economy Initiative, the FIA makes use of its connections with motor sport to help promote its environmental campaigns. Examples include the "FIA Action for Environment" and the "Make Cars Green Campaign" whereby Formula One drivers endorsed the latter campaign generating worldwide exposure (Fédération Internationale de l'Automobile 2016). This can be considered a significant development in the attitude of motor sport regarding its relationship with the natural environment. It

^{*}Research Member of Staff (Bap) and Phd Student, Research Group: Media, Policy and Culture (Mpc) and Department of Communication Sciences, University of Antwerp, Belgium.

[†]Professor and Head of Communication, Drexel University, USA.

acknowledges motor sport's need to manage and market itself as sustainable, in line with the wider acceptance of changed environmental circumstances globally (Dingle 2009).

A key step in this regard is the FIA's part in developing Formula E, a fully electric racing series which is meant to serve as a platform for research and development, education and promotion of more environmentally and socially sustainable modes of transport (Formula E 2015). Formula E is an annual, single seater racing series taking place in various cities around the world, involving big name drivers and teams. The electric nature of the cars means lower noise levels and carbon dioxide emissions, allowing races to take place on temporary city center circuits and audiences of all ages to attend races and (potentially) learn about the future and benefits of electric cars. However, as a new concept, what Formula E brings in innovation, it also brings in uncertainty. Indeed, ES has not been part of fan values traditionally associated with motor racing (Roy et al. 2010). This creates considerable challenges for Formula E to establish itself both as a relevant and (commercially and otherwise) successful motor sport series and as an example of ES in motor sport. This article aims to understand how the organization of Formula E has chosen to represent itself in relation to ES by means of an analysis of its self-representation on its official website. To this end, it first establishes a theoretical framework, combining insights from both a marketing and a political economy approach to corporate social responsibility (hereafter: CSR) and ES in general and in motor sport in particular. It further develops a framework to understand self-representation. Next, it operationalizes the main and sub-research questions by determining the sample for which a mixed method approach is designed, after which the findings are presented and discussed.

Environmental Sustainability and Corporate Social Responsibility

Environmental sustainability (ES) has become an integral part of corporate social responsibility (CSR), yet due to the significant academic interest and the variety of theories, for example the triple bottom line approach and stakeholder theory, on the topic, no exclusive definition exists. The European Commission (2011) defines it as:

The responsibility of enterprises for their impacts on society [...] enterprises should [...] have a process in place to integrate social, environmental, ethical human rights and consumer concerns into their business operations and core strategy in close cooperation with their stakeholders.

Another definition by Mohr et al. (2001) considers ES to be the initiative to minimize or eliminate harmful effects on society with the aim to create long term sustainability in businesses and communities (Mohr et al. 2001). In a study on CSR practices by multinational corporations, research has revealed that almost all companies provide an environmental policy and around 80% provides

environmental reporting (Karlsen 2011). Particularly the latter is relatively easily exercised and allows corporations to enhance their image (Karlsen 2011).

This growing emphasis on ES is driven both by the possibility of creating new markets through ES and, institutionally, by government policies and regulation (Trendafilova et al. 2013). The growing relevance of ES extends to sport that, according to Smith and Westerbeek (2004), is becoming increasingly “green” by adopting ES in CSR strategies. They identify two main reasons: firstly, motor- and other types of sport are responsible for environmental damage and are therefore unavoidably “being called to ransom by the community at large” (Smith and Westerbeek 2004: 138). Secondly, it is clear that “industries and governments have come to understand the marketing and education potential of green sport” (Smith and Westerbeek 2004: 138). Adopting ES in CSR provides sport with certain advantages. Not only does it satisfy stakeholders, it can generate brand and image enhancement, and (thus) bring in new fans. More so, it reduces the carbon footprint of the sport and its associated activities, and helps raise environmental awareness with a broad audience. Such associations that accompany the adoption of ES in CSR are representative of what is known as “green marketing” (Cox 2012: 286).

Today, marketing motor sport involves considering how to make the sport genuinely sustainable in terms of the environment and, in some cases, to make ES the core ethos (Dingle 2009). As such, ways in which motor sport organizations embrace and enact environmental CSR range from rather limited activities such as planting trees or encouraging public transportation to more substantial initiatives such as engaging in long term partnerships with environmentally minded businesses or opting for solar and/or wind power (Trendafilova et al. 2013: 299). Yet, in the case of Formula One, research (Karlsen 2011) has shown that the brand has become so popular and well established that it has no need to take CSR and ES very seriously. Another study by Fairley et al. (2011) looked into ES as part of the 2008 Australian Formula One Grand Prix’s triple bottom line, the latter referring to organizations and their need to consider socio-economic and environmental impact of their business practices. Yet, the study did not include to what extent the organization of Formula One undertook (marketing) measures to improve sustainability and enhance its image. Such a lack of academic focus on ES within the sport as a whole exists, at least in part, because efforts to improve sustainability in motor sport are rare. Yet, one other example of a motor sport series worth mentioning is the WEC (World Endurance Championship) which includes the 24 hours of Le Mans race and encourages the development and use of hybrid technology for endurance racing. Regarding Formula E, however, the relationship to ES in CSR seems more self-evident, given that it is presented as a platform for understanding and promotion of electric motoring as a more environmentally and socially sustainable mode of transport (cf. supra). Consequently, this article aims to provide an answer to the question *how and to what extent Formula E presents itself first and foremost as an example of ES in motor sport*.

A More Critical View on Environmental Sustainability Marketing Strategies

ES and wider CSR are part of the marketing of motor sport, yet it has also attracted interest from a political economy perspective that positions these strategies and their relationship to motor sport within “power relations, that mutually constitutes the production, distribution and consumption of resources” (Mosco 2009: 25). An earlier study into motor sport and ES is Hassan and O’Kane’s (2011) analysis of the Paris to Dakar Rally and its impact on the development of ES as part of CSR within auto sport. They found that the Rally’s environmental CSR project, aimed at supporting local African communities in the countries the rally visited was depicted by some as a smokescreen, meant to divert criticism of possible dangers or lack of ES away from the Rally. This more critical approach suggests a certain practice of “greenwashing”, a form of misleading information released by an organization with the aim of presenting itself as having an environmentally sustainable public image (Cox 2012: 286). Like the Paris Dakar Rally and Formula One, corporations invoke ideals to describe themselves as morally legitimate, when mainly pursuing economic self-interest. As such, greenwashing is not just a form of misleading information released by an organization with the aim of presenting itself as having an environmentally sustainable public image (Cox 2012: 286). As Miller (2016) reveals in his study on greenwashing practices in Formula One and FIFA, greenwashing can be a sporting organization’s way of combining a set of goals, namely a quest for profit unhampered by regulation, the aim to be morally legitimate and an urge to meddle in everyday life. Based on this, this article aims to provide an answer to the question *if and to what extent ES as part of CSR of Formula E can be considered a form of greenwashing*. Such greenwashing has been shown in wider contexts to be related to commercialization or the socio-economic process of transforming a sport into a business (Sturm 2011) as well as commodification or process by which goods and services with high use value are transformed into marketable products as commodities (Mosco 2009). With respect to the latter, in motor sport this ranges from clothes ware to larger paraphernalia and even drivers as consumer objects (Sturm 2011). Indeed, commodification is also known to extend to the environment, to environmental sustainability and derivatives such as ecotourism and, indeed, professional sport (Dorsey et al. 2004). Furthermore, the promotion of commodity consumption as environmentally sustainable is known to be associated with greenwashing (Cox and Pezzullo 2015). Another question this article aims to provide an answer to is *how and to what extent Formula E contributes to the commodification of ES*.

Factors of Commodification in Motor Sport

Professional sport has a long history of producing commodities such as live events in order to generate revenue (Dart 2014). As such, Formula One - as the pinnacle of motor racing – has been shown to function as a well-oiled homogenous global commodity spectacle (see e.g. Sturm 2014). It does so,

according to Sturm (2014) by using commodified objects or factors such as celebrities and glamorous lifestyles that are aimed specifically at mass consumption and that can be easily reproduced. Cox (2012) suggests two more factors of commodification, i.e. games and advertisements.

The newly established Formula E and its relationship to ES becomes of particular interest as it begs the next question this article will aim to answer, namely *how the commodified factors often associated with motor sport in general relate to (i.e. shape and affect and/or are affected and shaped by) ES in Formula E*. We therefore address each of the factors, namely glamour, celebrities, gamification and advertisements and their relation to ES in motor sport.

Glamour

This commodified factor in motor sport has been traced back to key components such as “fast cars, expensive kit, global jet-setting and beautiful women with spray-on smiles” that function as trophies and adornments (Turner 2005: 205, Sturm 2014). Despite being firmly rooted in top end motor sport series such as Formula One, commodification through glamour and its subsequent components is not in itself associated with an ES approach, as the latter has long been seen to restrict motor sport values such as speed of racing and the reputation of the series (Roy et al. 2010). This begs the following question this article aims to provide an answer to which is *if and how Formula E bridges the seemingly opposing values of glamour in motor sport with those of ES, and whether it thus contributes to the commodification of ES*.

Celebrities

Celebrities are considered as hyper-commodities: at the same time vehicles for the presentation of commodities and a tradable commodity themselves (Rojek 2006). Yet, since the turn of the century, they increasingly perform functions as endorsers of social and environmental causes, so much so that it has now become part of a celebrity’s job description (Lester 2010, Cox 2012, Panis and Van den Bulck 2014). This celebrity engagement extends to issues regarding the environment, from celebrities such as Keira Knightley driving ES cars to celebrity activists such as Leonardo DiCaprio addressing politicians at environmental world summits. Consequently companies have integrated celebrities in their media strategy for the implementation of environmental CSR as a means to strengthen and mobilize support (Lester 2010). Consequently, this article aims to provide an answer to the question *how and to what extent Formula E employs celebrities in the promotion of its ES project*.

Gamification

Crabbe and Brown (2004) confirm that it is of vital importance to maintain the ability to sell sports as an authentic or nostalgic (viewing) experience for audiences. On the other hand, it is becoming increasingly imperative for both

(motor) sporting organizations and media alike to be on top of emerging popular trends. One such emerging trend in (motor) sport can be found in the world of competitive video gaming, namely eSports or more specifically “games that resemble conventional sports insofar as they have superstars, [...], fans, uniforms, comeback and upsets. [...] But all the action in [eSports] occurs online, and the contestants hardly move” (Segal 2014, para. 6.). As such, Formula E has embraced eSports to allow (amateur) audiences to connect and engage with the sport more closely than ever before. For example, it has achieved this for the first time in 2017 through setting up a virtual championship alongside the ‘real world’ Formula E championship whereby amateur and professional gamers can compete for what was at that time the largest ever eSports prize pot totalling one million dollars (Formula E 2015). Subsequently, the final eRace in Las Vegas generated extensive additional media coverage for Formula E through both mainstream news media channels as well as the popular online eSports broadcasting channel twitch.tv (Formula E 2015). The application of such games is commonly referred to as gamification. Beyond eSports, gamification can also use existing elements such as a website or other non-game context, and introduces game design elements with an aim to motivate participation and engagement, thus adding value to an organization (Deterding et al. 2011). Robert Cox (2012) reveals that, although the technique was initially used exclusively for commercial marketing purposes, gamification is increasingly used in environmental interests with the concept being ideally suited for people to join in environmental actions to the extent that it now even carries value as a commodity. He goes on to say that the internet and social media are the tools used most often in environmental gamifying, such as for example Carbonrally.com, a challenge where users team up, compete and interact via twitter to save the most energy and reduce the impact of climate change (Cox 2012). In the case of Carbonrally.com, the commodification of ES consequently brings with it an educational effect on users. This raises another question this article will aim to answer, namely *if the gamification of ES in Formula E leads to the commodification of ES or whether it also serves an educational purpose.*

Advertising

A final factor often associated with the commodification of ES is advertising (Van Couvering 2004). Particularly advertisements featuring ES elements, known as “green advertising”, have become part and parcel of the communication strategy related to CSR and can be seen in advertising for a wide range of consumer goods and services. Car manufacturer GM, for example, advertised a new truck set against a forest with sunlight gleaming through accompanied by the caption “our respect for nature goes beyond just giving you an excellent view of it” and mentioned that it had made a “sizeable contribution to The Nature Conservancy” (Switzer 1997: 130, Cox 2012: 287). Such green advertising has also permeated the world of sports, including motor sport, and is often accompanied by so-called “eco” or “green” labels, display advertisements, listings, corporate logos and partner/sponsorship information denoting the ES characteristics, thus revealing the process of commodification (Corbett 2006, Cox

2012: 287). As a result, this article aims to provide an answer to the *question if and to what extent advertisements, corporate logos, and sponsorship contribute to the commodification of ES in Formula E*.

(Self-) Representation

Mass media and new media play an important role in the process of commodification throughout the economy because they represent ideal sites of commodity production (Mosco 2009). The Internet, in particular, as a channel for communication is a primary source of credible information on sustainability in general (Russo et al. 2012). In relation to (self-) representation and sporting organizations, Haase-Reed et al. (2007) state that control over the former by the latter occurs most often by means of a website as this presents one of the easiest tools for an organization to choose its own organizational identity and to market itself. Such a digital storefront further helps to circumvent potential gatekeeping functions of the media (Haase-Reed et al., 2007). What is more, websites contain both textual and visual information, including advertisements, logos and labels, and this information is crucial to understand the daily workings of an organization (Jakubowska 2011). This is of particular importance considering that representation, as a key component of the process through which meaning is created, involves “the use of language, of signs and images” (Hall et al. 2013: 1). As such, websites provide an excellent basis to study the self-representation of an organization and the role of certain key factors such as ES in this self-representation. As such, this article aims to *understand the self-representation of Formula E, the position of ES in this and the potential commodification of ES as a result hereof, by means of a (self-) representational analysis of the official website of Formula E*.

Research Set-Up

To answer these research questions, we analyzed the website of Formula E (Formula E 2015) during its inaugural season of 2014-15, in particular as it appeared online on 10 May 2015, the day after the Monaco Eprix. This particular moment was chosen because it is the only Formula E race that takes place on a track also used by Formula One, increasing potential influences from Formula One. It was assumed that in the inaugural season, the self-representation by Formula E on its website would have been carefully considered and implemented, while the inclusion of race results allowed for an insight into the nature of “regular” updates. NCapture was used to scrape all pages of the website, which also allows for text to be accessible to perform keyword searches. This sampling method resulted in a total of 201 webpages and documents.

*Quantitative Content Analysis***Table 1.** *Categories and Subcategories*

Categories For Analysis	Subcategories For Analysis		
		Theory Based	Data Based
Document ID	Number Title Location On Site Type (E.G. Editorial)	X X X X	
Banners	Top (Website Navigation: Home, News, Etc) Middle -Vertical (FE Partnerships) Bottom – Horizontal (Race Teams)	X	X X
Advertisements	Name/ Description Obvious Link With Formula E Notion Of ES Presence Audience Engagement	 X X	X X
Celebrities	Presence Identification Name Gender Nationality Industry Celebrity Talk	X X X X X X X	
Gam(E)/ Ification	Name Of Game Intended Audience Competitive Character Of Game Medium Used Sort Of Game Game Goals Game Feedback Corporate Backing Formula E Link ES Link	X X X X X X X	X X X
Goals And Objectives	ES Goals Non-ES Goals Specific Environmental Concerns Specific Environmental Objectives	X X X X	X
Images And Body Of Text	Presence Of Video Graphic Images Presence Of Editorial Image As Advert Main Image Theme Text Main Theme Similarity Main Image Theme - Text Main Theme Similarity Main Image Theme - Webpage Title	X	X X X X X
Other Remarks			

Source: Author.

To obtain a broad but systematic insight into the various aspects of the self-representation and representation of ES offered through the website, the first step of the empirical study involved a quantitative analysis. To this end, we developed a set of categories and subcategories. Inspired by ethnographic-like approaches (Gläser and Laudel 2013, see also Altheide 1996), we combined the original development of categories based on insights from the literature with an adjustment and elaboration of the instrument based on insights gained during coding of a first set of research materials. As a result, we aimed for a more systematic and analytic quantitative approach while avoiding the rigidity of a codebook developed solely on categories derived from literature (Bryman 2012). Table 1 provides an overview of the main categories and subcategories as used for the process of coding and indicates whether a (sub-) category was based on literature theory or data.

The smallest unit of analysis for text was a set of sentences that created a meaningful segment, which usually included a number of sentences but in some instances just one or two. For visual material, the smallest unit of analysis was a single image. However, when a webpage consisted of a large compilation of image-only material such as the webpages under the section “gallery”, images were analyzed in group. Advertisements were analyzed both for textual- and visual elements. After all webpages were coded, the data were entered in a matrix database to look for emerging patterns (Gläser and Laudel 2013). To ensure the validity of the coding results, 5% of the data were coded by a second coder, a random PhD student unprejudiced because unfamiliar with the research questions but briefed about and familiarized with the coding instructions and schedule. Krippendorff’s alpha (α) came down to 0.811 suggesting good intercoder reliability (Krippendorff 2004).

The Qualitative Connection: Thematic Analysis

To complement the quantitative content analysis, we applied a more qualitative, critical thematic analysis of the data, following the idea of Hall et al. (2013:158) that groups of statements are combined to create a useable language to talk about things. This allowed for a more in-depth analysis of representations, thus contributing to a better understanding of power relations (Hall et al. 2013). To this end, we returned to the primary material, i.e. the webpages, noting themes as they emerged. We identified up to three main themes for each webpage. Based on this detailed analysis, we were able to combine themes “into wider thematic categories that would represent overall segments” on the website as well as make out inter-theme relations (Bryman 2012: 581). After completing each of the two research steps, the results were compared and contrasted to create a deeper understanding of the representation of ES and the wider self-representation of Formula E on its website.

Findings

In what follows, we first describe the general layout of the webpages on the Formula E website, after which we address the result of the textual analysis and its implications, followed by a more in-depth qualitative and thematic analysis.

Webpage Layout

Figure 1 provides a generic example of a webpage on the Formula E website. The top of the webpage features a navigational banner (a) with buttons for access to the different website sections (e.g. news, results, sustainability) with the main webpage image (b) just below. Below the main image we find a text box (c) which contains the main textual content on the webpage. In addition, the section designated for textual content can also contain images and varies between webpages. On the right side of this is a section for advertisements (d) which are vertically positioned and function as links to the associated companies. These precede another vertical listing of Formula E partnered companies, (e) followed by a final, horizontal banner containing all Formula E teams (f).

Figure 1. *Formula E Webpage Example*



Source: FIA Formula E 2015

Environmental Sustainability: Goals, Concerns and Objectives

We first looked at three elements that are often associated with environmental advocacy, namely goals, objectives and concerns. Robert Cox (2012: 217) describes goals as “long term visions or values” and distinguishes them from objectives which are more detailed, immediate actions. The relevance of concerns then lies with the fact that private and individual concerns are usually translated

into more public matters on a wide range of forums and, as such, are key in shaping the environmental public sphere (Cox 2012).

Table 2. (Non-) Environmental Goals, Concerns and Objectives

ES GOALS	Website hits	ES CONCERNS	Website hits
Promoting clean energy and sustainability	14	Carbon footprint	9
Education into feasibility of electric mobility	10	Energy conservation	7
Increase the use of sustainable mobility	9	Sustainable communities	4
Initiate changing the existing image of motor sport as a polluting sport	7	ES OBJECTIVES	
Improve image of electric vehicles	7	Electric propulsion	8
Reduce carbon footprint	7	Battery improvements	7
		Awareness campaigns	4
NON-ES GOALS		NON-ES SUBCATEGORIES	
Maintaining traditional motor sport values	171	Skilled drivers	44
		Motor sport heritage	38
Continuation of the Formula One jet-set lifestyle	99	Exotic and global locations	40
		VIP guests	19
Provide information on the proceedings of the sport	93	/	/
Promote affiliated companies	50	Tire Manufacturers	13
		Car Manufacturers	10

Source: Author.

As Table 2 shows, 45 out of the 201 webpages contained a total of 90 hits, covering 20 different environmental goals. The top three hereof consisted of “promoting clean energy and sustainability” (14), “education into feasibility of electric mobility” (10), and “increase the use of sustainable mobility” (9), with fourth position being shared by three more goals, namely “initiate changing the existing image of motor sport as a polluting sport” (7), “improve image of electric vehicles” (7) and “reduce carbon footprint” (7).

To fully grasp the scope to which ES is presented on the website, we also looked at references of environmental concerns (35 hits) and suggested solutions or objectives (35 hits). The major concerns were “carbon footprint” (9), “energy conservation” (7) and “sustainable communities” (4), while the main suggested solutions included “electric propulsion” (8), “battery improvements” (7) and “awareness campaigns” (4). In line with environmental reporting as part of CSR by multinationals in (Karlsen 2011), these data thus suggest a fairly elaborate spread of these environmental parameters across the website. On the one hand, this could indicate a more genuine and profound environmental and social concern on behalf of the organization and the FIA than what has been the case in motor sport

up until now. Indeed, many of the items raised are very much in line with larger contemporary efforts in sustainable development by multinationals (UNCTAD 2010) and assists in limiting criticisms of greenwashing (Simon 1995). Of course, a more critical interpretation of these data could read such practices of significantly applying these parameters as a means for image enhancement. Karlsen's (2011) claim that the use of environmental CSR by corporations is meant to be a win-win for business and society but is mostly still profit driven applies here to a certain extent as well. Indeed, as Formula E's CEO revealed:

[...] it makes sense for everybody in their own space to do something related to sustainability and to the environment. My space is motor-racing, so that comes first and, as a consequence, I want to do motor-racing in a cleaner way. (Swithinbank 2014).

Karlsen's (2011) claim is given further credit by means of the two most common non-ES goals, namely maintaining traditional motor sport values and continuation of the Formula One jet set lifestyle.

From ES, Other Initiatives, the Future and Technical Developments to Gamification

As part of Formula E's sustainability effort, we found initiatives such as Solar IMPULSE (flying a solar powered plane around the world to promote clean technologies), Earth Day (an annual, global event emphasizing environmental protection), R100 (companies that agree to strive using 100% renewable energy), and eKarting (electric karting which expels no carbon dioxide or noise). In opting for these themes, Formula E associates its own sustainability efforts with those of others, thus legitimizing its efforts as part of a wider, contemporary and global trend. According to Corporate Watch (2006), this is often seen as corporate philanthropy because, as at least a pars of this will be stakeholder money, there needs to be a return on investment. Notwithstanding, this legitimization on the website is further linked to the theme of the future, suggesting Formula E is acting as a tool to positively add to a greener future by means of pushing the development of relevant and sustainable technologies as well as working with charities such as One Drop and Greenpower. Based on Corporate Watch's claims (2006), organizations such as, in this case, Formula E can create links with charities and causes with the aim of providing it with more market access as well as a more powerful message. More so Formula E's CSR aims strengthen its not yet full established brand identity, i.e. awareness and loyalty by appealing to customer's consciences and desires (Corporate Watch 2006: 12). For example, Formula E's cooperation with Greenpower involves stimulating future generations to get involved with sustainable engineering by erecting the Formula E school series where students build and race their electric race cars prior to Formula E races. This FE school series was also identified in the game analysis as one of five games including "Auction" (bidding on items for charity), "Prize Competition" (the best fan photograph wins), "Simulator competition" (on site Formula E race game for fans) and "Fanboost" (drivers selected by fans receive a power boost

during the race). In case of the latter, audiences can be part of the change Formula E provides by having a theoretical possibility at changing the race's outcome by voting for a driver who may then receive a power boost activation period during the race. With Fanboost and by means of providing online racing simulator championships, Formula E taps into the emerging eSports scene. Out of all five games, only two revealed to have corporate backing: "FE school series" was powered by Michelin tyres and Greenpower, a UK trust aiming to advance education in sustainable education, and the "Simulator competition" was backed by VISA. The remaining games were created and supported by Formula E itself. Importantly, only "FE school series" and "Auction" made a clear reference to ES, the former by promoting sustainable engineering and Greenpower (and the kit it provided), the latter by making reference to charitable institutions such as the Prince Albert II of Monaco Foundation which is "dedicated to the protection of the environment and the promotion of sustainable development" (Formula E 2015). The educational range of Formula E is thus significantly aimed at children.

Further analysis revealed that social goals (e.g. promote sustainable technology, support charities) and social rewards (e.g. recognition as best school team) were by far the most common and also appeared in relation to the webpage's most prominent game, Fanboost. The latter could be used exclusively online while all other games were designed for use in the real world. Only the "Prize Competition" could be "played" trans-medially, i.e. combining online usage with real world usage. The Fanboost section of the website revealed no relationship to ES and was characterized by a distinctive lack of advertisements or partner logos. This indicates an exclusive emphasis on promoting motor racing and on increasing fan involvement and, consequently, hints at commodification of audiences and labour (Mosco 2009). This is because the use of voting results affects the actual race and fan data obtained through the Fanboost login might be used for further marketing purposes. In this sense, gamification in Formula E seems to primarily carry value as a commodity, despite a (limited) educational effect in terms of ES.

Celebrities and Glamour

Celebrities are significantly represented across the website. We identified 35 ($n=35$) different celebrities featured on 25 webpages. Most prominently so were US actor Leonardo DiCaprio (8), prince Albert II of Monaco (6), US actors Adrian Brody (4) and Cuba Gooding Jr (4), Russian model Irina Shayk (4), UK socialite Lady Victoria Hervey (4) and UK sport celebrity Louise Hazel (4). The celebrities mainly originate from the domains of film, royalty, sport and business and are predominantly American (12) and British (5). This apparent Anglo-Saxon dominance corresponds to a wider tendency throughout celebrity culture (Panis and Van den Bulck 2014), yet can also be explained due to the fact that the website was scraped at a time when it focused on the (then most recent) races in the United States and Monaco. The latter also suggests the connection with Prince Albert II of Monaco. Celebrities talked primarily about Formula E and to a lesser extent about supporting ES and their own achievements in that respect. Although

each issue was raised only once, celebrities specifically pointed to climate change, green technologies and Formula E's sustainability efforts. Celebrities such as Leonardo DiCaprio and Sir Richard Branson, both stakeholders of Formula E race teams, advocated the necessity to create more sustainable motor sport. This suggests that Formula E attributes value to celebrities and uses them as a platform to further exposure of ES in Formula E:

Celebs love [electric vehicles]: George Clooney, Scarlett Johansson, Tom Hanks and Leonardo DiCaprio all own electric vehicles, just like famous car fanatic Jay Leno. [...]. The World Health Organization estimates that each year more than 70 million people die due to air pollution – electric vehicles do not produce emissions (Formula E 2015).

The characteristics of celebrities as commodities affect their subsequent environmental activism and as such influences the notion of ES (Van den Bulck 2018). The presence of celebrities further fits within the second most prominent non-ES goal, namely the “Continuation of the Formula One jet-set lifestyle”:

[...] the After-Party has delighted guests with sky bars, rooftop pools and incredible seafront villas. Featuring renowned sponsors such as Mumm, Diageo and Amura Capital together with celebrity guests such as supermodel Valeria Mazza, superstar DJ Erick Morillo [...] (Formula E 2015).

Clearly, the emphasis on glamour goes hand in hand with the presence of celebrities in Formula E's self-organizational representation.

Promotion through Sport: Advertisements, Partners and Sponsors

A final factor in relation to commodification is that of advertising. In total we found 910 display advertisements, made up of 12 different advertisements. Table 3 presents an overview of the different advertisements and their links. Each webpage featured up to five advertisements. Out of those 12 advertisements, eight advertisements were identified as originating from commercial partners with varying degrees of affiliation with Formula E and only one advertisement that referred to sustainability, i.e. DHL. The remaining four advertisements were identified as editorial advertisements of which two revealed an exclusive link to ES (Green Tips and Tip of the Day).

The category of editorial advertisements featured predominantly “Green Tips” and, to a lesser extent, “Tip of the Week” and “Change your Light”, which invited the public to consult Formula E's designated sustainability webpage containing simple and everyday efficiency- and sustainability enhancing tips and tricks. The remainder of this category involved a word cloud advertisement with the purpose of enhancing navigating the website.

Table 3. *Advertisements*

	Adverts	Web-pages	ES link	Partner link	Auto-motive link	Motor sport/ FE link	Safety Link
COMMERCIAL ADVERTISEMENTS (TOTAL: 825)	FIA Golden Rules	194		X	X		X
	Michelin Golden Rule 4	191		X	X		X
	TAG Heuer	86		X			
	Renault ZE	78		X	X		
	Michelin R&D	73		X	X		
	BMW i	70		X	X		
	Qualcomm	69		X	X	X	
	DHL	64	X	X		X	
EDITORIAL ADVERTISEMENTS (85)	Green Tips	69	X				
	Word cloud	13	X	X	X	X	X
	Tip of the Week	2	X				
	Change your Light	1	X				
TOTAL	12	910	5	9	7	3	3
MICHELIN ADVERT COMBINATION	2	264	/	X	X	/	X

Source: Author.

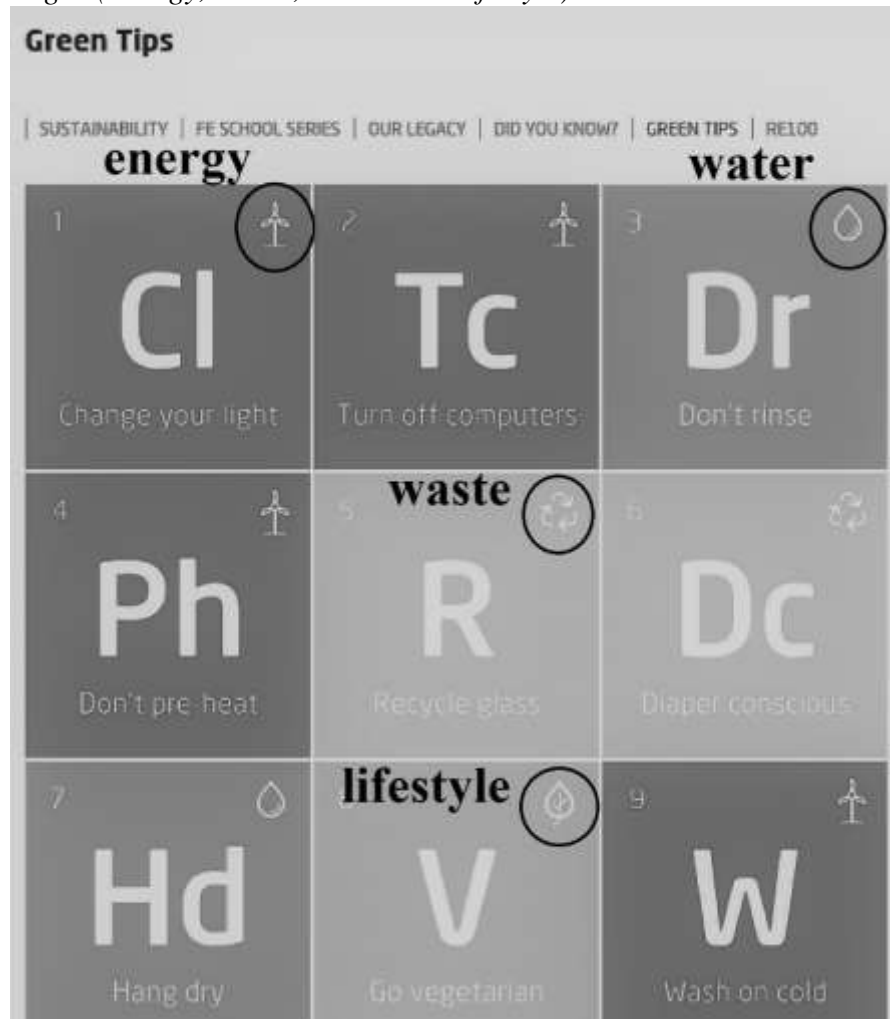
Out of all 12 advertisements, two commercial (Qualcomm and DHL) and one editorial (Word Cloud) advertisement showed an obvious link with Formula E. Five advertisements make a link with ES but only one (DHL) of these is commercial. The editorial advertisements “Green Tips”, “Tip of the Week” and “Change your Light” function as links to the sustainability webpages and exclusively featured eco labels such as “Energy”, “Water”, “Lifestyle” and “Waste” which were not part of any other editorial or commercial advertisements. Figure 2 shows some “Green Tips” with accompanying eco-labels.

The editorial advertisements featured in the same location, though less frequently, as the commercial advertisements. This dominance of commercial advertising space over ES allocated advertising space is in accordance with a main pattern of sport in general becoming an “adjunct of the advertisement industry” (Boyle and Haynes 2009: 45). The omnipresence of display advertisements, team logos and corporate/ partner logos on a vast majority of webpages further exposes the commodification of Formula E.

“Partners” operated frequently in conjunction with the theme of ES. Companies from the car industry (Renault, Dallara, BMW) to banking (Visa, Julius Bär) and green technologies (SMEG, GreenPower) appear keen to be associated with Formula E and its efforts in terms of ES, education and charity. In this sense, Formula E provides a means to communicate an organization’s environmental CSR aspirations and activities to website visitors as well as its

commitment to stakeholders (Trendafilova et al. 2013). Political support for the actions and efforts of Formula E was mostly related to the presence of a local politician or royalty such as, for example, Prince Albert II of Monaco, who showed his support for Formula E by stating that Monaco was proud to welcome the first Formula E race in Europe (Formula E 2015).

Figure 2. Partial View of the “Green Tips” Webpage with Accompanying Eco Logos (Energy, Water, Waste and Lifestyle)



Source: FIAFormulaE 2015.

Of particular interest were also the efforts by Julius Bär and TAG Heuer to convince the Swiss government to soften the ban on racing following the 1958 tragedy at Le Mans by means of the advantages associated with Formula E (Law change opens door 2015). This reflects a key element in power relations as permission is given by governments on the basis of ES and safety which, undoubtedly, holds significant promotional advantages for Switzerland as much as for Formula E.

Discussion and Conclusion

Formula E seems to, at least in part, have succeeded in presenting itself as an organization that has combined a relatively profound ES approach without compromising on values and traditions commonly associated with motor sport. It needs to be said that the emphasis does rest with the latter. This reveals that Formula E has picked up on the need for motor sport to become more sustainable whilst at the same time making use of the marketing and educational advantages that come with it, as suggested by Smith and Westerbeek (2004). In accordance with Lester's (2010) claim that environmental support from celebrities is commonly used by companies, celebrity support for Formula E's ES efforts form part of a larger marketing strategy that aims to mobilize existing support (cf. Lester 2010) as well as notify new audiences. Further, Formula E also uses celebrities to fulfill the more traditional role associated with motor sport, namely contributing to the aspect of glamour. Yet, although Formula E associates itself with glamour, it does not achieve the same level as for Formula One (Sturm 2014), which could be down to two reasons. First, as an emerging series Formula E does not yet enjoy the same level of stability, heritage or well-knownness as Formula One does. Second, this might be an intentional result by Formula E to avoid criticisms or stigmas commonly associated with Formula One, such as for example "circus" or "glamour spectacle" (Evans 2013, Sturm 2014). In any case, and as shown, the fact that Formula E links its own popularity to the sort of celebrities it attracts reveals that it does value exclusivity greatly. Consequently, this association with celebrities and glamour stimulates the commodification value of ES and is further extended by means of commercial and "green" advertising that incorporates eco labels, display advertisements and corporate logos. As we revealed, Formula E accommodated a substantial presence of commercial or corporate advertising. The reason for this is that Formula E has sacrificed its media rights revenue by making Formula E accessible free-of-charge to all broadcasters with the aim of achieving the highest level of public exposure possible (Chauhan 2015). Much as is the case for other sports that do so, and as can be witnessed from our analysis, this means that Formula E is largely driven by corporate revenue through advertising (Boyle and Haynes 2009). By adding editorial (ES) advertisements, Formula E creates two advantages. First, advertising companies are associated with ES, even if their advertisement does not incorporate an ES reference. Secondly, Formula E is able to "advertise" its own ES beyond the designated "sustainability" section on the website and, as such, present itself as a motor sport series that substantially integrates ES as a core ethos (Dingle 2009).

On the basis of our analysis we can conclude that Formula E's self-representation in terms of ES, to a certain extent, can be considered to be a form of greenwashing by not being able to realize fully what it sets out to do in the first place (Platell 2010, Miller 2016). For one, the Formula E website does not properly indicate whether the much reduced carbon footprint from race cars outweighs the extra emissions from building temporary race tracks in cities as opposed to using existing race tracks. As such, and similar to Miller's (2016) findings in relation to greenwashing in Formula One and FIFA, the total ecological

impact of Formula E was not fully considered. Where it is normally easier for businesses to spin stories rather than to significantly change resulting in environmental CSR being nothing more than a PR exercise or even a smokescreen (Karlsen 2011), it does seem that by means of external audits and action plans Formula E does aim to bring across its case more profoundly and attempts to present an image of being a catalysator for more environmentally sustainable vehicles. In that respect, and from a macro perspective on motor sport as a whole, Formula E could also be seen as a first step in profound change in motor sport governing behaviour.

Similarly, we also need to acknowledge that ES in Formula E does not escape the grasp of commodification considering Formula E is first and foremost a professional business aimed at making profit to which elements such as celebrities, glamour and gamification, most notably by tapping into eSports, contributes to in different ways and measures. At the same time, we see efforts to raise awareness in terms of ES. As our analysis revealed, the use of certain games on the website do fit an educational purpose. However, Formula E's most significant contribution in this respect remains that it, possibly for the first time ever in motor sport history, embraces ES as a major topic in its organizational identity.

As the first of its kind, this unicity of this study is that it looked specifically at the notion of ES in the self-representation of motor sport during a time in which ES has reached levels of global acknowledgement and action, both public and political in nature, never seen before. We do acknowledge the limitations in terms of generalization and exclusiveness of this particular case study, which was restricted to just a single website at one specific moment in time. Yet, we do believe this study's findings raises relevant empirical insights that allow to further the understanding of concepts such as the commodification of ES and greenwashing, especially so in motor sport. and contributes to an area of increasing academic interest. The unicity of Formula E as a field where commercial motor sport and ES crucially come together further contributes, if only for the highly likelihood that more such seemingly "unusual" collaborations might arise.

References

- Altheide DL (1996) *Qualitative Media Analysis*. Thousand Oaks, CA: Sage.
- Boyle R, Haynes R (2009) *Power Play: Sport, the Media and Popular Culture*. Edinburgh: Edinburgh University Press.
- Bryman A (2012) *Social Research Methods*. Oxford: Oxford University Press.
- Chauhan E (2015 August) Racing for pole position. *Sport Business International*, 32-39.
- Corbett JB (2006) *Communicating Nature: How We Create and Understand Environmental Messages*. Washington, DC: Island Press.
- Corporate Watch (Ed) (2006) What's wrong with corporate responsibility? *Corporate Watch Report 2006*. Oxford.
- Cox R (2012) *Environmental Communication and the Public Sphere*. London: Sage.
- Cox R, Pezzullo PC (2015) *Environmental Communication and the Public Sphere*. London: Sage.

- Crabbe T, Brown A (2004) You're not welcome anymore: the football crowd, class and social exclusion. *British Football and Social Exclusion*, 109-124.
- Dart J (2014) New media, professional sport and political economy. *Journal of Sport and Social Issues* 38(6): 528-547.
- Deterding S, Sicart M, Nacke L, O'Hara K, Dixon D (2011) Gamification. using game-design elements in non-gaming contexts. In *CHI'11 Extended Abstracts on Human Factors in Computing Systems*. ACM, 2425-2428.
- Dingle G (2009) Sustaining the race: a review of literature pertaining to the environmental sustainability of motor sport. *International Journal of Sports Marketing and Sponsorship* 11(1): 75-91.
- Dorsey E, Steeves H, Porras L (2004) Advertising ecotourism on the internet: commodifying environment and culture. *New Media & Society* 6(6): 753-779.
- European Commission (2011) *Corporate Social Responsibility: a new definition, a new agenda for action [Memo]*. Retrieved from <https://bit.ly/2SftfOY>.
- Evans CA (2013) *The Media Representation of Formula One as 'Spectacle': Constructing Sport as a Live Mediatized Event*. Doctoral Thesis. Cardiff University.
- Fairley S, Tyler B, Kellett P, D'Elia K (2011) The Formula One Australian grand prix: Exploring the triple bottom line. *Sport Management Review* 14(2): 141-152.
- Federation Internationale de l'Automobile (2016) Retrieved from <https://bit.ly/1Vrretm>. [Accessed 21 May 2016].
- Formula E (2015) *Sustainable Mobility*. [online]. Retrieved from <https://bit.ly/19B6Wpx>. [Accessed 26 November 2015].
- Gläser J, Laudel G (2013) Life with and without coding: two methods for early-stage data analysis in qualitative research aiming at causal explanations. *Forum Qualitative Sozialforschung*, 14, 2. Retrieved from <https://bit.ly/2DYG4Ka>.
- Haase-Reed A, Kushin M, Koeppel T (2007) Framing the ELF: an exploration of media representation and self-representation of a social movement organization. *Annual meeting of the NCA 93rd Annual Convention*.
- Hall S, Evans J, Nixon S (Eds) (2013) *Representation*. London: Sage Publications.
- Hassan D, and O'Kane P (2011) The great race across the Sahara: a history of the Paris to Dakar rally and its impact on the development of corporate social responsibility within motor sport. *The International Journal of the History of Sport* 28(2): 268-280.
- Jakubowska L (2001) Hermeneutic photography analysis in researching virtual self-presentation. In Jakubowska L (Ed). *Methods and Techniques of Cyberspace Research Theory and Practice*. Legnica, 87-98.
- Karlsen OA (2011) *Racing Towards Sustainability? Formula 1 and Corporate Social Responsibility*. Master's Thesis. Norwegian University of Science and Technology, Norway. Retrieved from <https://bit.ly/2ReXmG6>.
- Krippendorff K (2004) Reliability in content analysis: Some common misconceptions and Recommendations. *Human Communication Research* 30(3): 411-433.
- Law Change opens door for Formula E race in Switzerland (16 March 2015) *Autosport*. Retrieved from <https://bit.ly/2r4p1y9>.
- Lester L (2010) *Media And Environment: Conflict, Politics And The News*. Cambridge: Polity Press.
- Miller T (2016) Greenwashed sports and environmental activism: Formula 1 and FIFA. *Environmental Communication* 10(6): 719-733.
- Mohr LA, Webb DJ, Harris KE (2001) Do consumers expect companies to be socially responsible? The impact of corporate social responsibility on buying behavior. *Journal of Consumer Affairs* 35(1): 45-72.
- Mosco V (2009) *The Political Economy of Communication*. London: Sage.

- Panis K, Van den Bulck H (2014) In the footsteps of Bob and Angelina: Celebrities' diverse societal engagement and its ability to attract media coverage. *Communications* 39(1): 23-42.
- Platell L (2010) *Rethinking Communication Strategies in The Automotive Industry: The Influence of Environmental Claims on Manufacturers' Communication Strategies*. Germany, Erfurt: Lambert Academic Publishing.
- Rojek C (2006) Sports celebrity and the civilizing process. *Sport in Society* 9(4): 674-690.
- Roy DP, Goss BD, Jubenville C B (2010) Influences on event attendance decisions for stock car automobile racing fans. *International Journal of Sport Management and Marketing* 8 (1-2): 73-92.
- Russo V, Milani L, Re A, Crescentini A, Sciangula C (2012) *The sustainability and the role of the mass media: Representation, values and behaviours among consumers in Italy*. In IEPDR (Ed). Singapore: IACSIT Press, 71-77.
- Segal D (2014 October 10). *Behind League of Legends, E-Sports's Main Attraction*. *New York Times*. Retrieved from <https://nyti.ms/2PW79UX>. [Accessed 26 November 2015].
- Simon FL (1995) Global corporate philanthropy: a strategic framework. *International Marketing Review* 12(4): 20-37.
- Smith A, Westerbeek H (2004) *The Sport Business Future*. Palgrave Macmillan, Basingstoke.
- Sturm D (2014) A glamorous and high-tech global spectacle of speed: Formula One motor racing as a mediated, global and corporate spectacle. In Fletcher N, McCullough, Dashper K (Ed) *Sports Events, Society and Culture*, TRoutledge, London, 68-82.
- Sturm D (2011) Masculinities, affect and the (re) place (ment) of stardom in Formula One fan leisure practices. *Annals of Leisure Research* 14(2-3): 224-241.
- Swithinbank R (2014, July 1). Electric avenue. *The Times*. Retrieved from <https://bit.ly/2r5bl5I>. [Accessed 2 May 2015]
- Switzer J (1997) *Green Backlash: The History and Politics of The Environmental Opposition in The US*. Lynne. Rienner Publishers.
- Trendafilova S, Babiak K, Heinze K (2013). Corporate social responsibility and environmental sustainability: Why professional sport is greening the playing field. *Sport Management Review* 16(3): 298-313.
- Turner B (2005) *The Pits: The Real World of Formula One*. Atlantic Books.
- UNCTAD (2010) Investment and enterprise responsibility review. Retrieved online from: <https://bit.ly/2TMWKsP>.
- United Nations (1988) Our common future. *Brundtland Report*. Oxford University Press.
- Van Couvering E (2004, July) *New media? The political economy of Internet search engines*. Paper presented at the IAMCR. Porte Alegre, Brazil.
- Van Den Bulck H (2018) *Celebrity Philanthropy And Activism: Mediated Interventions In The Global Public Sphere*. London, UK: Routledge.

Accountable Sports Journalism: Creating a Gateway to Showcase Ethical Codes, Stylebooks, Ombudsmen and Beyond

By José Luis Rojas Torrijos*

Xavier Ramon-Vegas†

Sports journalism has been characterized by a series of ethical deficiencies that have challenged the normative standards of the profession. These widespread questionable practices include the blurring of the frontiers between journalistic genres; the pervasiveness of rumour; sensationalism; the use of warlike language; the inequalities in relation to gender, race and disability and the lack of variation in the news sources employed. All these ethical shortcomings have diminished the credibility of the professionals working in the sports journalism field. To address these ethical shortcomings, sports journalists must gain awareness of their accountability to answer for their practice to society at large. Accountability instruments can play an invaluable role in offering guidance and helping journalists and users monitor and criticize the quality of sports content. Thus far, the majority of studies on accountability have focused on the description of traditional and innovative tools but no study to date has provided a map of the existing instruments in sports journalism. To fill this gap, the objective of this investigation has been to identify and analyse the most relevant accountability instruments in sports journalism. The fieldwork consisted of monitoring the internet during a timeframe of 18 months (October 2015 – March 2017) to locate the most relevant instruments in the field. Once these were identified, the researchers proceeded to examine them using the qualitative content analysis technique. Among the instruments that have been implemented within companies, we highlight the ones produced inside the media (in-house stylebooks promoted by major sports media, recommendations for sports journalists in news agencies and general information outlets, ombudsmen and online chats), and instruments produced outside media companies (external codes, recommendations issued by key stakeholders in the world of sport, the largest publications related to media criticism, as well as several scholars' and citizens' blogs). All these instruments are compiled on the platform "Accountable Sports Journalism".

Keywords: Accountability, Ethical codes, Quality journalism, Sports Journalism, Stylebooks

Introduction

Far from traditional consideration as the “little brother” of the profession, sports journalism plays a key role in the new information ecosystem. In a changing landscape characterized by rapid technological innovations, the fierce competition

*Adjunct Professor, Universidad De Sevilla, Facultad De Comunicación, Spain.

†Visiting Lecturer, Pompeu Fabra University, Campus De La Comunicació-Poblenou, Spain.

between media, the accelerated 24/7 news cycles and the fight for the maximization of audiences (Brock 2013, Schlesinger and Doyle 2015), sports content is a key audience-driver and a pivotal asset for the financial sustainability of media organizations across the board. Beyond this commercial value, it should be borne in mind that sports journalism has great power over and a huge influence and impact on society at large. That being the case, socially responsible sports journalists who are able to distil noise from quality are indispensable and will still be essential in the future. Sports media professionals must gain awareness of their accountability to the public (Harro-Loit 2015) and counteract the widespread deficiencies that have not only challenged the normative standards of the profession but that have also eroded their credibility and status (English 2016). Those include the blurring of the frontiers between comment and facts; boosterism; the pervasiveness of speculation and rumour; the lack of investigative reporting; sensationalism; the use of warlike language; the inequalities in relation to gender, race and disability; or the lack of variation in the sources employed (Hardin et al. 2009, Horky and Stelzner 2013, Oates and Pauly 2007).

Addressing these ethical shortcomings is the only way to mitigate the long-held claims of sports journalism being a ‘toy department’ (Rowe 2007), that is, a “bastion of easy living, sloppy journalism and ‘soft’ news” (Boyle 2006: 1). The escalating pressures, the cacophony of competing voices in the current scenario and the orientation towards the market should not deter journalists from pursuing the goal of an ethical treatment of sports that ultimately links to the original public service mission of journalism in democratic societies (Singer 2013).

Accountability is “the process by which media organizations may be expected or obliged to render an account of their activities to their constituents” (Pritchard 2000: 2). As McQuail (2003: 19) highlights, “accountable communication exists where authors (originators, sources, or gatekeepers) take responsibility for the quality and consequences of their publication, orient themselves to audiences and others affected, and respond to their expectations and those of the wider society”. Traditional and innovate media accountability instruments (Bertrand 2000) can play an inestimable role in offering guidance and helping journalists and users monitor and criticize the quality of sports content.

Thus far, extensive literature has examined established accountability tools such as ethical codes and stylebooks, ombudsmen, letters to the editor media journalism (Malik 2004, Roberts 2012, Starck 2010) as well as innovate instruments such as editorial weblogs, readers’ comments, error buttons or media critique on social media (Craft et al. 2015, Eberwein et al. 2011, Fengler et al. 2014, Mauri-Ríos and Ramon-Vegas 2015).

As regards to sports communication, authors such as Horky and Stelzner (2013) have highlighted the contrast between the sports journalism field and the ethical norms and practices that should guide the profession. The authors explored problems such as the dependency on advertising; the difficulty of maintaining a critical distance; the economic and emotional constraints of sports journalists; or the scarce prominence given to issues such as doping. Other literature has examined the ethical attitudes and beliefs of sports journalists, focusing on economic problems (Salwen and Garrison 1998) and how the perceptions of

public service determine sports journalists' attitudes towards accepting gifts or establishing close relationships with sources (Hardin et al. 2009). Wulfemeyer (1985) analysed the *Ethics Guidelines* produced by the Associated Press Sports Editors (APSE) and offered guidelines in ten areas (newsgathering methods, privacy, moonlighting, freebies, gambling, special interests, self-interests and involvements, news sources, direct quotes) to promote the accountability of sports journalists. Taylor (1988) advocated: the requirement to be fair, honest and accurate; the avoidance of nationalistic and chauvinistic approaches; training in the ability to report on other issues beyond sport; and nurturing neutrality and honesty. Rojas-Torrijos (2011) even designed a stylebook intended for Pan-American sports reporters. Nevertheless, no study to date has provided a map of the existing instruments in sports journalism. To bridge this gap, this research offers a transnational exploratory overview of the major accountability instruments that have been created in sports journalism and presents an online platform (*Accountable Sports Journalism*) to disseminate the findings among media professionals, citizens and students.

Methodology

The objective of this investigation has been to compile, examine and disseminate the most relevant accountability instruments in sports journalism. The project has been developed in three different stages.

Mapping Media Accountability Instruments in Sports Journalism

The first step was to identify and analyse the most relevant accountability instruments in sports journalism. In this exploratory study, a transnational approach was pursued with the aim of locating the most relevant examples across different media systems and journalism cultures around the world. The fieldwork consisted of monitoring the internet during a timeframe of 18 months (October 2015 – March 2017) to locate the most relevant instruments in the field. Through *snowball sampling* –a chain-referral technique that is mostly conducted within qualitative research frameworks (Brickman Bhutta 2012, Bryman 2016) – the instruments were identified and progressively incorporated into the sample.

Snowball sampling is a valuable research strategy “for locating information-rich key informants or critical cases” (Patton 2002: 237) when there is an “absence of a sampling frame” (Bryman 2016: 415). This non-probabilistic procedure, introduced by Goodman (1961), consists in identifying relevant cases or initiatives that are progressively accumulated and incorporated into the sample (Noy 2008, Tracy 2013). In our research, we chose this technique to build up a consistent and useful dataset of accountability resources which were scattered in many channels and platforms. Drawing upon a small sample of instruments previously identified by academic literature, such as the Associated Press Sports Editors (APSE) *Ethics Guidelines* (Wulfemeyer 1985) and the recommendations created by the German association of sports journalists (Horky & Stelzer 2013), we pursued to discover

further media accountability instruments (MAIs) in an effort to build a broader sample. According to Eberwein et al. (2011: 20), MAIs are “any informal institution, both offline and online, performed by both media professionals and media users, which intends to monitor, comment on and criticize journalism and seeks to expose and debate problems of journalism at the individual, media routines, organizational and extra-media levels”.

Through the systematic search in academic databases (Web of Science, Scopus, Sage, Taylor & Francis Online, Communication Abstracts, Wiley Online Library, Project MUSE); search engines such as Google, Yahoo and Ask; professional websites such as the Ethical Journalism Network; media directories and lists; and websites from general information and sports media companies in different countries, we gathered a wider range of tools (stylebooks, codes, specific recommendations and blogs) that enhanced the list of existing accountability instruments in the field of sports journalism.

Once the accountability systems were identified, the researchers proceeded to examine each one of those instruments using the qualitative content analysis technique (Bryman 2016). The steps highlighted by Wimmer and Dominick (2000: 141–144) were thoroughly followed. The categories of the analysis included the following: instruments produced inside or outside of media organizations, description of the specifications for and use of the instruments, and evaluation of the mechanisms from the accountability perspective. All the detected experiences were classified and categorized.

An early version of this analysis was presented during the Pre-Conference ‘Ethics, Research and Communication: Looking Forward’ of the IAMCR (International Association of Media, Communication and Research), that was convened by the IAMCR Ethics of Society and Ethics of Communication Working Group and held at CEU Cardenal Herrera University in Valencia in 22 July 2016. The contribution was appointed as second best scientific presentation. Afterwards, the results of this first part of the research came to light in the article entitled ‘Mapping media accountability instruments in sports journalism’. The article was published by *El Profesional de la Información* in a special issue on ethics and communication released in March 2017 (<http://www.elprofesionalde lainformacion.com/contenidos/2017/mar/02.html>).

Figure 1. Screenshot of the Article Published at *El Profesional De La Información*

Source: El Profesional De La Información.

Launching the Platform “Accountable Sports Journalism”

Drawing from the findings of the abovementioned article, researchers created the platform *Accountable Sports Journalism* (<http://accountablesportsjournalism.org>) to compile the most significant instruments found online and make them readily accessible to media practitioners, scholars and students. On this site, users can find access to the instruments that have been produced inside the media (in-house stylebooks promoted by major sports media, recommendations for sports journalists in news agencies and general information outlets, ombudsmen and online chats) and to tools implemented outside media companies (external codes, recommendations issued by key stakeholders in the world of sport, the largest publications related to media criticism, as well as several scholars’ and citizens’ blogs). This platform, titled “A gateway to ethics guidelines, stylebooks, ombudsmen and beyond”, was launched in April 2017 and was presented as a **dynamic, open and flexible site**. New accountability instruments that emerge in the international context will be progressively incorporated into this toolkit. The platform is also open to by citizens and media professionals, who can collaborate by pointing out further instruments and useful resources on sports content.

Figure 2. Homepage of Accountable Sports Journalism. Through this Site, Users can easily access the Different Resources Located in the Research



Source: Accountable Sports Journalism.

Enhancement and Update of the Platform

The initial list of accountability resources on the platform is being enhanced and completed on an on-going basis. After having compiled 25 accountability instruments in April, the platform was updated in a second development stage in July 2017 by adding 17 new relevant tools in the field of sports journalism from a greater number of countries and media systems. Thus, now *Accountable Sports Journalism* brings together a sum of 42 resources stemming from 15 different countries, along with those produced by international organizations.

Figure 3. New Guidelines Incorporated into the Accountable Sports Journalism Platform Include Material from Different Countries Such as Puerto Rico and Czech Republic



Source: Accountable Sports Journalism.

Accountable Sports Journalism has been presented as a project during the IACS (International Association for Communication and Sports) 10th Summit in Phoenix, Arizona (March 30 - April 2, 2017), during the IAMCR 2017 in Cartagena de Indias, Colombia (16-20 July, 2017) and now in this Congress on Economy, Sports and Media in Hamburg (4-5 September, 2017) and in the annual

conference of the British Institute of Communication Ethics ('Sports journalism: ethical vacuum or ethical minefield?') in 27 October 2017 in London. The content of the platform was discussed with the participants in those specialized conferences, attending from many countries including the United States of America, Australia, United Kingdom, Canada, Spain, México, Argentina, and beyond. This approach allowed us to control and evaluate the quality of the resources in the platform and ensure their usefulness as accountability instruments in the field. The platform has also been disseminated through the internet and social media. Key stakeholders such as the Ethical Journalism Network (<http://ethicaljournalismnetwork.org/>) have shown their interest in collaborating and exchanging further material on this area. Going forward, the aim of the authors is to maximize the transference of knowledge by presenting *Accountable Sports Journalism* across professional associations, media organizations and higher education institutions in different countries.

Results

42 accountability instruments have been located online and uploaded into the platform through the research process. Those have been classified, as we said before, into two categories: the instruments produced within media organizations and those created outside of them.

Instruments Produced Inside Media Companies or Media Groups

Stylebooks and Guidelines Promoted by Major Sports Media

One of the fundamental accountability instruments is in-house stylebooks (also known as company editorial guidelines), which establish an implicit contract between journalists and citizens. Therefore, they are a crucial component in promoting news quality. As Fengler et al. (2014: 100) highlight, "among the traditional instruments, in-house and professional codes of ethics, as well as journalism education, are the mechanisms with the highest relevance for journalistic performance".

Only a few specialized media outlets in the field of sports journalism have in-house stylebooks: sport daily newspapers *Mundo Deportivo* (1995) and *Marca* (2013) in Spain, *Lance* in *Brazil* (2008) or the nowadays monthly magazine *El Gráfico* (2000) in Argentina (Rojas-Torrijos, 2011). One of the scarce sports outlets that has adapted its stylebook to the new environment is the digital native *Bleacher Report* (<http://bleacherreport.com/pages/styleguide>). As its creators point out, it is a "new resource for a new era: a document designed to keep pace with 24/7 news and to-the-minute information". This online stylebook provides guidance on online newswriting and includes a dictionary with more than 300 references about the world of sport.

Another American outlet concerned with accountability is *ESPN*, which has published its *Editorial Guidelines for Standards & Practices* (2010) ([357](http://edge-</p></div><div data-bbox=)

cache.deadspin.com/deadspin/editorial.pdf). As their authors note, the purpose for their editorial guidelines “is the protection of ESPN’s journalistic credibility across all platforms”. And they add: “the focus is on guidelines that, if violated, could alter the perception of our objectivity among readers, viewers and listeners”. This instrument is not focused on the use of language but rather on ethical topics and professional practices. So it tackles the following issues: transparency, commentary, general reporting and editing, sourcing, attribution, civil suits, criminal activity, corrections, media criticism, social networking, outside activity, political advocacy, presidential elections and advertising.

Grantland, a sports and culture website created by the journalist Bill Simmons in 2011 and discontinued operations in 2015, elaborated several terminological glossaries on sports like tennis, wrestling, basketball, American football or baseball (<http://grantland.com/tags/grantland-dictionary/>).

Recommendations for Sports Coverage Proposed by Agencies and General Information Outlets

News agencies and general information outlets worldwide have also proposed recommendations for sports journalists. In Europe, the *Reuters Sports Style Guide* (http://handbook.reuters.com/index.php?title=Sports_Style_Guide) is one of the key documents available. This guide offers insights into the coverage and vocabulary of six sports with a long tradition in the United Kingdom (cricket, golf, motor racing, football, tennis and winter sports). In Spain, some public broadcasting corporations have specific sections devoted to sports in their in-house handbooks: *RTVE*, Spanish public broadcasting corporation (<http://manualdeestilo.rtve.es/>); *CCMA*, the Catalan Corporation of Audiovisual Media (<http://www.ccma.cat/lilibredestil/>), and *Canal Sur*, the radio and TV corporation in Andalusia (Allas and Díaz Salgado 2004). In complying with their remit as PSBs, these institutions stress the importance of disseminating the positive values associated with sport.

Moving on to North America, the *Ethical Journalism Handbook* from *The New York Times* (2004: 40) outlines three rules (131-333) addressed to the sports desk. More precisely, it mentions that journalists should avoid gambling on sports events and serving as scorers and that they should not “accept tickets, travel expenses, meals, gifts or any other benefit from teams or promoters”. Further references to conflicts of interest are included in documents issued by US media companies such as *Los Angeles Times* (<http://latimesblogs.latimes.com/readers/2011/02/la-times-ethics-guidelines.html>) or *Minnesota Public Radio* (http://www.mpr.org/about/news_ethics). As far as sports coverage is concerned, *Los Angeles Times*, like many other news organizations, does not allow its sportswriters to participate in voting for any award or poll so as not to create possibilities for conflicts of interest, nor attend sporting events purely for private enjoyment by using their affiliation with *The Times* to gain access or to avoid paying.

Conversely, other news organizations such as the *Columbia Missourian* (2009) focus its in-house handbook on providing guidance on sports language. In a similar vein to Associated Press (“Sports guidelines and style”) (AP, 2016), this

stylebook has a section devoted to sports coverage (“Sports Style”), where some recommendations on writing (first references of team names, avoidance of clichés and other basics) are provided.

Online Ombudsmen

The role of ombudsmen is nearly non-existent in sports media outlets. The exception can be found in *ESPN*’s public editor, a pioneering post created in 2005 to ensure that the content of the network complies with its *Editorial Guidelines*. The public editor (<http://espn.go.com/blog/ombudsman>) fosters transparency and helps fans understand *ESPN*’s journalistic culture and the editorial criteria behind the content. He writes a monthly column on the website, reflecting on core aspects such as the loosening of standards with the treatment of *ESPN* Body Issue photographs, the use of sponsored content, the criteria employed by the company to select their anchors or the debates about conflict of interest. He also maintains an open forum so that users can send him questions, complaints and suggestions via email or social media about the news and the programming of the network. Afterwards, the Public Editor gives an answer to those complaints and suggestions on the website, fostering a two-way dialogue with the audiences.

Since November 2015, the public editor has been Jim Brady, former sports editor at *The Washington Post*. Previously, the post was occupied by George Solomon (2005-07), Le Anne Schreiber (2007-2008), Don Ohlmeyer (2009-2010), The Poynter Institute (2011-2012) and Robert Lipsyte (2013-2014). *ESPN* indicates that the ombudsman can be appointed for a maximum of 18 months. The existence of the *ESPN* Public Editor contrasts the situation in other major US news organizations, where this position is disappearing. *The New York Times* got rid of it in 2017 while *The Washington Post* eliminated the figure in 2013. Besides them, several other local outlets have recently decided not to hire a reader representative.

Online Chats

Online chats, which help foster live interaction between readers, editorial teams and experts, have expanded in recent years and have proved to be powerful tools for accountability purposes (Fengler et al. 2014, Mauri-Ríos and Ramon-Vegas 2015). *ESPN*’s programme Sportsnation has promoted live chats since 2008. All the live conversations can be retrieved at any time from *ESPN*’s website (<http://espn.go.com/sportsnation/chat/archive>). Three illuminating examples reveal the usefulness of these chats for discussing about editorial criteria and handling errors. First, *ESPN* football reporter Mike Reiss answered readers’ questions about journalism ethics, reflecting on why sometimes it is required to grant anonymity to sources, provided that they are “close enough to the story to really know the truth and complete context of the truth”. Second, *ESPN* SEC blogger Edward Aschoff responded to users’ concerns about how he does balance school loyalty with journalistic integrity, stating that he does not root for anyone when covering football. Third, a chat with blogger Andrea Adelson allowed her to acknowledge two factual mistakes in her reporting. Given that nowadays credibility is

constructed between journalists and audiences (Vultee 2010), this cultivation of a two-way conversation about standards and quality of sports content should be assessed very positively.

Instruments Produced Outside Media Companies or Groups

Specialized Codes in Sports Journalism

The range of external codes devoted exclusively to sports journalism is fairly limited. The most recognized document is probably the *Ethics Guidelines* promoted by the Associated Press Sports Editors (APSE). The code (<http://apsportseditors.org/apse-ethics-guidelines/>), created in 1974 and revised in 1991, is built around seven cornerstones that urge journalists to safeguard professional independence, verify information, be attentive to sources and avoid gender and race discrimination.

The Football Writers Association of America (FWAA) provides recommendations in four areas: the search for truth, minimizing harm, professional independence and accountability (<http://www.sportswriters.net/fwaa/about/ethics.html>). The ethical code of the Automobile Journalists Association of Canada (AJAC) also considers the avoidance of any conflict of interest a cornerstone (<http://www.ajac.ca/web/about/ethics.asp>). The American Auto Racing Writers & Broadcasters Association (AARWBA), dedicated to the coverage of motor sports, has also its own code. *The White Paper* (<http://www.aarwba.org/aarwbawp.htm>), created in 1981 and revised in 2006, compiles 72 guidelines in seven sections: ethical recommendations for journalists and for promoters and competitors in understanding the functions and needs of the media; facilities and special needs and considerations of the broadcast media; information services pre-race, during the race and post-event, post-race interview area; or special issues concerning photographers.

In the European context, we should highlight the *Italian Media and Sports Code* (http://ethicnet.uta.fi/italy/media_and_sports_code). Drawing from the notion of the social transcendence of sport, this code is organized in six chapters that advocate for justice, dignity and the citizens' right to receive information. Moreover, the eight guidelines promoted in 2010 by the German association of sports journalists, the *Verband Deutscher Sportjournalisten* (VDS), are noteworthy (http://www.sportjournalist.de/Ueber_uns/Leitlinien/). These recommendations emphasize the public function of sports journalism and advocate for non-discrimination. The VDS also highlights the importance of maintaining independence, respecting individuals' privacy and ensuring accuracy (Horky and Stelzer 2013).

Other specialized codes produced in Europe stem from Eastern countries: Serbian Sports Journalists Association (USNS) *Code and Sport Journalists' Club Ethics* (<http://www.usns.rs/wp-content/uploads/2016/10/Kodeks-sportskih-novina-ra-Srbije.pdf>) and *Moral Code* (Czech Republic) (<http://www.ksn.cz/o-ksn/eticky-a-moralni-kodex>). Both are short texts focused on professional ethical standards

like safeguard of independence, discipline of verification and due diligence in the use of sources.

Besides, there are some relevant ethical codes in the field of sports in Latin America: *Sports Journalists Association Ethics Code* (Puerto Rico) (<http://www.wallice.com/apdpur/reglamento.html>), *FAPED Ethics Code* from the Argentinian Federation of Sports Journalists (<https://web.archive.org/web/20160328143342/http://faped.org/estatutos.html>) and *Manual de Conduta Ética da Associação Brasileira de Cronistas Desportivos (ABCD)* (Brazil) (<http://abcdesportes.com.br/abcd/manual-de-conduta-etica-da-abcd/>). The most exotic example comes from Africa: Cameroon Association of Sports Journalists (CASJ) Code.

In 2014, the International Sports Press Association (AIPS) approved its *Code of Professional Conduct*, supervised by the veteran American sports broadcaster Jimmy Magee. The code, available in English, French and Spanish (http://www.aipsmedia.com/acopcs/AIPS_CODE_OF_PROFESSIONAL_CONDUCT_STANDARDS.pdf), provides 13 guiding principles, including the need to be knowledgeable about the law, work with honesty and integrity, provide information about potential conflicts of interest, correct errors and avoid publishing false information. In addition, professionals are reminded about their duty to update their knowledge.

General Codes of Media Ethics

In addition to specialized codes in sports, professionals can consult the website *Accountable Journalism* (<http://accountablejournalism.org/>) created by the Donald W. Reynolds Journalism Institute at the University of Missouri. The site contains more than 400 general and specialized deontological codes from around the world and is the largest resource of its kind. This database can be sorted by keywords or by using the advanced search. Codes can be selected by type of organization, topic, region, year created or updated and country.

Some organizations and professional associations developed general codes in which the field of sports journalism must be included like any other beat. Thus, UNESCO approved in 1983 the *International Principles of Professional Ethics* (http://ethicnet.uta.fi/international/international_principles_of_professional_ethics_in_journalism), a set of ten fundamentals prepared as an international common ground to be promoted autonomously by each professional organization and as a source of inspiration for national and regional codes of ethics. The International Federation of Journalists (IFJ) adopted its *Declaration of Principles on the Conduct of Journalists* (<http://www.ifj.org/about-ifj/ifj-code-of-principles/>) in 1954. The text, amended in 1986, “is proclaimed as a standard of professional conduct for journalists engaged in gathering, transmitting, disseminating and commenting on news and information in describing events”.

Finally, the Society of Professional Journalists in the United States has got its own *Code of Ethics* (<https://www.spj.org/ethicscode.asp>), a text written 1973 and revised several times, the last of them in 2014. As creators say, this is “a statement of abiding principles supported by additional explanations and position papers that address changing journalistic practices” or a guide rather than a set of rules, “that encourages all who engage in journalism to take responsibility for the information

they provide”. The text is divided into four sections (‘Seek Truth and Report It’, ‘Minimize Harm’, ‘Act Independently’ and ‘Be Accountable and Transparent’). It has also been translated into other seven languages: Spanish, French, German, Chinese, Arabic, Persian and Portuguese.

Recommendations for Sports Journalists Issued by Key Stakeholders

Recommendations issued by key stakeholders in the world of sport should be also taken into account by sports journalists. Among those suggestions, two relevant ones are accessible online: *Code of Sports Ethics* (Council of Europe 1992) and the *Charte d’éthique et de déontologie du sport Français* (CNOSF 2012). Both emphasize media’s responsibility to promote fair play and set a positive example to children and young people. Moreover, the *Code of Sports Ethics*, devised by the Portuguese Institute for Sport and Youth (2015), includes a section on recommendations with regard to objectivity, truth and privacy.

On the platform *Accountable Sports Journalism* there are also three essential documents that address the way disability sport should be treated by media. The International Paralympic Committee (2014) created an 18-page document entitled *Guide to reporting on persons with an impairment*. This easy-to-use guide provides journalists with general rules and a list of preferred terminology and incorrect terms. The British Paralympic Association (2012) published *Guide to Reporting on Paralympic Sport*, a 5-page guide to help professionals use appropriate language (http://paralympics.org.uk/uploads/documents/ParalympicsGB_Guide_to_Reporting_on_Paralympic_Sport.pdf). Regarding intellectual disability, the Special Olympics (2014) *Style guide* is available to professionals. In Britain, the charity Living Sport, works to promote the safety and welfare of children and young people engaged in sporting activities across England and has published a set of guidelines for clubs and organizations, sport coaches and leaders, parents as well as young people (<http://www.livingsport.co.uk/safe-sport/>).

Other External Recommendations

Additional recommendations are promoted by institutions that promote the appropriate use of language, such as Fundación del Español Urgente, created in 2005 by the news agency EFE and the bank BBVA with the support of the Real Spanish Academy (RAE). In 2013, Fundéu created a specific section on the language of football, entitled “Liga BBVA del Español Urgente” (<http://www.fundeu.es/especiales/liga-del-espanol-urgente/>). Also in Spain, recommendations for the whole sports community to avoid misconducts and risky behaviours and for media to promote self-regulation and values through sports coverage are included in *Violence in Sport* (http://www.consejoaudiovisualdeandalucia.es/sites/default/files/recomendaciones/Recomendaciones_2009_01_Violencia%20deporte.pdf), a document jointly agreed in 2009 by the Andalusian Audiovisual Council and the regional Federation of Sports Journalists (FPDA).

Media Observatories and Specialized Publications in Media Criticism

Although there are no media watch observatories exclusively devoted to sports journalism, the largest publications related to media criticism around the world examine the good and bad practices of sports media. To illustrate, *Columbia Journalism Review* raised a public debate about anonymous sourcing in NBA trade scoops (Biasotti 2016) or the Poynter Institute provided resources for reporters who cover LGBT athletes (Klinger 2014).

In Latin America, *Ética Segura*, a site created by Fundación para el Nuevo Periodismo Iberoamericano in Colombia, regularly promotes debates about ethical issues in the sports field on the web (<http://www.fnpi.org/es/keywords/prensa-deportiva>) and on Twitter and archives the most relevant messages in Storify (<https://storify.com/EticaSegura>). Before the Rio 2016 Olympics, it also disseminated a set of guidelines to promote ethical sports coverage, written by Xavier Ramon (<http://eticasegura.fnpi.org/2016/07/26/decalogo-una-cobertura-deportiva-responsable>).

Scholars' and Citizens' Blogs

Researchers also point out that other innovative instruments such as scholars' and citizens' blogs also promote reflection on news quality. In Spain, we highlight *La Buena Prensa* (<http://labuenaprensa.blogspot.com.es/>), and *Periodismo Deportivo de Calidad* (<http://periodismodeportivodecalidad.blogspot.com.es/>). In The United States, two key examples should be considered: the blogs from the National Sports Journalism Center at Indiana University (<http://sportsjournalism.org/>) and the Center for Journalism Ethics at the University of Wisconsin-Madison (<http://ethics.journalism.wisc.edu/>). The latter provides students and citizens with many materials and resources about journalism.

Conclusions

This research has contributed to the field of sports and communication by engaging with the scholarly and professional debate surrounding ethics and accountability in sports journalism. Beyond particular newsroom cultures (Boyle and Haynes 2009), it is true that journalists are affected by a myriad of interwoven factors and constraints that make it difficult for them to produce work that entirely abides by the recommendations established in the major ethical guidelines of the profession. Those include the increasing tension between quality of information and the orientation towards market forces; the progressive tabloidization process on the wider journalistic culture; or the impact of the celebrity culture on the world of sport. Overall, there is still a long way to go to eliminate fully the “toy department” label and enhance the credibility and status of the professionals working in the field. That being said, the reinforcement of media accountability systems created both within and outside media companies is a vital opportunity for harvesting the traditional values of journalistic practice.

The range of accountability instruments presented here and disseminated through the *Accountable Sports Journalism* platform can serve as a ‘moral compass’, that is, a valuable toolkit for professionals across the board. These assets can help practitioners increase their self-awareness of the ethical constraints and practices embedded in journalistic routines. Most importantly, they can ultimately point journalists in the right direction with regard to language and the highest of standards of reporting. To illustrate, these resources can help reporters and decision makers to make better linguistic choices; avoid thinking in stereotypical terms; enhance their sporting culture; or search for a broader range of news sources to build their stories, to list a few. Despite that certain resources available are rooted in particular media outlets and specific journalistic cultures around the world; they can be very useful to media professionals based in other contexts.

In addition to that, the resources presented here can be enlightening to citizens. As experts have highlighted, the public is an essential agent for holding the media accountable (Christians 1988). Therefore, raising the awareness of the usefulness of accountability instruments can contribute to helping audiences to become active and conscientious consumers so that they can carry out a critical assessment of the quality of sports content published by media organizations.

Going forward, researchers suggest that media organizations and external agents (institutions, professional associations and academia) from around the world should work harder to create additional recommendations. Current documents should be enhanced with further guidelines that address key challenges that have emerged in the new 24/7 digital environment, including the verification and fact checking of content from social media sites and blogs; the continuous adaptation and updating of material posted to maintain accuracy and integrity; the clash between real-interest stories and populist click-based ones; or the handling of mistakes and complaints (Zion and Craig 2015). In addition, other innovative accountability instruments that have not been detected in the field of sports journalism, such as editorial videos, open news lists, online broadcasting of newsrooms’ meetings or error buttons should also be encouraged given the beneficial impact that these instruments could have on journalistic practice.

As scholars, we should remain particularly attentive to this area. First, subsequent research must monitor and thoroughly examine the emergence of new accountability systems in the international context. Further tools detected will be progressively incorporated into the *Accountable Sports Journalism* platform to maximize their online visibility. Second, ethnographic research could be very helpful to gain additional insight and assess the impact of those instruments among citizens, sports media professionals and decision-makers. Third, drawing on the findings of this research and the existing accountability instruments highlighted, our next stage will be to propose a new specialized code, which will take into account both the general standards of the profession and the singularities in this field. This dynamic code, which will combine up-to-date recommendations with helpful study cases around the world, will be distributed online. By creating and delivering these guidelines, this research can further contribute to fighting against some of the major constraints that still prevail in the sports communication field.

Acknowledgements

This paper is a part of the research project ‘Accountable Sports Journalism’, carried out by researchers Xavier Ramon (Univ. Pompeu Fabra) and José Luis Rojas (Univ. de Sevilla) in different stages since 2016. <https://accountablesportsjournalism.org/>.

References

- Allas JM, Díaz Salgado LC (2004) *Libro de estilo. Canal Sur Televisión y Canal 2 Andalucía*. Sevilla: RTVA. Retrieved from <https://bit.ly/2y9RYf6>.
- AP (2016) *The 2016 Associated Press Stylebook*. New York: Associated Press.
- Bertrand CJ (2000) *Media ethics and accountability systems*. London: Transaction Publishers.
- Biasotti T (2016) “Anonymous sourcing and the problem with NBA trade ‘scoops’”. *Columbia Journalism Review*. Retrieved from <https://bit.ly/2IAyR2t>.
- Boyle R (2006) *Sports journalism: context and issues*. London: Sage.
- Boyle R, Haynes R (2009) *Power play. Sport, the media and popular culture* (2nd ed). Edinburgh: Edinburgh University Press.
- Brickman BC (2012) “Not by the Book: Facebook as a Sampling Frame”. *Sociological Methods & Research* 41(1): 57–88.
- British Paralympic Association (2012) *British Paralympic Association guide to reporting on paralympic sport*. Retrieved from <https://bit.ly/2QtRkAt>.
- Brock G (2013) *Out of print. Newspapers, journalism and the business of news in the digital age*. London: Kogan Page.
- Bryman A (2016) *Social research methods* (5th ed). Oxford: Oxford University Press.
- Christians C (1988) “Can the public be held accountable?” *Journal of Mass Media Ethics: Exploring Questions of Media Morality* 3(1): 50–58.
- CNOSF (2012) *Charte d’éthique et déontologie du sport Français*. Retrieved from <https://bit.ly/2OCOPP6>.
- Columbia Missourian (2009) *Columbia Missourian Stylebook*. Retrieved from <https://bit.ly/2zR3AWy>.
- Council of Europe (1992) *The code of sports ethics. Beyond the rules of the game*. Retrieved from <https://bit.ly/2y9V2YE>.
- Craft S, Vos T, Wolfgang JD (2015) “Reader comments as press criticism: Implications for the journalistic field”. *Journalism* 17(6): 677–693.
- Eberwein T, Fengler S, Lauk E, Leppik- Bork T (eds) (2011) *Mapping media accountability – in Europe and beyond*. Cologne: Helbert Von Halem Verlag.
- English P (2016) “Mapping the sports journalism field: Bourdieu and broadsheet newsrooms”. *Journalism* 17(8): 1001–1017.
- Fengler S, Eberwein T, Mazzoleni G, Porlezza C, Russ-Mohl S (2014) *Journalists and media accountability. An international study of news people in the digital age*. New York: Peter Lang Publishing.
- Goodman LA (1961) “Snowball sampling”. *Annals of mathematical statistics* 32(1): 148–170.
- Hardin M, Zhong B, Whiteside E (2009) “Sports coverage: ‘toy department’ or public-service journalism? The relationship between reporters’ ethics and attitudes toward the profession”. *International Journal of Sport Communication* 2(3): 319–339.

- Harro-Loit H (2015) "Journalists' views about accountability to different societal groups". *Journal of Media Ethics: Exploring Questions of Media Morality* 30(1): 31–43.
- Horky T, Stelzner B (2013) *Sports reporting and journalistic principles*. In Pedersen PM (ed.) *Routledge handbook of sport communication*, 118–127. Abingdon: Routledge.
- International Paralympic Committee (2014) *Guide to reporting on persons with an impairment*. Retrieved from <https://bit.ly/2FX4GkR>.
- Klinger L (2014) "Resources for reporters on all beats (including sports) who cover LGBT people". *Poynter.org*. Retrieved from <https://bit.ly/2NoGCJE>.
- Malik M (2004) *Journalismusjournalismus. Funktion, Strukturen und Strategien der journalistischen Selbstthematisierung* [Journalism journalism. Function, structures and strategies of journalistic self-thematization]. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Mauri-Ríos M, Ramon-Vegas X (2015) "Nuevos sistemas de rendición de cuentas de la información periodística. Una exploración del escenario online español [New systems of accountability of journalistic information. An exploration of the Spanish online scenario]". *El profesional de la Información* 24(4): 380–389.
- McQuail D (2003) *Media Accountability and Freedom of Publication*. New York: Oxford University Press.
- Noy C (2008) "Sampling Knowledge: The Hermeneutics of Snowball Sampling in Qualitative Research". *International Journal of Social Research Methodology* 11(4): 327–344.
- Oates TP, Pauly J (2007) "Sports journalism as moral and ethical discourse". *Journal of Mass Media Ethics: Exploring Questions of Media Morality* 22(4): 332–347.
- Patton MQ (2002) *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, California: Sage.
- Portuguese Institute for Sport and Youth (2015) *Code of sports ethics*. Lisbon: IPDJ. Retrieved from <https://bit.ly/2zQkBQy>.
- Pritchard D (ed.) (2000) *Holding the media accountable. Citizens, ethics, and the law*. Bloomington: Indiana University Press.
- Roberts C (2012) "Identifying and defining values in media codes of ethics". *Journal of Mass Media Ethics: Exploring Questions of Media Morality* 27(2): 115–129.
- Rojas-Torrijos JL (2011) *Periodismo deportivo de calidad: propuesta de un modelo de libro de estilo panhispánico para informadores deportivos* [Quality sports journalism: proposal of a pan-Hispanic style book model for sports reporters]. Madrid: Fragua.
- Rowe D (2007) "Sports journalism: Still the 'toy department' of the news media?". *Journalism* 8(4): 385–405.
- Salwen MB, Garrison B (1998) "Finding their place in journalism: newspaper sports journalists' professional 'problems'". *Journal of Sport & Social Issues* 22(1): 88–102.
- Schlesinger P, Doyle G (2015) "From organizational crisis to multi-platform salvation? Creative destruction and the recomposition of news media". *Journalism* 16(3): 305–323.
- Singer JB (2013) "The ethical implications of an elite press". *Journal of Mass Media Ethics: Exploring Questions of Media Morality* 28(3): 203–216.
- Special Olympics (2014) *Special Olympics style guide*. Retrieved from <https://bit.ly/2Rm mICm>.
- Starck K (2010) "The news ombudsman: viable or vanishing?". In Eberwein T, Müller D (Eds) *Journalismus und Öffentlichkeit*. Wiesbaden: Verlag, 109–118.
- Taylor F (1988) "Impartiality, sincerity, precision. Tough demands on the sports journalist". *Olympic Review*, 248: 209–303.

- The New York Times (2004) *Ethical journalism. A handbook of values and practices for the news and editorial departments*. Retrieved from <https://bit.ly/1vXX9q2>.
- Tracy SJ (2013) *Qualitative Research Methods. Collecting Evidence, Crafting Analysis, Communicating Impact*. Chichester, West Sussex: Wiley-Blackwell.
- Vultee F (2010) "Credibility as a strategic ritual: The Times, the interrogator, and the duty of naming". *Journal of Mass Media Ethics: Exploring Questions of Media Morality* 25(1): 3–18.
- Wimmer RD, Dominick JR (2000) *Mass media research: an introduction* (6th ed.). New York: Wadsworth publishing company.
- Wulfemeyer KT (1985) "Ethics in sports journalism: tightening up the code". *Journal of Mass Media Ethics: Exploring Questions of Media Morality* 1(1): 57–67.
- Zion L, Craig D (2015) *Ethics for digital journalists. Emerging best practices*. New York: Routledge.

