國立交通大學 應用藝術研究所

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碩 士 論 文

運動賽事特質於社交電視設計之影響

Sport Events Effect on the Design of Social Television System

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摘要

　　長久以來，運動賽事的社交特質早已被人們所認定。如同我們所見，運動賽事透過本身善於引發人們慶祝活動的天性，不斷刺激人們的生活並產生豐富圍繞著運動賽事的社交活動，其本身的所蘊含的巨大的社交需求及價值早已不言而喻。近來，隨著社交科技的創新及發展，一種支持人們圍繞著電視內容進行社交互動，被稱作"社交電視"的新興概念正在逐漸形成，將人們對於觀看電視的體驗帶入另一個新的境界。

　　雖然，這樣令人興奮的概念似乎正為滿足人們對於運動賽事的社交互動的渴求提供了一個良好的機會，不少實證研究仍指出不同的電視節目類型會為人們帶來不同的社交體驗，而針對於節目類型對於人們社交互動的影響的研究也十分罕見。因此，本研究的目的旨在探索運動賽事節目如何在人們對於電視內容的相關互動行為中扮演關鍵的腳色，並嘗試進一步將賽事的特質融入新生的社交電視系統中。

　　透過深度訪談(In-depth interview)，探針日誌(Probe diaries)，以及配對訪談(Pair interview)三種互補的研究方法，針對運動迷圍繞在賽事中的各式的生活面向進行深入調查，並利用親和圖(Affinity diagram)來分析整理三個階段訪談所收集到的所有資料。根據研究結果，我們歸納出幾個運動賽事主要不同於其他電視節目類型的關鍵社交特質，並進一步就以下三個面向: 觀看模式、社交活動及社群建立，來探討這些特質對於人們圍繞電視內容的相關行為所造成的影響。

　　最後，我們也根據結果提出七項設計建議: (1)促進賽事間的同步互動。(2)以社群資訊為賽事選汰依據。(3)鼓勵分享重點賽事及重要時刻。(4)支持賽事流程中注意力的轉移。(5)強化重要時刻的慶祝活動。(6)以球隊及球員為中心建立社群。(7)顯示他人對於賽事之偏好及觀看狀態。本研究期盼其所提出之發現及建議，可以做為設計師在將新興的社交電視系統融入運動賽事節目時的基礎，並進而創造出圍繞著運動賽事內容美好的社交經驗。

關鍵字:
社交互動電視、電視節目類型、運動賽事，使用者經驗、探針日誌法

Abstract

The social character of sport events has long been recognized. As we could see the celebratory nature engenders massive social activities around the game, the huge social needs and value of sport events are self-evidencing. Recently, with the rapid developing of social innovation and technology, an emerging idea of "social television" which supports peoples' social interaction around television content has been brought up, leads television viewing experience into a new field.

While this exciting concept seems a great opportunity to satisfy the enormous social needs of sport fans, many researches also show that different television genres bring out different social experiences according to the corresponding contents. However, thorough research of this phenomenon is still scarce. Therefore, the purpose of this thesis is to explore how sport genre can play a role in the peoples' use of television contents, and integrate the sport genre into the neonate television system.

Through conducting complementary methods including the in-depth interview, group probe diaries, and pair interview, various perspectives of sport fans' life that revolve around sport events are investigated. All data collected from the three-stage research process were analyzed and categorized into affinity diagram. According to the results, several key social characters of sport events have been identified which differentiate it from other television genres. Being discussed is how these key characters affect people's use of television contents in following three aspects: viewing pattern, social activities and the community building around sport events.

Finally, seven design suggestions were also developed based on our findings: (1) Promoting synchronize interaction during sport events. (2) Using social information as a content filter. (3) Encouraging to share important materials. (4) Supporting attention switching with game flow. (5) Maximizing the celebration on important moments. (6) Building community around players and teams. (7) Showing the preference and viewing status. We hope that our findings would provide a sturdy foundation for designers to blend the emerging social television systems into sport genre, and therefore, creating a better social experience around sport events.

Key words

Social interactive television, television genre, sport events, user experience, probe diaries

致謝

我想要先謝謝三年前的自己。因為你的努力，進來了應藝所，我才能遇到這些美麗的人。

很多的謝謝要先獻給我的指導教授 鄧怡莘老師，謝謝老師這些日子以來包容我一拖再拖的個性，謝謝老師藉由很多機會告訴我要做回最踏實的自己，謝謝老師給了我很多空間和機會去磨練、去嘗試、去犯錯、並從中學習。讓迷惘的時候很煎熬，所以有更深刻的體會。老師總是能用最簡單的例子向我闡述最深刻的道理，讓我知道，學問是從生活長出來的，而生活本身也是一門學問。和老師聊天總是忘了時間，我想這是一種奢侈，也是一種幸福，也希望這樣的學習可以一直一直這樣延續下去。

另外也要謝謝所上的每一位老師。每一堂教過我的課，甚至每一句走廊上的交談，都餵養著我三年來的成長；感謝氣度寬宏的莊老師，一路來對我的照顧，無論是口試中所給的建議，或之後的鼓勵，都讓我與這篇論文更加的完整。謝謝心直口快的林老師，老師的熱情，執著和那一段花園與園丁的故事，我會一直惦記在心裡。謝謝溫柔卻總帶有力量的賴老師，電影課所教給我的不只是藝術，更多的是內在對於世界的反思與自省。謝謝可愛的陳老師為我開展人生的道理，很受用，心也平靜，我會試著好好的去實踐它。很酷的謝老師總是像我的大哥一樣，work hard, play hard 的態度，是我學習的好榜樣。也要謝謝成大的簡老師，在口試期間能夠給我很棒的建議，讓我能看到自己的缺點，而能夠再更向前邁進一步。

然後，是 IAA 的你們，這一群我也許永遠無法忘懷的同學、學長姐學弟妹們。你們的真誠、善良、自由、瘋癲，你們每一個人的獨特和美好，都讓我看到這個世界各種的可能性。謝謝 98 的丕旭、蔡爸、草莓、路西、邱哥、如薇、彥翔、方哥、冠宇、瀚云、丹丹、瞇瞇、思思、俊全、凱婷，和你們生活在一起的日子，從你們身上學到的東西，和那些爽朗的笑聲，太多太多，我沒有辦法一次講完，但我會一直記得，也會持續下去。謝謝博班的螞蟻、庚錞和阿骨適時的給了我很多的建議與幫助，被照顧感覺很是窩心。謝謝承捷和育婕，國科會的過程讓我從你們的身上學到了很多，如果沒有你們的加入，還是真不知道該怎麼辦。謝謝致軒、欣蕙、曾晨、阿蛤、汪汪與其他學弟妹在很多大大小小事情上的幫忙，我才如此順利的度過每一個關卡。特別要謝謝鐘張，這段日子以來的照顧；那些苦悶喪志的時時刻刻，有妳在，很溫暖。謝謝應藝所每一個人，你們所給予的，除了設計，還有愛與人生。
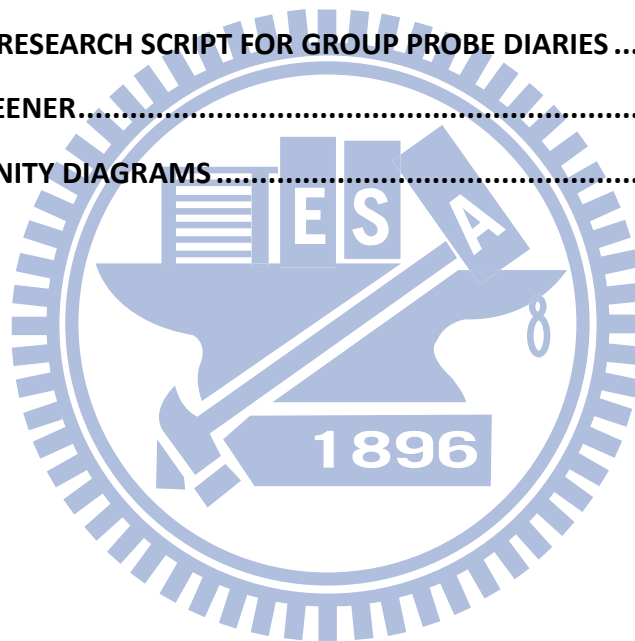
最後要感謝我的爸媽，沒有你們的支持，就沒有這本論文，和這一段美麗的旅程。

毛迦霖 謹誌
中華民國一〇一年七月

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Chapters 1 Introduction

People do socialize around sports. From the ancient Coliseums to nowadays various professional sports games, the tremendous social character of sport events has long been recognized. Along with the rapid science and social technology, people can now comfortably watch their favorite live sport event through the high-definition television, while using variety of communication media to interact with their friends even with distant. Recently, the emerging social networking further fueled those social activities, brings an exciting concept of Social television which support peoples' social interaction around television content. As this concept seems a great opportunity to meet the social hunger of sports, valuable uncultivated lands are waiting to be explore.

1.1 Background

As Television has long been an essential household appliance in the modern house which is so popular all around the world. Today, television viewing might be a major daily recreation for most of us, vast consumption contents of the television penetrates every aspects of our life. It is not only works as a regulator that segment our daily schedule, but also influence our social relationship with others by interacting and communicating around television content. (Lull, 1980) The richness and diversification of television contents pour abundant social resource into our everyday social activities, makes it plays a central role of our social life.

Among these miscellaneous television contents, sport is one of the most social able programs. It is so obvious that the social activities around sport event are never scarce to see. Every year, when mega-sport event begin, such as Olympic Games, millions of fans gathering in front of television in their house, bars and squares, talking and cheering enthusiastically with their friends and family, or even stranger. Furthermore, these social interactions will extend from the watching period to their daily life which becomes a motivator of their social activity, such as talking with their colleagues about the game yesterday as a conversation starter. Sometimes this conversation can last for a long period even the sport event itself is over. To these avid fans, watching and talking sport event is not only a leisure activity, but a rope to tie them together with their social community and reinforce their interpersonal relationship with others.

Nowadays, with the rapid sciences and technology innovation, the viewing and social pattern of television has been fundamentally changed. People can now easily watching their favorite show whenever and wherever they want with their on-demand and mobile television. Moreover, the emerging social networking and communication tools facilitating the social interaction between television viewers, which allow them to interact and socialize around television contents in a variety modality. These innovations further drive the concept of "Social TV", which is now a general term for technology that supports communication and social interaction in either the context of watching television, or related to television content.

It is to believed that, with the exciting newly communication and social interaction capability provide by social television, the huge social demands from sport fans are seems about to be satisfied. However, the Social television is still at its infancy, there is still a semi-chaotic situation remain to be fully understand.

1.2 Motivation

As we can see the emerging of social networking and communication media have already fundamentally changed how we interact with others in the last decade. These social innovations not only reform peoples' social life, but also radically changed the television landscape. We shall not surprise why social television development sprung up like mushrooms in the last few years, as it is an attempt to recapture the social nature of the television experience at its origins through these emerging social technologies.

Recently, research on social television has been mainly focus on the creation of the system itself, or on specific features. Large numbers of social TV prototypes are put into lab and field test to examine peoples' social behaviors and attitude around television content, and the results above all shared facts that television genres play a significant role on peoples' uses of television content as different genres result in a different social experience. The distinctive impacts not only dominate peoples' social interaction while watching, but pervasively into their social activities afterward.

Simultaneously, as another identical result has been shown, many participants in disparate researches coincidentally indicate that sport as one of those program genres that are very well suited for stimulating social interactions. (Harboe, Massey, Metcalf, Wheatley, & Romano, 2008) Moreover, we could also see how people are now eager to socialize around sport event on various social platforms. Take BBS for example, every day, huge amount of people are enthusiastically discuss and debate about sport event on the variety discussion boards related to sport events, and most of the time, these sport discussion boards are

always at the top ranking of popularity.

Nowadays, more and more sport forums are pop out every day, and all the websites related to sport events are trying to integrate social network giants into their site, such as Facebook or twitter. Even the online sport event broadcasting channel have started to provide communication tools for the viewer, such as text chat to allow user can share their thoughts during the sport games. As all the present of these evidences, the significant social requirement of sport event is apparent, and the characters of sport genre itself are believed massively social.

There is no denying that the social demands around sport events are huge, and how to supporting people social interaction to satisfy their needs, creating a better social experience seems an urgent topic to be explored. Meanwhile, although many researchers have suggested that television program genres play an important role in the social use of television, research on how a particular genre impact peoples' social pattern remains scarce.

Therefore, the main purpose of this research is to bridge the gap by investigating how specific sport genres might influence peoples' social life, in order to create a desirable social platform for people who love sport to facilitate their social interaction, fulfill their social demands and further strengthen the social tie with their sport community.

1.3 Objectives

Although the developing Social TV provide a great opportunity to feed sport fans' huge social needs around sport events, how to integrate the neonate television system into particular sport genre remain to be a challenging issue to the Social TV designer. In this research, we try to devote more insights into this emerging field, investigating of how particular sports genre might influence peoples' uses of television sports contents, and to promote a better social experience around sport events broadcasting for the developing social television system. Three objectives are focused as follows:

A. Understanding how sport genre affecting peoples' life around sport events

In this research, via the thorough investigation into people's interaction and connection around sport events, various aspects of how sport genre affecting peoples' viewing pattern, social activities and interpersonal relationship building around sport events would be explored. It is believed only when having the comprehensive understanding of how sport genre influence peoples' life, a seamless and holistic social experience

around sport events can be created.

B. Identifying what unique characters of sport genre are specifically affect peoples' social activities

As television genres play a prominent role on peoples' social uses of television content, it is critical to understand what specific factors the sport genre has that differentiate itself from other television genres, bring particular impacts on peoples' social activities. Through analyzing the influence sport genre brings to peoples' life, some unique social characters could be identified, setting a corner stone for the distinctive design of social television system of sport genre.

C. Proposing design suggestion for social television system on sport events

By thoughtfully understanding the specifically influence that sport genre brings to peoples' life, some design suggestions were proposed as the guidance for the designers to provide a satisfying and desirable social experience when designing social platforms related to sport events.

1.4 Scope

This research is intended to provide insights and suggestions through the user study of peoples' current viewing and social activities around sport events broadcasting which could help the future social television blend into sport genre. The "sport events broadcasting" in this research were mainly referred to the current sports programs which provided and produced by the television producers.

Moreover, the word "sport events" in this research were widely defined as all kinds of sport broadcasting, such as would cup, Olympics, and various professional sports. Therefore, the findings of the study could generally referenced for the designs of social platforms relate to sport events, but the subtle divergent impacts on peoples' life among different specific sports are not examine in this research.

Finally, the term "social television system" we use in this research were widely defined as all interactive system that support social able aspects of television viewing, allowing people to interact with each other via television set, smart phone, tablet or PC. Chapter 2.4.1 presented the complete definition of social television in this research.

1.5 Outline of thesis

This thesis consists of six chapters. **Chapter one**, introduction, state the research background, motivation, objectives, limitations. **Chapter two**, literature reviews, compares results from other relevant research in several different fields, such as the social uses of television, the social values of sport event and the development of social television. **Chapters three**, methodology, describe the research plan and the method for research activity. The analyzed results of the research phases and summarized findings are presented in **Chapter Four**. The findings are discussed in **Chapter Five** and the design suggestions are proposed in **chapter six**. **Chapter seven** concludes the summary of this research and some recommendation are provided for further studies on the design of social television relate to sport events.

Chapters 2 Literature review

This part on literature review started with an introduction to the social influence of television and sport events on section 2.1 and 2.2. Section 2.3 described co-experience that used to understand the social aspects of user experience, setting a theoretical foundation for us to discuss the social experience of sport events. In order to have a holistic viewpoint and further link our study into the emerging domain, we extensively reviewed the related works of social television in section 2.4, including the definition, the influence of social network, secondary screen, commercial products, research prototypes and field studies. Finally, section 2.5 presented works which related to the social television of sport events, to comprehend what have already been provided for this new territory.

2.1 The social uses of television

Although the traditional stereotype regards television watching as a solitary, personal activity, the social uses of television have long been recognized. Television serves many social purposes, such as providing topics for conversations, easing interaction, and promoting feelings of togetherness. Lull (1980) classifies the social use of television in two main aspects: structural and relational. The structural aspects are concerned with the way television has an impact on the structure of peoples' life, and the relational aspects consider the influence television has on the relationship between people.

Lull further divide the structural uses of television into environmental and regulative aspects. First, the environmental uses, he regarded television as a background noise to create a busy atmosphere which could instantly bring live into the house, or to use as companion during the tedious household chores, and without denying service as a timeless entertainment source for the family. Secondly, the regulative aspects, he indicated that television also works as a regulator to punctuate peoples' time and activities, such as family members may talk to each other regulative by the scheduling programs.

On the other hand, the relational aspect has divided into four categories. Communication facilitation means television can trigger off peoples' conversation. Social affiliation or avoidance referred television can promote but also prevent physical or verbal contact. Social learning shows the possibilities offered by television to learn how to behave socially or solve problems in their daily life. Finally, Competence or dominance presents that by forbidden someone to access or to critic or predict the content of the television, people can demonstrated their authority and competence or promoting themselves (Lull, 1980)

Conversely, these sociable aspects can also be important motivations for TV viewing. For example someone might watch a television program in order to participate in a later conversation about it. Therefore, these social aspects are not only influence people during the time they watch, but more on the time after it.(Harboe et al., 2008)

2.2 Social leverage of sport events

Sports have two very predominately social characters: it frees peoples' emotion, and then brings them together. Anthropologists, who study public performances, including sport events, call these two characters 'Liminality' and 'Communitas'. These two interdepend character mutually reinforcement each other and create massive social impact on sport events. (Chalip, 2006)

As the definition form anthropologists "If there is a feeling of overtly sacred aspect to what is going on in a secular context, it is called 'Liminality'". (Chalip, 2006) Liminality can provide a safe place and time to elaborate openly emotional behavior despite social norms, which we can see quite extraordinary in sport events, people embracing, shouting, swearing, kissing, dancing in jubilation. Even male weeping is accepted. Moreover, people who watching sport events can create an experience of communal excitement through unavoidable and constant extensive physical contact which is unusual in our life context, even in any culture. (Kennedy, 2001) The experience of Liminality is a sense that is felt more than understood. In Chalip's study, the interviewees find themselves felt something but have no words to describe. They feel new energy has been injected into the communal atmosphere which can be shared by all, and further heighten the sense of community among those who are present (Chalip, 2006)

Anthropologists called the sense of community are 'communitas' which engendered via liminality. It has flow-on consequences for community life and social relations which gives people freedom to negotiate a relationship to other fans or even strangers.(Chalip, 2006) Took world cup as example, people often look to the team as a representative of the polis and take civic or national pride in their `ownership' of it. And when the team wins, the entire country wins, and thus the supporter shares the lustre, becomes ritually distinguished from non-supported persons and especially from the losers. In the psychological sense, sports spectators seek, through a process of identification, a refuge from urban anonymity: an imagined return to an imagined small community, or the communitas. There are few entertainments like sports that have such astonishing power to foster the formation process of community to this extent. (Kennedy, 2001)

McDougall (2003) present a shared phenomenon which demonstrate the "liminality" and "communita" effect of sport events on these fans: *"people like to watch football or baseball game as live entertainment where crazy fans fill the court rather than watching TV broadcast alone at home. Even when they have no options but to watch the broadcast, they would choose to watch the game with friends or with a group of strangers accidentally met at the bar. That's because people enjoy the atmosphere of shouting and clapping at the same time, especially the idea that everyone is caring about the same thing."* (McDougall, 2003)

2.3 Co-experience

The notion of co-experience, start from a gradually shifting focus by the user center designers who put more attention on the experience of interacting with others rather than on the product itself, such as usability. The awareness of a holistic user experience should not only consider the aspects of a single users' experience, but to extend to a larger circle with the social aspects of interaction with others. (Battarbee, 2003a) Therefore, an empathic designer should focus more on "co-experience", take all the elements into consideration to help user achieving a better interaction experience with others. (Forlizzi & Ford, 2000)

2.3.1 Defining co-experience

As above mention, the term "co-experience" are mainly refer to the missing social quality of user experience. Battarbee (2003b) define "co-experience" as the user experience which created in social interaction. In another study, he further explains the term itself is to describe "experiences with products in terms of how the meanings of individual experiences emerge and change as they become part of social interaction." (Battarbee & Koskinen, 2005) Users create ways to make existing technologies and products work in for them in social interaction, and when they create together with others, the situation become much more interesting and unpredictable which brings out different emotions and satisfaction and further strengthened the social tie between them. (Sanders, 2001)

2.3.2 Co-experience and the migration

To further understand the differences between personal experience and co-experience, we apply the framework which generated by Forlizzi and Battarbee (2004) to explain the three types of user experience in the interactive system.

First, experience, is the constant stream of "self-talk" that happens while we are conscious. It referred to how we continually assess our goals relative to the people, products,

and environments that surround us at any given time. Second, an experience, this type of experience may be characterized by a number of product interactions and emotions which in a more coalesced way. An experience has a beginning and an end that makes people feel a sense of completion, and often inspires emotional and behavioral changes in the experiencer. The third and the final, Co-experience, it is about user experience in social contexts which takes place as experiences are created together, or have been lifting up and shared with others. (Forlizzi & Battarbee, 2004)

As these experiences are not stood individual, there are dynamic migration between them, from the center of attention to the periphery or into stories and acts of personalization and back again. Such migrations happen in at least three general ways below:

a. **Lifting up experiences:**
Through a social process, subconscious experience often migrates to become "an experience". People constantly lift memories from their everyday life and evaluating it as if meaningful enough to communicate them to others.

b. **Reciprocating experiences:**
Once the experience is lifted up, recipients would usually admit and respond to that experience. For example, they may reciprocate by sharing their own similar experiences or simply offer a sympathetic response. By the feedback they give, they show that both the experience and the person are meaningful for them. Experiences can be maintained, supported and elaborated socially, and the memories related to it may be retold as well.

c. **Rejecting and ignoring experiences:**
Finally, experiences brought to the attention of others may also be rejected or downgraded by others. For example, something that is important for one person may be too familiar, uninteresting or even offensive to others. They may indicate this in various ways to soften the rejection, such humor or teasing, topic change, direct response or even inaction.
(Battarbee & Koskinen, 2005)

2.4 The concept of Social television

2.4.1 Defining the term of social TV

As the rapid developments of social TV are pop out skyrocketing, many researchers are

trying to define the boundary of the emerging field. According to number of studies, "Social TV," is a label for Interactive TV systems that support the sociable aspects of TV viewing. (Coppens, Trappeniers, & Godon, 2004; Harboe et al., 2008; Oehlberg, Ducheneaut, Thornton, Moore, & Nickell, 2006) However, the broadness and complexity of the current situation are hard to understand by such a short phrase. Therefore, it is needed for a quick flash back of the historical context of the development of social television.

Since the growths in networking bandwidth and computing power available to the house in last decade, the way we watch TV are no longer reluctant to the traditional standalone box. Web applications with video content, networked televisions, set-top boxes, and online TV widgets are now transforming our television viewing experience and blur the boundary of the notion of television. Simultaneously, computer-mediated communications are becoming an indispensable part of our daily interactions and by combining with the following enormous development of social networking, lead us towards a more social-aware television experience. (Cesar & Geerts, 2011; Harboe et al., 2008)

As people start social around TV content via social networking, the widespread phenomenon elaborated commercial services' interest to integrate the current social networking with TV content. Some examples include the integration of Twitter updates during live video streaming (Shamma, Kennedy, & Churchill, 2009) and the ClipSync, combine with Facebook applications that allow commenting while watching video content. Some of these applications are recently being created for smartphone, which can act as a secondary screen, so the commenting does not take valuable space on the television set. (Cesar, Bulterman, & Jansen, 2008) In parallel to the integration of social networking into the television environment, in the last few years there have been great efforts in devoting a direct communication link between separate households to watching television together.

All the above innovation can be referred to "social TV", allowing people to interact with each other via the television set, smartphones, tablets or the PC. In the past few years, many academic and industrial researches have already creating several prototypes to explore the field. Features include remote talking or chatting while watching television, commenting television content, content-aware buddy lists to show what others are watching, and sharing and recommending video clips. (Cesar & Geerts, 2011)

Next, we would go further to review more studies related to social TV. It would begin as the illustration about how the social network can boost social TV, and how secondary screen play its role in the television environment. Later, provide some current research prototypes and the results of field studies.

2.4.2 Social networking encourages the concept of Social TV

Facebook's more than 600 million and Twitter's almost 200 million users are a strong indication that these web tools are part of people's lives and are indeed changing the way people interact. Along with their success, the television experience has been transformed, and with the way it influences the population and it allows for social interaction. These virtual spaces are now leading people to expand their social interaction to a larger size of communities, such as countries, or even hemispheres. (Klym & Montpetit, 2008) Therefore, if television already facilitated social interaction in the past, nowadays this property has been certainly further emphasized. The use that has been done of social networks such as Twitter and Facebook in concert with TV viewing, principally as forums to discuss TV shows, and further changing or even rediscovering some of the traditional properties which associated to television, such as liveness, content narrative and watching flow. (Cusumano & Summa, 2011)

The most salient impact of the social networks is the reforming and recapturing the liveness of television experience. The "liveness" has been defined as a specific feature of television that differentiate itself from other media, and a reflection of the living, constantly changing present. (Feuer, 1983) It provides people a feeling of instantaneousness and uncertainty which very much like the actual life. Although, the on-demand system seems are decreasing this traditional character, the rise of social media however enhance and redefining the sense of the liveness. (Cusumano & Summa, 2011)

Nowadays, with many TV producers starting to integrate the various social networks into television, people can now easily share their thought about the show with others, and the results shows the strong tendency that people do lust to share their experience to as many people as possible, and the liveness program promise the goal by gathering the highest possible quantity of people to watch the same show, such as super bowl and Grammy award. Simultaneously, people who watch alone are attracted by the massively comment on the show because they want to join the conversation. The characters of social networking which facilitating the conversation and shared experience are now as an instrument to re-impose liveness back to the audience. (Cusumano & Summa, 2011)

However, these social networks was not just a platform for people to talk around television, the convergence of TV and web further create a unique entity with a more democratic television experience. As current social media allow viewers to interact with their favorite shows almost instantaneously and without having to make almost any effort, and

they could also further give feedback to the TV producers or scriptwriters to change the narrative of television in an interactive way. Meanwhile, these producers also try to facilitate people to participant the show by giving the fans invitation to image and decide what would be next. For example, two characters from the show "Lost" were killed off from the show because viewers were complaining online that the two characters were simply too annoying. (Cusumano & Summa, 2011)

As mentioned above, with television and web converging into one element, the social networks substantially becoming part of the watching flow itself. In the "old television" age, the ways we experience the flow are almost exclusively determined by the interests of TV provider and advertisers. What is happening now is that comments and conversations on social networks are increasingly becoming both elements of the flow and what actually define the flow itself. A much democratic flow defined by one's social network: whatever friends, acquaintances or the web talk about defines what we watch. *"People are now learning how to use these different social media technologies to bring a freer flow of ideas and content. Inspired by those ideals, consumers are fighting for the right to participate more fully in their culture"* (Cusumano & Summa, 2011)

As more researchers clam the convergence of different domains is still in its infancy, such as IPTV, the Web, and the mobile world. (Cesar, Bulterman, & Jansen, 2008; Cesar & Geerts, 2011) The further development on social networking will work as a bridge across currently fragmented environments, providing seamless shared experiences independently of the location, the network, and the device. (Cesar & Geerts, 2011)

2.4.3 The secondary screen

The very first notion of using a secondary screen in the television environment can be trace back to 1996, Robertson, Wharton, Ashworth, and Franzke (1996) presented a system where handheld devices are used for interacting with the television. The watching experience of television can be enriched by using other devices as a secondary screen providing both rendering and interaction capabilities. Today, it is a very common phenomenon that people frequently use their laptop or mobiles for a number of activities while watching television, such as surf the web or use email or even chat to others. People have their preference for accessing different services on different display panels rather than overloading one shared display channel. (Seager, Knoche, & Sasse, 2007)

Cesar, Bulterman, and Jansen (2008) further extending the previous studies, identify four major usages of the secondary screen in an interactive television environment: control,

transfer, enrich and share television content. And they can be mainly categories into two independent aspects, rendering and interaction.

On the rendering side, control is capable of differentiating the shared and personal nature of the media content. For example, people can share media resource to the public screen with others, and when the material is private information, it can be showed on the private display, which is the secondary screen. Transfer, on the other hand, can be used for presentation continuity, such as when the user is moving out for somewhere, but still wants to bring along the presentation shown in the television set to the secondary screen.

On the other hand, the aspects of interaction, people are able to use the secondary screen to edit and share a bounded fragment form the main screen, or further enrich the fragment by adding personalized media overlays such as a voice commentary and share the "enriched fragment" to their peer group. through their studies, it is concluded that *"hand-held devices would be used in the living room, in conjunction with other consumer electronics appliances, for consuming and manipulating television content."*(Cesar, Bulterman, & Jansen, 2008)

2.4.4 Current Social TV developments

Recently, several conceptual, prototype or research systems for social television have been pronounced, and implemented to various degrees. Each of them might focus on one or more specific features, which support peoples' different social activities around television content.

AmigoTV includes a rich set of interaction options such as animated emoticons and voice chat. (Coppens et al., 2004) Regan and Todd (2004) create a system with Buddies list that allows multiple simultaneous users to access their instant messaging while watching TV together. 2BeOn integrated interpersonal communication on a TV as a workbench system. (Abreu, Almeida, & Branco, 2002) CollaboraTV integrates asynchronous social information into recorded shows which provide a way for user to interact with each other despite watching at different times. (Harrison & Amento, 2007) Cesar, Bulterman, Geerts, et al. (2008) propose a secondary screen system for viewers to enrich broadcasting content and share the results with other users. TakeoverTV go further demonstrate a way to lets local users influence and interact with others by showing their preferences of television programs shown on public displays via smart devices. (Elliott, Carr, & Holtzman, 2011) IntoNow are a recent service which able to recognize what one is watching on TV via their proprietary "Sound Print" audio fingerprinting technology, and it also notifies the user when someone of

his own social networks is watching the same show.

As these systems mentioned above are all presented through the TV, on the other hand, Fink, Covell, and Baluja (2006) provide a TV channel chat room through a separate laptop computer, gathering presence information from the TV audio through the PC microphone. Other websites such as BuddyTV and Joost also allow users to chat while watching TV.

In order to understand and tame this semi-chaotic situation, Cesar and Geerts (2011) further investigate over thirty systems, to provide a framework of current developments in the emerging field of social TV. They first identified four major activity categories which determine the goal of the interaction around television:

a. **Content selection and sharing:**
The users might want to send full programs or edited versions to their peers, or be informed by other peers to decide what to watch.

b. **Communication:**
The user can have direct communication via chat, audio, or video with other peers.

c. **Community building:**
The user could comment about a television program with a large community.

d. **Status update:**
To making the users available to others that what they are currently watching.

In parallel, they also point out there are five aspects that determine how each activity is performed, and some of the aspects are more salient than in others. They are the usage of device and network, the communication modality, the presence of users, the synchronization of interaction and the strength tie with peer group or larger community. (Cesar & Geerts, 2011) It has believed that this framework would provide us a tool to draw an outline for the systematically investigation of the sport fans' social activities around sport events.

2.4.5 Field trials and program genres

Although there are many social TV applications, both research and commercial, have been reported above, there are few studies have investigated the actual uses of social television system. Geerts (2006) compared text chat and audio chat while watching television, he find out most users regard voice chat are much more natural, and text chat is more

preferred by younger users. Weisz et al. (2007) investigated the influence on the social relationships of friends and strangers of text chatting while watching online videos, and found that it did create more positive feelings. But also refer the needs for more cautious when integrating strangers into the social television to engage to a wider community. Both above proposals describe ways to support the proper timing of social interaction during group television viewing and minimize the disruptions in the flow of television viewing. However, these studies still in a lab setting experiment.

On the other hand, two studies on the uses of social television were conducted in a much natural field. Harboe et al. (2008) compare the results from a field test of social TV prototype and focus groups with several social TV concepts. They find out people are showing more appreciation when they actually using it. Meanwhile, people can deal with potential conflicts between conversation and television audio without any technical support, but the video chat did not improve their experience. In another study, Geerts and De Grooff (2009) try to build up sociability guidelines for the interaction of social television. Based on several user studies with social TV prototype in a real-life context and grounding analysis, they have provided twelve sociability guidelines for designing or evaluating the social interaction these systems enable. One of the guidelines suggests that *"there is more need to consider the differences of specific program genres"*, which is much related to our research that we would further extend the review below.

Current research on social interactive television has been mainly focused on the creation of the systems itself, or on divergent specific features, such as a comparison between voice chat and text chat. (Geerts, 2006) Several user studies have showed that television program genres play an important role in the use of social TV (Cesar, Bulterman, & Jansen, 2008; Harboe et al., 2008; Weisz et al., 2007) especially concerning about attention switching and communication activity. However, researches into why and how certain genres have an impact on the uses of social TV systems remains scarce.

In the research of television genres, many researchers focus on the constitution of a genre, categorizing television programs fit into a genre and the way audiences use genre to understand and enjoy programs.(Bignell, 2004) On the other hand, the social patterns surrounding certain television genres are not explicitly studied. Recently, some scholars have dedicating to this domain. Hawkins et al. (2005) found that, contrary to what they expected, attention styles were not a steady characteristic of an individual, but differed according to genre. They further identified the importance of plot structure which causes different attention style in the viewing experience. For instance, dramas and movies require for more continuous attention than commercials and news items. Oehlberg et al. (2006) asked their

participants where they watched television over a distance, what kinds of television programs they watched in groups. Genres with bursty rhythms, redundant content or people-centered content were considered as the most sociable.

Another interesting study offer more insight into the impact of different genres, Geerts, Cesar, and Bulterman (2008) apply an systematically analysis of the different genres that influence peoples' communication patterns around television content, and mainly focus on two interaction modes: synchronous and asynchronous. The usage of divergent devices on certain television program genres were also takes into their consideration. There are some stimulating findings have been revealed.

First, they have identified the importance of plot-structure on the social interaction. Genres with plot-structure call for peoples' full attention; hence they do not talk while watching. Strong Plot-structure genres like Films, news and documentaries are genres people talk more and also like to share, might fit into asynchronous systems. Conversely, News, soap, quiz and sport are those genres during which people talk most while watching, are much suitable for synchronous systems. (Geerts et al., 2008)

Additionally, they also found that there are certain relations between device and genre preferences. Which genres with more plot structure are preferred to be watched on television, whereas genres with less plot structure can be watched on a mobile phone.(Geerts et al., 2008) As they concluded *"More research needed into this interplay between these social uses and specific genres"*, we further look into one of the most social able genre which referred by many studies - the sport genre.

2.5 Social TV of sport events

Sport is often mentioned as one of those genres that are very well suited for inspiring social interactions. Harboe et al. (2008) evaluated a social TV system via the focus groups as well as the field trials, they found most participants agreed that sport programs are especially well suited for the using of their system. In the conclusion, they claim that when designing social TV systems, the features should be optimized for the characteristics of sports viewing. Similarly, Weldon (2006) suggests creating an audio tool specifically designed for talking and shouting during sport match, arguing that the voice chat should be tailored to facilitate fan communication while watching sports events.

Here are one anecdote evidence of sport genre have been found in several studies. Sport is very a "male genre" which being preferred more by males rather than woman. As

aforementioned study, Harboe et al. (2008) state that the women in their study would use their social TV system more for programs other than sport, such as shopping. Brereton and O'Connor (2007) also follow by reporting that the three favorite genres of males in their study are comedy, sport and science fiction, while for the females this was comedy, soap opera and romance. Kennedy (2001) explains the phenomenon by stating that *"Sport has become a male preserve because it is one of the few areas of life where aggressive male behavior is sanctioned"*, in other word, men can neglect the social norms to show their macho aggressiveness via sports.

Another one revealed in the previous study, Geerts et al. (2008) shows people talk a lot while watching sport events, but also talks more about it afterwards. They further concluded the reason that *"plot structure is less important in sport events as it focuses more on the situation at hand rather than the bigger plot"*. Although they regard it as odd evidence, it seems no surprise that people in these researches show a great desire for social interaction around sport events.

However, to our knowledge, there is little user studies really specifically addressed on the uses of social TV system on sport genre. As above mentioned, an audio tool has been particularly designed for sport fans, which support the communication while watching a sports event. (Weldon, 2006) Another interesting research we found, My Second Bike is a social TV system combines with Google earth which targeting at bicycle racing. Via link with other viewers and the live bicycle game on TV, user can see other spectators, competing athletes and outdoor bikers simultaneously on the screen and physically interact with them through the sensor-fitted bikes, such as racing with them. (Chung, Xu, Colaco, Schmandt, & Li, 2010) Sofanatics is a commercial service which aimed directly at people who keep a computer in their lap while watching sport games on TV. People can log in with their Facebook account, sticking on the 'Fan Battle' to talking about the game via video chat, commenting or even predicting the game. Still, these prototypes are not a user study project.

In the study that is most relevant to our work, Sahami Shirazi et al. (2011) designed a mobile application which allow user to share divergent nonverbal iconic to other viewers in real time while watching sport events. To make it available to a large number of users, they upload the app to the Android Market and conducted a user study in the wild during the World Cup 2010. Some interesting results have been revealing, TV viewers who used the app had more fun and felt more connected to other viewers. By monitoring the real-time channel, collected data exemplify that the aggregated sentiments correspond to some important moments, such as the "Goal" time. A more implicit fact is that when user and the majority of fans had pressed the "Vuvuzela button" at same time, they presented an "aha" reaction and

promoted the conscious experience of connectedness between other viewers. (Sahami Shirazi et al., 2011) However, due to their difficulties of gathering the ground truth for individuals, it is believed that there need to pouring more effort on investigating the interaction between sport fans, during or after watching sport events.

Chapters 3 Methodology

The purpose of this research is to find out how sport genre might specifically influence peoples' uses of television contents that contribute insights to promote a better user experience on social television when apply to sport events. In order to reach this goal, it has been try to investigate peoples' current viewing and social activity around sport events and further discover and understand their fundamental needs and expectation. Therefore, we target our participants on the actual sport fans, who have rich experience and social activity around sport events. Due to the privacy difficulties, in-depth and Pair interview are used as the alternative methods to uncover these sport fans' life, and the added group probe diaries to investigate more subtle issues and enhance the reliability of the data we found.

3.1 Research issues

We started our empirical work focusing on exploring and investigating peoples' current viewing and social activities around sport events broadcasting. For the comprehensive exploration, various aspects and issues were set to address.

As we could see in literatures, most of the researchers studying different program genre on social television, including sport, focusing on peoples' viewing and social activities during sport events, social activities afterward which related to the television content of sport events were less addressed. Therefore, our survey were first start with identifying what special characters of sport events might affect peoples' viewing attitude and behavior, then extending to how these characters might influence their social interaction during or after the sport events. Furthermore, it has also been tried to understand more about the interrelationship between sport peers group, since the structure and strength of social ties might bring impact to the social interaction among sport peers. (Figure 3-1) Additionally, we also pay attention to peoples' usages of communication media under different context, as the behaviors may further reveal their subtle needs and expectation.

Through thoughtfully look into sport fans' life; we might expected to reveal how special characters of the sport events influence people's viewing and social activities and their relationship from the peer-group to the larger community. Subtle needs and expectation such as the communication facilitation, emotional attachment, and the identification with their community are also expected to be unfolded.
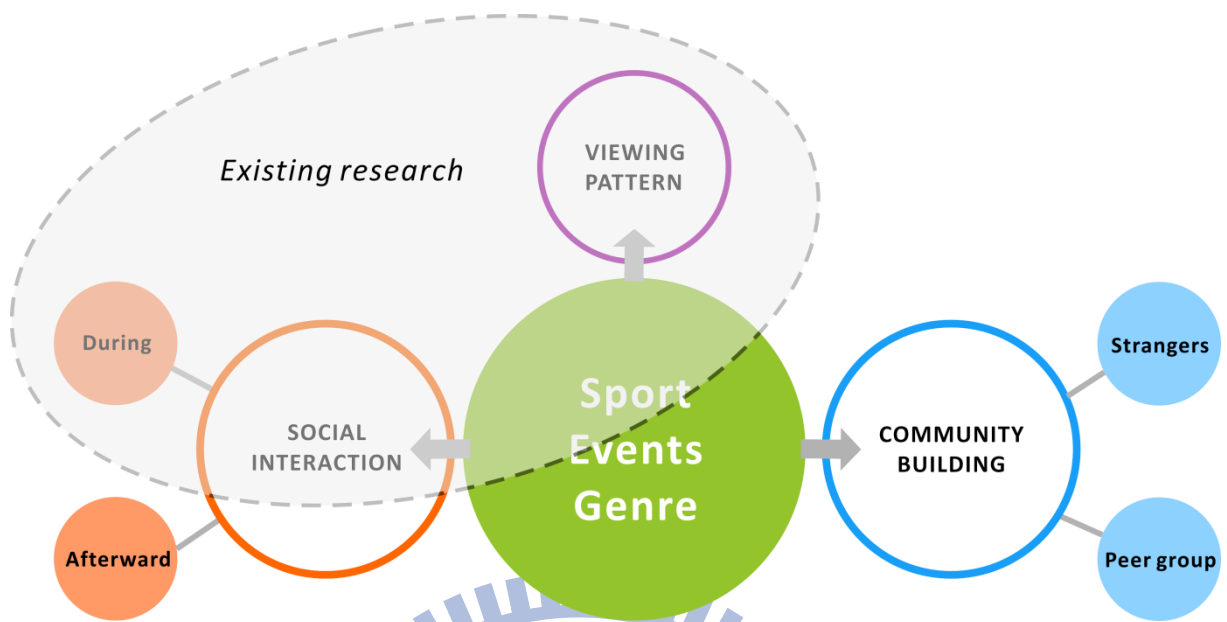
Figure 3-1 Research issues of the thesis

3.2 Research process

It is believed that it is worth to observe sport fans' behavior around sport events in the actual field to get the most original and reliable data. However, due to limit of time and privacy reason, we decide to set our research plan with series of alternative complementary methods. The research process was carried out through three stages: in-depth interviews, group probe diaries and pair interview. Each stage was aim to address some specific issues and also as the supplement for other approaches to systematically investigate the complex real situation of sport fans' social activities in a variety aspects. Intact research process of this thesis is shown in figure 3-2 and explained in the following:

Since the purpose of this research is mainly to reveal peoples' social needs around sport events based on their life context related to sport events, before we start our research process, a screener was first designed and sends out via network to recruit and filter out the real sport fans as participants to join the research process.

Considering the wide range issues around sport events might involve in different spectrum of sport fans' life. Before the formal research process, it was first tried to explore and understand peoples' viewing and social activities through a pilot study, then revise the research plan for the following formal researches.
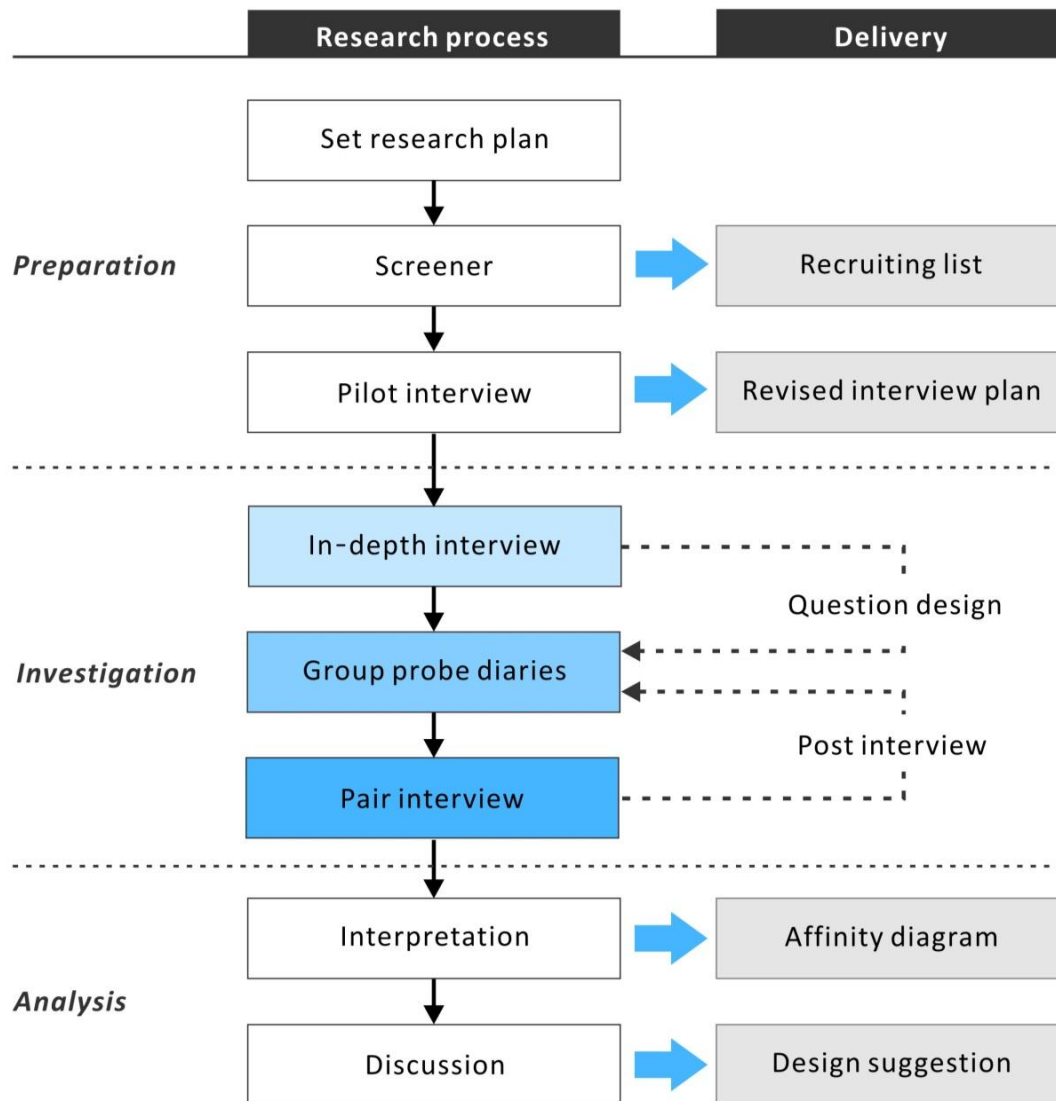
Figure 3-2 The research process of this thesis

The first stage is in-depth interview. The aim of this stage is to widely explore and investigate sport fans' current viewing and social behaviors around sport events. Impressive viewing and social experience were also covered in this phase. Data collected from this stage were interpreted and categorized into several orientations and further provide directions to guide the question design of the following probe diaries.

The next stage is group probe diaries. The aim of this stage is to discover more subtle facts about the formation, interaction and relationship between sport fans' peer group and larger community by comparing the peers' diaries. Additionally, it has been try to solve the recall bias problem in the in-depth interview session through the self-document process.

Interesting and ambiguity facts recorded by the participant in the diaries were noted during the interpretation process for a further investigation through the post pair interview.

The final stage is a pair interview which regards as the complementation for the previous in-depth interview and probe diaries. There are two aims in this stage: firstly is to have a deeper understanding about the thought behind some interesting facts recorded in the probe diaries and secondly is tried to reveal more subtle information about the social interaction and relationship via prompting conversation between the two peers in the same group.

All of the data gathered from the three research stages were taking noted and categorize into affinity diagram for a fully understanding of the scope of the variety aspect of sport fans' life. Finally, after analysis and interpretation, we have discussed our findings and provide some design suggestion for the future developing of social television for sport fans.

3.2.1 In-depth interview

In in-depth interview, it mainly focuses on the context of viewing behavior and social interaction with other viewers. Facts that may impact viewing pattern and social activities during or after sport events are expect to be found in this stage, on the other hand, participants' media usage pattern, social needs and expectation of sport events are also expect to be revealed.

As we observe in pilot study, participant recalls more when talks about their favorite sport events, especially their favorite players or teams. Therefore, in order to facilitate and raise their interests of expression, the design of the interview script would first start from questioning their favorite sport events or players, then gradually shift to how they follows and watch these favorite events and how they share their viewing experience and thought with others during or after the sport events. Additionally, we also invite participant to talk about some of their most impressive watching experience around sport events, since the memory might be easier to retrieve and recalled complete.

Through this process, participants might be more open and freely to express their self and the extending discussion may dig out more subtle and unexpected issues. The outline of the in-depth interview consisted of four parts, shown in Table 3-1.

Table 3-1 The outline of in-depth interview (more details refer to Appendix A)

Sub Issues	The factors that might influence viewing pattern
Viewing pattern of sport events	Favorite sport events or players Choice of sport events Viewing media and devices Viewing context Viewing environment
Main Issues	**The factors that might influence social activities**
Social activities during sport events	Social interaction behaviors and activities Interaction media and devices Interaction content and context Viewing environment
Social activities after sport events	Social interaction behaviors and activities Interaction media and devices Interaction content and context
Expectation of sport events	Impressive broadcasting watching experience Impressive live watching experience Concerns when watching sport events

3.2.2 Group Probe diaries

After the interview process, some interesting issues have been found which needed for further investigation, such as the formation and interrelationship between peer-group. Meanwhile, to raise the reliability of the data we found in first stage, probe diaries were conducted as alternative method through a self-document process. There are three kinds of tasks in the probe diaries: the informative, inferential and innovative task. (Figures 3-3)

Firstly, the informative tasks, participant were ask to record their daily media usage relate to sports events, four key element have been indicated: the software and network they use, through what kind of device, the related activities they involve and if there are any notable impression during these activities. The viewing context, social activities and impressive impression during the sport events were also ask to be noted.

Secondly, the inferential tasks, participant were ask to think to indicate their three closest friends around sport events, Rank their interaction frequency, describe the relationship and understanding between them, common leisure activity them involve together, and what if these closest friends know each other.

And finally, the innovative tasks, participant were ask to design a sport club for their peer-group, what activity they want to hold in this club and what expectation and attitude toward this sport club. Participants were also asking to sketch out their current viewing environment and the future viewing environment they have dream about.

Figure 3-3 Group probe diaries

Above tasks were designed and divided into five different daily themes to guide participants to write the diary thoughtfully. Since the curiosity about interaction and relationship between peer-group has been raise up, it has tried to recruit two participants who are both in the same peer-group to participant the diary process.

By the comparing and analyzing of these self-document records, deeper information on the relationship, interaction and expectation between peer-groups around sport events were revealed. More reliable facts such as sport fans' routine media usage, viewing and social activity during sport events were also collected and reached. For more detail of the probe diary, take a look at Appendix C.

3.2.3 Pairs interview

For the deeper interpretation, after collect and analyze the probe diaries, a following post pair-interview has been conducted. In this stage, except from inquiring participants'

viewing and social context during sport events, we focus more about their social activities afterward, the relationship and interaction with their sport peers. Moreover, we also provide some social TV prototypes to ask participants' opinion when applied to sport events and the expectation about the next generation of sport program.

We invite one of the participated groups from the probe diaries for the pair interview. As the interviewee might be prompted or reminded by their peers, more information about the peer-group may be reveal to complement the in-depth interview and the candid and delightful interview progresses were also help participants to express themselves. The procedure of the pair interview was similar to the in-depth interview, but emphases more on some specific issues we mentioned above. Questions raise from their diaries were also asked when related to current topic. The outline of the pair interview was shown in Table 3-2.

Table 3-2 The outline of pairs interview in the thesis (More details refer to Appendix B)

Sub Issues	The factors that might influence viewing pattern
Viewing pattern of sport events	Favorite sport events or players Viewing behaviors and activities
Main Issues	**The factors that might influence social activities**
Social activities during sport events	Social interaction between sport peers Interaction media and devices Interaction content and context Viewing environment
Social activities after sport events	Social interaction between sport peers Interaction media and devices Interaction content and context
Peer group relationship	The formation of sport peers group Social dynamics within the peer group
Expectation of sport events	Impressive watching experience Frustrating media usage experience Concerns when watching sport events Expectation of future social interaction
Social TV prototypes	Several social TV prototypes are shown to the interviewees that allow them to discuss and give opinions

3.3 Recruiting

In this research, we try to find out peoples' social need and expectation around sport events based on their current viewing behaviors and experiences. Therefore, it is critical to look for participants, who have abundant social activities around sport events. Since these people immerse in sport events to certain level, they might provide ample and variety information for us to figure out comprehensively about the sport fans' life and their ultimate social demands.

In order to reach the above participants, a screener was designed as a filter which contains a few questions to realize people's current sport viewing and social status. Through the screening process, we try to find out people who have rich sport viewing experience, highly sport viewing frequencies, highly acceptance of technology, open social attitude and abundant social activities around sport events. The screener was broadly sent out via our social network and all the participants of the research process would recruit from the screener. For more detail of the screener, take a look Appendix D.

To be mentioned here, there are five options we set to figure out how often people watch sport game and use their social network in our screener, the rank of the frequency from the highest to the lowest in the following order: several times a day, once a day, several times a week, once a week, once a month or less. It was assumed this could help people can easily remind and fit their behaviors into our options, instead of counting the actual number that they might forget or even recall incorrectly.

In this thesis, we choose fifteen participants out of fifty-one persons on the screener list to join three different research sessions. Most of them were interested in a variety of sport events and have at least eight or more years of sport watching experience. These participants have highly viewing frequency during the sport events season, such as once a day or more. They also have a high degree of social tendencies and acceptance of technology which regularly use variety devices to login their social network and visit their favorite sport forums during daytime, such as BBS. All of the participants are at ages 20 to 30, most of them are students or just graduated from school in a few years. However, the gender ratio in this research is not balance, as there is only one female on the screener list has met the recruiting requirement. Table 3-3 showed all the recruited participants in three research stages.

Table 3-3 Profile of all participants

Participants		Age/Gender	Sport Viewing Experience	Sport Viewing Frequency	Social network Frequency	Viewing Sport events
Pilot interview						
P1		28/male	9 years	1/day	S/day	Basketball, baseball, tennis, golf, soccer
In-depth interview						
P2		25/male	8 years	S/day	S/day	Basketball, baseball, billiards, volleyball, tennis, soccer, football
P3		24/male	8 years	S/day	S/day	Basketball, baseball
P4		25/female	10 years	S/day	S/day	Basketball, baseball, volleyball, tennis
Group Probe Dairy						
G1	P5	25/male	13 years	1/day	1/day	Basketball
	P6	25/male	13 years	S/day	S/day	Basketball
G2	P7	25/male	10 years	S/day	1/day	Basketball, baseball, golf
	P8	26/male	11 years	S/week	S/day	Basketball, baseball, tennis, football
G3	P9	25/male	8 years	S/week	S/day	Basketball, baseball
	P10	24/male	8 years	S/week	S/day	Basketball, baseball
G4	P11	30/male	12 years	S/day	S/day	baseball
	P12	30/male	11 years	S/day	S/day	baseball
G5	P13	28/male	10 years	1/week	S/day	Basketball, baseball, tennis
	P14	30/male	11 years	S/week	S/day	Basketball, baseball
	P15	29/male	10 years	S/week	S/day	Basketball, baseball, tennis, hockey
Pairs Interview						
G3	P9	25/male	8 years	S/week	S/day	Basketball, baseball
	P10	24/male	8 years	S/week	S/day	Basketball, baseball
NOTE: P = Participant G = Group S= Several times Frequency: S/day> 1/day> S/week > 1/week						

For the initial understanding of the sport fans' life, we first recruit one participant for conducting a pilot interview. After adjust the research plan, in-depth interview were conduct as the first stage of formal research process. In this stage, we invite three participants who have the highest viewing frequency, including two male and one female to share their life around sport events. The interview duration were averaging about one and a half hours.

In order to understand more about the interaction and interrelationship between peer-group, the group probe diaries have been applied which aim to recruit two participants in the same peer-group as a pair to join the probe diaries session. We initially recruited five participants from the screener, and then invite them to recommend their closest sport peers for us.

After the recruiting process, five groups and a total eleven probe diaries were sent out via post. One of the groups contains three participants, rests of the four groups have two participants in each, and all participants are male. These participants were ask to finish each theme task a day, and after five days later, these probe diaries were send back to the researcher for a further analyses.

Finally, for a more understanding of the interaction between peers and a comprehend interpretation of the diaries, it has decided to hold a post interview. Two participants in the group three were recruited form the probe diaries session to join the interview together. This interview was taken about two hours to finish.

Chapters 4 Result

After the three-stage research process, all data collected from the in-depth interview, pair interview and probe diaries have been take notes and analyzed into affinity diagram. As a great deals of findings have been revealed through different approach, the outline of sport fans' life around sport events have been clearly draw out.

To be mentioned here, although each method was originally aimed to address some specific issues, there are still many topics have been covered with more than a single method. Therefore, those findings found from the in-depth and pair interview would be integrated and stated together in the first section of this chapter, since the addressed issues are much similar. Findings gathered from probe diaries would be presented in the next section of this chapter.

4.1 Interviews

In this section, findings of in-depth interview and pair interview which gathered from five participants we recruited were presented here. These findings have been integrated and classified into five main phases: Facts of viewing pattern, social activities during sport events, daily social activities relate to sport events, the usages of media and the community building around sport events. (Table 4-1)

Table 4-1 Five phases of interviews results

Factors of viewing pattern around sport events	A. Significance of sport events influencing viewing attitude
	B. Viewing behaviors during sport events
	C. Viewers' concerns about the sport watching experience
	D. Common sense requirement for sport events
Social interaction during sport events	A. Group viewing prerequisite
	B. Thoughts of collocate viewer
	C. Social interaction with peers during sport events
	D. Social interaction with strangers during sport events
Daily social activities to sport events	A. Factors of social interaction with sport peers
	B. Sharing under different context
	C. Factors of social interaction with strangers

Media usage versus sport events	A. Enriching information collection
	B. Enhancing social ability
Peer groups and larger community	A. Interrelationship within peer group
	B. Enlarging the sport community

4.1.1 Factors of viewing pattern around sport events

In the interviews, our informants referred about how they choose to watch the sport events, how they watch and what they do during the game, what they concerned most of the viewing experience and what expectation they have around the sport events. Sports fans' perspectives on how special characters of sport events influence their viewing behaviors will be line up here.

A. Significance of sport events influencing viewing attitude

a.1) Different preference for sport events

Almost all the informants claim that they would not watch every single game even if their favorite sport events, because there are too many games for them to follow up. Instead, they will choose the sport games they want to watch based on some preference criteria. In the interviews, we found three major criteria constitute the "significant game" which referred most by our participants, shown in table 4-2

Table 4-2 Criteria of significant games

Criteria of significant games	1. Games with favorite teams or players: Firstly, games which are played by their favorite teams or players were the most mentioned reason by our informants.
	2. Outcomes of the games are decisive: The outcomes of the games were having much directly impact on the teams and players they support, such as playoffs or national match up.
	3. Games are rare to see or have monumental meaning: Thirdly, games are rare to see or have monumental meaning, such as a classical matchup or a retire game of a player.

a.2) Cautiously treating significant games

Above criteria constitute the so called "significant games" by our informants, and further influence their viewing behaviors. Throughout the research, nearly all the participant report that they were only care about these significant games, as they will pay more attention to

the broadcasting time of these games and arrange them into their viewing schedule. Besides, they would also watch these games from the beginning to the end during broadcasting period. Conversely, other insignificant games would be treated with a relatively casual attitude which people would only watch when they have free time, as they often cut in in the middle of the game and might not going finish it if the game itself is too boring.

B. Viewing behaviors during sport events

b.1) Unimportant moments during sport events

All of our informants reported that they will not always steadily stay in front of the channel while watching the sport events. Instated, there are some circumstances during the game they will choose to leave, and shift their attention to other activities. These circumstances usually make people feel boring and want to neglect it. Here are the four common boring circumstances constituted the "Unimportant moments" which make our informants wants to leave, presented in table 4-3

When meet the unimportant moments, people would temporarily leave for other activities to get through these unentertaining periods of the game, such as interact with other viewers, check and update game related information or even engaged in routine works which were unrelated to the sport events.

Table 4-3 Unimportant moments during sport events

Unimportant moments during sport events	**1. Official game breaks:** Official game breaks during the game, such as timeout, quarter breaks. These periods are normal and regular, so the informants can usually predict when they should go back to the game.
	2. Stable situation: Gap of the score between two competitors is huge and the outcome of the game is predictable and oblivious to see.
	3. Non- emphasis periods: Contrast to emphasis periods below, when the player supported by our participants are not playing, or the game is not yet into the crucial moments which every play on the court might decisive to the result of the game.
	4. Poor performance: When two opponents have poorly performance at the same time, people might feel uninteresting and want to leave even their favorite player are still on the court.

When matching to the above circumstances, people would temporarily leave for other activities to get through these unentertaining periods of the game, such as interact with other viewers, check and update game related information or even engaged in routine works which unrelated to the sport events.

b.2) Important moments during sport events

On the contrary, our informants also report that there are some moments during the game will excite them, even drag their attention back to the channel if they participating other activities. There are two kinds of circumstances which regard as "important moments" by our informants, shown in table 4-4

Table 4-4 Important moments during sport events

Important moments during sport events	1. Burst events: These events are usually abrupt and rare events which unexpected by our informants, such as astonishing movement, foolish play or even a fight between two opponents.
	2. Emphasis periods: When the player they loved are playing on the court or the crucial moments that every play might be decisive to the outcome, usually the last period of the game. These are two main specific periods referred most by our participants.

Most of our informants think watching the whole game are quite time consuming, and they only wants to emphasis more on some specific periods. Therefore, when the above important moments arrived, they would focus more on the game and tend to share and exchange their opinion and emotion about the events with others. The share activities were presented lately at paragraph 4.2.

b.3) Holding the context of the game while absent

Moreover, in order to capture the precious "important moments", people would not turn off the broadcasting channel while they leave for other activities. Instead, they would use the loudly sound from the game as a voice cue to inform them the real time situation on the court and the sound could make them feel they were still in the game. Some participants even claim they would predict the timing of these emphasis periods to decide when to go back to the channel.

"I'll always keep the broadcasting channel on. Once there is any special voice pop out from the game, such as the screaming from the reporter, I'll immediately jump back and see what happen"(P1)

Besides, many participants also say it is needed to check the game statistics or listen to the reporters' explanation to understand the current situation of the game if they just cut in in the middle. But they can always easily grab the context in a very short time.

C. Viewers' concerns about the sport watching experience

c.1) Live broadcasting bringing excitement
The importance of live broadcasting has mentioned most by all of our informants. They think live sport events brings an unpredictable character which make the game exciting since no one could possibly know what might happened next, and they all agree they would not watch the rebroadcast if not necessary.

"Watching live broadcasting is just like we are witness the history making" (P4)

c.2) Preferring higher content quality
Other obvious concern is that people care about content quality when they watching sport events. Although many of the informants report they usually watch sport events broadcasting via computer due to the restriction of environment or lack of channel selection, they still claim that once they have option, they would jump to the bigger screen, such as television, and use other devices as a secondary screen to do other activities.

c.3) Rare game, Impressive memory
On the other hand, when talked about the utmost impressive game experience our informants have ever had. Dramatic content and monumental meaning to their support player or team are two common reasons among those events they have recalled. They say these kinds of game are rare to see, especially when it is mega-events, such as Olympics or World cups.

"I remember the baseball game in 2004 Athens Olympics which the Chinese Taipei are chasing for qualify into the final. My friends and I originally thought we are going to win the game, but somehow we lost in the last inning, all the crazy audience around us devotes great emotion into the game, my friends even burst into tears." (P2)

D. Common sense requirement for sport events

d.1) Sport improving the understanding of sport events
The requirement of the certain knowledge about sport events is another key factor to influence peoples' watching experience. In the interview, many of our informants have watching more than one kind of sport events, and many of these events are matching to the sport they have participated. Almost all of our participant acknowledge that it is helpful to understand the sport events by participate the related sport activities. Simultaneously, they could also learn from the sport events to enhance the performance of the sport they play.

"I think the sport I play helps me to understand the game better, not only the rules, but feel the movement on the court."(P3)

d.2) Frustrating when watching unfamiliar sport events
On the other hand, our informants also report that when they were watching less familiar sport events, they would feel frustrating if they cannot understand the situation on the court. To deal with this problem, they might ask friends who know the events better or to participant a related sport, such as take the sport class. Some participants even say they could learn the knowledge from the discussion on the related BBS boards.

"If I don't understand the game, I'll ask others who know it better. It just how tiring to watch the sport event you are not familiar with" (P2)

4.1.2 Social interaction during sport events

In interviews, almost all the informant says they preferred watch the sport events with others. They think via watching together, they could share their opinion and emotion about the game with others, and further create exciting atmospheres and enhance the pleasure of the game. The social context and behaviors during sport events would be revealed in this section.

A. Group viewing prerequisite

a.1) Watching together only when significant games
Although the entire informants claim they preferred watch the sport events with others, they usually watch alone, and would only watch the games with other peers when they both know each other might have interest about the game. Moreover, the games itself are usually

huge and significant, such as playoffs or world cups, or have the player and team them both supports.

"I would only invite others to watch the significant sport events together, because these are something worth to see and everyone would pay much more attention on." (P4)

a.2) Geographically close prompting to watch together
When this significant game are about to arrive, people will notice and invite their peers to watch the game together, and generally they will tend to invite the peers who are "close" to them, not only relationally but also geographically. Since close friends will make them feel more comfortable and careless to express themselves and a closer distant might be easier for them to gathering in the same place to watch together without paying great effort.

"I would like to invite acquaintances who live close to me to watch the sport events together. This is much convenient for both of us!"(P1)

a.3) Better viewing environment enhancing enjoyment
Most of our informants feel that watching sport game with their peers is a kind of enjoyment, so they would like to pursuit a higher quality of the game, such as watching at a bigger screen and place, sometimes even go to the sport bar if the situation permitted. Some informants even say they might prepare related sport equipment to enhance and facilitate the interaction during the game.

"Watch sport events together with friends are something enjoyable and relaxing, it deserve a better viewing quality." (P2)

B. Thoughts of collocate viewer

b.1) Supporter sharing the recognition
Our informant also share some subtle thought about the collocate viewer they tend to invite to watch the game together. All informants say they prefer invite people who have a similar mindset and attitude with them about the game, or support the same teams and players. They think via sharing the same thought and emotion, they could feel being supported and accompany by others.

"I would invite someone who shares the same idea with me to watch the game together. It feels good when you can share the emotion and being supported by others."(P6)

b.2) Antagonist facilitating social interaction

Interestingly, many of our informants also refer that they would like to invite people who might hold an opposite ideas about the game against them, such as support the opponent of the game. The hostility situation, our informants consider, might facilitate the discussion, brings much more fresh view point and topic while watching sport events. But they also refer that the antagonist they invite will only reluctant to acquaintance, since the hostility discussion might offend people who are not intimate with them. However, few people in the interview claim they were not intent to invite antagonist, as they concern the criticize words might hurt the relationship of each other.

"If I watch the games with people I do not quite familiar, I would follow the mass support tendency in order to avoid saying something wrong or offend others. But if I watch with acquaintances, teasing around each other's favorite player or team would be a great pleasure of the game" (P1)

"We love to joke around other's favorite player when watch the game together, since we all acquaint to each other, no one would care about the offending words" (P5,P6)

b.3) Mix group, the best

Some informants who prefer to invite antagonist even think the best watching circumstances is to watch with the *"mix group"*, which some people share the same ideas with our informants while others hold an opponent opinion about the game. They say this kind of circumstances could usually raise an intense atmosphere, stimulus and generate variety topics to talk, and most important, fire up emotion via against each other, pouring energetic of interaction and lead to an ultimate viewing experience.

"It is best when watch the game with both supporters and antagonists. Those supporters would help me to against antagonists, and the squabble situation make the watching experience become much exciting and interesting" (P1)

b.4) Preferring viewer with more or less common sense

Lots of our informants say they prefer to invite people who might have similar understanding of the game as them. The informants explain these people are familiar with the rules and process of the game, so they both share the same aware of *"important and unimportant moments"* which smooth the conversation timing during sport events. Some informants even claim they feel frustrating when they watching the games with someone who is new to the sport events, because they have to be keep explaining the rules and situations to another person, and these newcomer will always talking a unrelated topic in a

weird timing which could interrupt and bothering the watching experience.

> *"Watching sport events with others who are unfamiliar with the rules are sometime quite disturbing, because I might need to keep explaining the game and interrupted by unrelated chatting." (P4)*

C. Social interaction with peers during sport events

c.1) Interaction changeable with game flow

All of our informants say that most of the times while they watching sport events, their talking topics will stay around the game itself, such as commenting each plays or even talk about other relate game or even the sport they play. Especially when the *"burst events"* comes, they would further put all their attention to it, talking, shouting, share the exciting emotion about the events with collocate viewers. Conversely, during the *"unimportant moments"*, they would shift the talking to other topics which might nothing to do with the game itself, such as the gossip about their peers or other life anecdotes.

> *"Since most of the sport events we watch together would be significant game, everyone would focus and talk more about the game itself, unless the commercial or some boring timing, we might engage in chitchat" (P4)*

> *"We talk less during those intense moments of the game and chat more when those leaving timing when I watch alone, but there are times we would celebrate and shouting for some exciting plays." (P1)*

c.2) Interaction only if remote peers interest

Besides, our informants reported that they will also interact with their remote sport peers while watching sport events. They might use different devices and networks to chat or share information with their peers, but as a prerequisite, they have to know first that their peers might have interest about the game.

Our informants say they would assume their peers would feel interesting if the games are important to them, such as playoffs or the games are played by their favorite player. Or, they might saw their peers are on-line at social network site during sport event, and further guess they might watching the same game as they are. Under these circumstances, they would actively chatting or sharing information about the game with the remote peers, especially when "burst events" happened.

"Sometimes I would call my friends to recommend some important sport game to them, or chat during the game when I saw they are on-line, especially when exciting events happened." (P3)

c.3) Collocate viewer instead of remote viewer

In the interview, most of our informants say they would not intend to interact with other remote peers or use other devices if they are watching the sport events with collocate peers. As they claim the real social interaction with collocate viewers could replace the virtual interaction and entertainment, bring more pleasure of the game.

"I would not use my laptop when I watch the sport events with friends, because the real interaction could replace any other entertainment."(P2)

However, some participants in the interview also reported they would like to share the viewing experience with remote peers who are also acquaint with the collocate viewers.

"There are sometimes we would call our friends to share the information about the sport events we are watching, it just like he also watches the game with us" (P5, P6)

D.   Social interaction with strangers during sport events

As the aforementioned, all of our informants acknowledge they preferred watch the sport events with others. However, when ask about their normal watching situation, these informants report that most of the time they just watch alone. But, they will stay on the BBS boards which are related to the sport events they are watching. The BBS board works as a platform which brings a huge amount of passionate strangers who share same interest about the game as our informants are, and provide a great opportunity for they to see how others' reaction toward the same game.

d.1) Stranger as a role of companion

Our informants says they would keep checking the update discussion and information on the BBS throughout the game, especially when the *"burst events"* arrive, because they would curious about what others might think about the play they just saw, and if others share the same idea and emotion as they are.

"If there are some exciting event happened during the game, I would immediately check the related discussion about the event on the BBS board, because I want to know what others reaction." (P4)

Same ideas shared by many of our informants, they think when their peers cannot watch the game with them, those viewers on the BBS can brings a feeling of accompany to they, even if they are strangers. Some informants even say sometimes they could share the emotion by just simply watch the discussion on the board, and watching these interesting comments have become one of the pastime to them, especially during the unimportant moments of the game.

"When there are no one can watch the game with you, BBS are your best friends" (P2)

d.2) Following sport events via strangers' discussion
Interestingly, as our informants referred, they would keep staying on the BBS boards even if they have already turned off the broadcasting channel. This would happen in two situations. Firstly, the game is over, but our informants wants to know what other viewers' opinion about the game, they think others' comment sometimes are funny and fresh, and they can find pleasure or even understand more about the game.

"Usually, I would stay on the BBS board for a while after the game, because I want to know others' comments and thoughts or some related statics about the game." (P3)

Secondly, the game itself is too boring, so our informant shut the channel down, but they will keep following the game via the discussion on the BBS, and if people start enthusiastically talking about the situation on the board, their curiosity would be raised again and then going back to the channel again.

"I would turn off the broadcasting channel if the game is really boring, but there are sometime I was attracted by the exciting discussion on the BBS board and go back to the channel again. The impact of others on the boards is huge to me."(P5)

d.3) Conservative interaction with strangers
Although most our informants regard BBS as a great source of pleasure and bring a feeling of accompany to them, they do not actively interact with other viewers on the board, because they are strangers. As our informant' report, usually they just browsing the board, since they do not know other viewers' intention, and afraid their opinions might be criticized by those viewers. Therefore, they would post their thought onto the board only if they are pretty familiar about the game or have seen some opinions that are inappropriate or even make them feel offended. Besides, most of the replies by our informants on the BBS are highly relate to the sport events, since they do not know these viewers, it hard to talk about other topics with them.

"I would post my thought on to the BBS boards only if I am familiar with the game, otherwise I might afraid the opinions are not persuasive enough to convince others, even if I really want to share."(P2)

4.1.3 Daily social activities to sport events

In the interview, the sport fans' daily life interaction with their peer-group were also been revealed. It has found that there are variety of interaction related to the sport event between our informants and their peers. Here we present the perspective of our informants about their daily interaction with their peer-groups.

A. Factors of social interaction with sport peers

a.1) Sport events as a beginning chatting topic

Most of our informants referred that sport events would usually become the beginning topic of the chatting between their peers in their daily life, especially when meet face to face or even playing the related sport together. Usually, the conversation would quickly shift away from the sport events to an unrelated topic, such as gossip about other peers or life anecdotes.

"It is common to talk about sport events when I meet friends who have interest about the game, but not necessarily knowing them have watched the game or not. And this would usually at beginning of the talking, but not lasting long."(P1)

a.2) Active Interaction only if peers interest

Probably one of the most silent facts shared by our informants, they would share the information about the sport events with their peers only if they knew the peers might interest about the game. Moreover, the sharing activity would be more actively if the topic itself is about the *"significant games"* which were mentioned above, since they know both of them would pay highly attention to this kind of game.

"I want to talk or share the information about the sport events with my peer only if the game itself is important and they might feel interesting about it" (P4)

a.3) Sharing significant games and important moments

In the interview, each of our informants also talks about the information they usually share or discuss with their peers in their daily life. Most of the topics are about the *"significant games"* or *"important moments"* which we aforementioned, they are: games with

monumental or classical meaning, games that are played by the player and team which our informants and their peers loved, games that the results are critical to them, especially with dramatic results, and the last and most mentioned, the "burst events", such as astonishing movement or unexpected moment which are rare to see during the games.

a.4) Sport topics constantly popping out

Throughout the interview, some of our informants reflect that sport events seem took a great part of the interaction between them and the peers. In the pair interview, two informants both recalled that the sport topics would constantly prompted out when they hanging out together. These topics would always suddenly appear in anytime and anywhere, such as when dinning, shopping or even watching the movie, and would also easily triggered by related things, such as walking by a sport store then start talking sport events.

"No matter what we do together, we would always unintentionally talked about the sport event we both loved, it just natural to us" (P5, P6)

"I think it's just because there are too many things to talk, since the news of sport events are update so frequently, and even a single game have such verity facets to discuss" (P5)

B. Sharing under different context

b.1) Public sharing to attract the best attention

An common phenomenon have found in the interview, the sport fans would share the information or their thoughts about sport events with their pees via network, especially through their social network sites. The phenomenon usually happened when they have received something interesting about the sport events or they have some strong thought after watched the sport events, but they do not know who might feel interesting about the thing they want to share. Therefore, they would simply post it publicly on their wall and see if there is anyone who is interesting to discuss with them.

"Sometime I might have a strong feeling about the information, but I just don't know who to share, so I'll put the information on my wall and hope someone would come and discuss with me" (P5)

b.2) Private sharing specific to special person

Conversely, once our informants have an idea about some particular peers who might also feel interesting about the information, they would directly share the information to them in order to make sure their peers would receive, such as post on their wall, tag their name, or

privately share via message. Additionally, they would usually add annotate with the information when share to particular person, and expecting their reply.

"Sometimes when I see some fool plays by a particular player, I will link to some of my peers who support him, and share this highlight directly to them with some teasing words. It just how fun to see their reaction, and they will do the same mean thing to me!" (P1)

b.3) Synchronous interaction if urgent

Our participants reported that they would sometime chat about the game with their peers via cellphone or instant message, but only if the information itself are very important and particularly link to some of their closest peers. This usually happen when the game just finished since the exciting atmospheres are still exist, or there are something they are urgent to tell or share, such as a recommendation or invitation of the coming significant game.

C. Factors of social interaction with strangers

c.1) Stranger's discussion creating plenty of pleasure

Our informants also say they would frequently link to BBS as a habit in the daily life, but they will widely browsing every board related to each sport events they loved, rather than just focusing on a particular board which they would do during the game time.

"I love to watch the discussion on the BBS boards, as there are many funny teasing words between strangers and I could also learn some knowledge from others' analysis of the game, this brings lot of energy of my life."(P3)

Through browsing these boards, they could update news about every sport events they loved, and what more important is, each news would frequently followed with some interesting comments by other strangers. Watching these comments, as our informants report, are one of their favorite recreations, since these comments are sometime informative or even hilarious, poring great pleasure into their daily life. Many of our participants also report the discussion on the board would affect their viewing chose of the future sport games.

c.2) Conservative interaction with strangers

However, most of our informants report that they do not actively interact with these strangers on the BBS boards. They would post or share information only if they are familiar with the sport events or having a strong feeling about the content on the board, such as feel being offended. The reasons are exactly the same as their concerns while watching sport

events we have mention above, check paragraph 4.2.

"Usually, the dialogue with others strangers on the BBS was only focus on the sport events, unless there is someone saying something that are really interesting or provoking, the conversation would turn to unrelated topic" (P6)

4.1.4 Media usage versus sport events

In the interview, it has been found our informants use variety of media related to sport events. As different media holds different modality, they can satisfy our informants' diverse requirements, such as convenience, privacy, immediate, or constraints in the viewing environment. By jumping around these media, our informants could meet their needs around sport events broadcasting, during or even afterward.

A. Enriching information collection

a.1) BBS boards as a fundamental information source
Throughout the interview, one of the most referred media that our informants would frequently use are BBS boards related to sport events. Many of the informants acknowledge that these boards are their primary information source about the games, since other strangers would keep passionately gather information they received from everywhere and post onto these boards, everyone could easily update the last situation of every sports they loved by just browsing the boards.

"Most of the information about the sport events comes from BBS board, because there are miscellaneous information which posted by other strangers, it is quite easy to find something I might feel interested." (P4)

Moreover, each of the information would usually follow with some interesting comments by other viewers, and the calculation of the replies also shows the popularity which helps our informants to choose the hottest issue they want from the miscellaneous information pool.

a.2) Sport news for instant updating
Many informants report they would occasionally watch sport news on the television if they have no time to watch the whole game. This kind of news brings them a fast review of those sport events they care, gathering all the important moments which help them update the latest situation in a short time.

a.3) Using sport website as a complemental service

To enrich the information about the sport events, most of our informants say they would also visit some website related to the sport games they watch, such as the official sites of sport events or sport channels. These sites provide much professional and reliable information about the sport events which made by experts, such as breakdown columns of the game, and the clear layout could quickly lead them to find some specific information they require during the games, such as the real time game statistics or match tables.

Although the website and sport news seems a great source of the game, most of our informants only regard them as complement tools and spend way more time on the BBS boards to gather information about the sport events.

"Although some information preformed much clear and professional on the official website rather than BBS, such as the match diagram or real time game statics, most of the time I were still staying on the BBS boards." (P3)

B.   Enhancing social ability

b.1) BBS gathering massive sport fans

The BBS boards also work as a social platform, gathering massive sport fans in a single place, allowing our informants to accesses other unknown viewers' opinion and further exchange ideas or share information with them, no matter during or after sport events. It seems how important the role that BBS boards plays in their sport life, especially when they are alone, these boards not only provide information, but more a feeling of accompany.

b.2) Social network as a unification linking to sport peers

On the other hand, when it comes to sharing information with their peer-group, social network sites took place, or in most of our cases, the Facebook. As all our informants' reports, when they want to share their thought or interesting information about the sport events, their social network site jumps into their mind first.

"All of my friends are on the Facebook, there is no doubt I would share my thought there". (P1)

"It just how convenience the Facebook now is, it adopts almost all kind of types of information we want to share, and once you post, all of your friends would see and reply." (P6)

The characters of adaptation and uniform make the sharing activity could perform easily and efficiently. Meanwhile, the features of sharing in publicly or privately, also helps our informants to fit their share information into different context. Make the social network sites become the main bridge between our informants and their peer-groups, during or after sport events.

b.3) Cellphone using in urgent scenario

Another communication tools which used a lots by our informants are cellphone and instant massager. Cellphone would usually use in a relatively urgent scenario that when the informants want to share something immediately to their peers, such as notice an coming games which are important to both of them. By calling or sending a message directly to their peers' mobile, the informants could ensure their peers would actually receive the information.

"Sometimes I would send message or call the peers to sharing some information about sport events, but this only limit to acquaintance and the situation were usually urgent, such as notice a friend for his coming favorite game."(P5)

b.4) Instant message presenting peers' viewing status

Simultaneously, instant massagers like msn or Google talks are another common communication tool for the informants but work in a slightly different way. Our informant use the tool more while watching sport events, they would seek out if there are peers online who are interesting about the game they are watching, then talk with them, since they might also watching the same game.

"When I see my peers are online, I would think maybe she is watching the same game as me" (P3)

b.5) Peers' media preference considering

Interestingly, when it comes to sharing activity, the chosen of the media would not only affect by the informants' preferences, but also their peers' preferences. They would consider what kinds of media their peers like or familiar with, then share the information via these media in order to ensure their peers would receive the information.

"I use Line more to share the sport information to him, because he uses it a lot" (P5)

b.6) Cross media and devices usage meeting different needs

Instead of staying in front of the traditional standalone TV, sport fans would jump between

different media to support their viewing and social requirement around sport events via each specific feature or modality the media can provide. And these behaviors are not only reluctant to the game time, but also afterward and extend to their daily life.

In the interview, most of our informants expressed that it seems natural to them to shifting their attention between different media during the game, since they all use computer to watch the sport events, switching are just as easy as a few clicks and multi-tasks are done without effort.

"I would jump to BBS or other website from time to time during sport events. I think it is because the switching task is too easy for me when I using the laptop to watch sport events." (P3)

4.1.5 Peer groups and larger community

As the present above, all of our informants have a group of people which frequently interact with them around sport events during or after the game. In this part, we would further reveal the relationship facts between our participants and their sport peers, and to the larger community.

A. Interrelationship within peer group

a.1) Iterate discussion forming sport peers
Based on our informants' report, the formation of the peers might once start as an occasionally talk which makes them know that both of them are interest in the same sport events or even the same team and player. Then, this would gradually become a common topic in their conversations and finally, with the Iterate talking reinforcement, build a stable relationship between them to form a peer group.

a.2) Common interests building closer relationship
Furthermore, if two peers in a same group shares more common interest about sport events, they tend to form a closer relationship and become a sub-group. The interaction between them might be much frequently than other peers in the same group.

"Although, we are three best friends on sport events, but he is closer to me, since both of us love to watch NBA and MLB, we have more common topic to talk and share with. In contrast, I could barely talk baseball with another one, because he only watches MLB games." (P5)

a.3) Proximal distance building closer relationship

Our informants say many of their closest peers are actually live close with them now, or at least ever. This advantage brings a great opportunity for them to meet, so that they can frequently interact with each other to form a better relationship.

"My roommates are my best sport peers, we always watch the game together, and we both love basketball and baseball, it easy for us to talk around sport events." (P4)

a.4) Peers with similar common sense of the game

Many informants reported that most of their peers' understanding of the sport events is about at the same level as they are, and this helps them can immediately capturing what each other are talking about, further form a smooth and pleasure talking experience. On the contrary, if the gaps of understanding of the game are huge, it would bring a frustrating talking experience, since they would interrupt by keep explaining the rules and terms of the game.

"When I watch or talk tennis with my peers, the discussion would always be more analytical. I think it is because we are all tennis players so we could talk like that."(P3)

Active interaction on favorite sport issues

Based on our informants' report, different peers would take the actively role on the interaction around their favorite sport issue. For example, if someone in the group loved a particular player, he wound enthusiastically send invitation of his game, share the information about him, or even raise a discussion about the player while the group conversation.

"I think there is no such an active person on the interaction among the three of us. Everyone play a dynamic role on the interaction of his favorite player or sport events."(P6)

B. Enlarging the sport community

As we know so far, the sports fans would not only interact with their peers around sport events, but also the unknown stranger on the BBS board. In the interview, we also found some evidence that these peers and strangers would further affect their and viewing and social attitude around sport events

b.1) Sport events watching for common social topic

In the very beginning of the pair interview, two informants which are junior high classmate, both reported that the reason they start watching the sport events is because most of their

classmate watching and talking about it. For having a common topic to interact with, they turn on their TV and have their first experience of the game.

b.2) Attitude to sport events being affected by others

Many participants acknowledge that they might change their support attitude toward others. For example, they might start pay attention to a player if the player himself is supported by most of his peers, friends, and family around them, or the player is so popular that they could see him everywhere frequently on TV, magazine or so on.

"I would usually support player or teams which being frequently broadcasted or loved by the mass population." (P1)

"I loved Roger Federer just because my mom supports him" (P3)

b.3) Following the public viewing behavior

Some of our informants also referred that if they saw there are others, especially a group of others, are watching and exciting about a sport events, they would forward and watch together with them. They explain this offer an opportunity for them to talked to someone they are not familiar with, and even discover a new sport peers. One informant even explicitly expressed his expectation:

"I want to discover more sport peers form the friends around me, and I would also like to know more people who love the same sport events as I am". (P5)

b.4) Open attitude toward unfamiliar supporter

In the interviews, our informants' interactions are much frequent and openly with those strangers on the BBS boards which related to their favorite players or teams. Some informants even reported that they would add the players or teams' fans blog. They are much willing to post comments, or even share information about the team they loved on to these social platforms.

"When I watch sport events alone, I would browsing the BBS board which related to the team I loved. Via staying on the board, I hope I could find people who are sympathetic to my opinion to discuss the game together." (P1)

I would only occasionally share some interesting information to the BBS boards which related to my favorite players and teams. So far, most of the information I've shared are all have positive feedback. (P5)

4.2 Group probe diaries

Through the interview, different aspects of issues about the sport fans' life have been gradually unfold, the way they view the sport games, the social interaction around sport events and the interpersonal relationship between they and their peer groups. We further decide to apply the probe diaries to perceive more validity details from the field via self-document. By comparing the diaries between two peers in the same group, it is expected to found more subtle facts about their interaction and relationship, some innovation tasks would also cover in the diary in order to elicit their hidden needs and expectation around sport events. (Table 4-5)

Table 4-5 Five phases of group probe diaries results

Daily activities on sport events	A. Multi devices and media usage
	B. Conservative attitude toward strangers
	C. Sharing activities in daily life
	D. Similar media usage pattern among sport peers
The interrelationship and interaction among sport peer groups	A. Belonging to separate groups
	B. Similarity between two best sport peers
	C. Active role on favorite issues
	D. Latest viewing experience with collocate viewer
Activities during the game	A. Context of viewing and social activities
	B. Sharing activities just after the important moments
Building a sport club	A. Tendency to enlarge the members of the club
	B. Facilitating a better relationship through sport events
	C. Sharing activities with peers' preference
Viewing environment	A. Current viewing environments
	B. Ideal viewing environment

4.2.1 Daily activities on sport events

In the first tasks, questions are focus on their routine activity around sport events, such as the device and network they use, the sharing and communication activity with others during their everyday life. We also compare the two peers' routine activity and assume if there are any relations between them. (Figure 4-1)

Figure 4-1 A participant recorded his abundant daily activities around sport events

A. Multi devices and media usage

Most of the participants would regularly pay attention to the sport events they loved, especially their favorite player or team. Through the daily checking and browsing several familiar media related to sport events, such as BBS board, or official sport website, they could receive and update the latest news they care about.

Our participants also use different devices to accesses these network sites under different contexts, in most of our case are lab tops or computers, but there some participants also referred that they use their mobile device to watch the live score or news about the game their care, especially while commute, such as taking the bus.

B. Conservative attitude toward strangers

Another robust fact among the diaries, all of the participants massively pay attention to the comments from other unknown sport fans on the BBS, and they would usually have some thoughts about those comments, but there are no record shows that they have shared their thoughts on to the BBS broads.

C. Sharing activities in daily life

In probe diaries, the share and communication activities between peers did not frequently happened in most of our participants' daily life. Some of the participants are more active, but in most case, they only share information which is about important moments, especially about their favorite players or teams.

D. Similar media usage pattern among sport peers

Interestingly, when compare the two diaries from the same group, we found that the sources of information about sport event are highly overleaping between two peers, especially the closest peers. Some of the pair received many similar information form the same media, such as from the same board on the BBS, official website or sport news. (Figure 4-2)
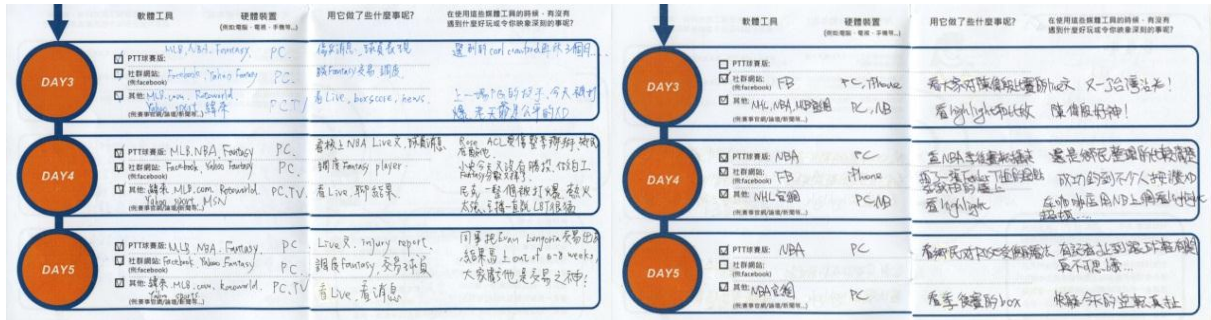

Figure 4-2 Two peers' similar media usage pattern related to sport events

4.2.2 The interrelationship and interaction among sport peer groups

As we discover some interesting issues about the sport fans' peers groups form the previous interviews, it is believed that there are more subtle facts which might influence the interaction and interrelation between them. Therefore, we try to design some tasks to make our participants have a deeper consideration about their interrelation and interaction with their peers.

A. Belonging to separate groups

Based on the relationship map they draw, most of our participants are not belong to a single peer group, but rather belonging to many separate peer groups at same time (Figure 4-3). These groups usually small-sized and the relationship within the group members are identical. Some of the peers even share one or more common relationship. For example, they might be high school classmate and basketball teammate at same time. Conversely, different peers in the separate groups did not know each other, and their relationships between our participants are usually diverse and different.

B. Similarity between two best sport peers

Then we focus more on our participants' best sport events peers, we found many similarity between them. First of all, the sport events they watched and the players or team they supported are usually highly overleaping, such as them both watch two kinds of sport events and support the same teams. Another factors is the physically close distant, some of our participants' best peers are really close to them in their daily life, such as colleague or even

lived together. Finally, many participants and their peers play the same sport which related to the sport events they both watch. Some of them play together, or at least they know what kind of sport their peers play.
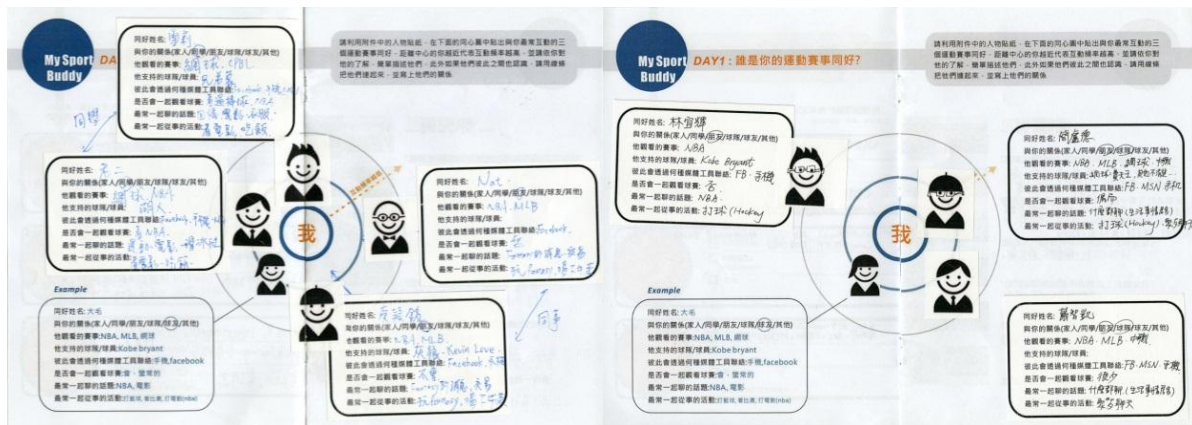

Figure 4-3 Two peers' own sport peer groups

C. Active role on favorite issues

In the sport peer group, people would tend to play an actively role on the interaction related to their favorite sport event issues. When we ask the two peers within the same group to recall the information the other one usually share, the content they noted almost match to each other's favorite sport events, players or teams. Many of them also regard the other one is a more professional sport fan.

D. Latest viewing experience with collocate viewer

Additionally, when ask to the last viewing experience of sport events with collocate viewers, the game they recorded are always the game player by their favorite players or a crucial game, such as championship series. On the other hand, the viewing activities often took in living room, some of the participants even record a sport bar which providing a better viewing environment. Besides, one participant even notes the reason he watch a game is because everybody in the lab are gathering to watch the game.

4.2.3 Activities during the game

A. Context of viewing and social activities

As we ask our participant to record their viewing context during watching sport events, the data shown on the diaries are no different to the result we have found in the interviews. The reason they watch the game, the activities they do during the game, the reason and timing they switch, even the media they use are exactly match to previous result which we found in the interviews.

B. Sharing activities just after the important moments

Sharing activity during sport events did not frequently found in our participants' diaries, and the few sharing activities we found are all happened right after "important moments" or at the end of the game, and the contents are also mainly about the "important moments" itself.

4.2.4 Building a sport club

In the probe diaries, we also add few innovation tasks to investigate their subtle needs and expectations of the interaction with their peer groups. In a "building a sport club" task, we ask our participants to imagine a sport club for them and their peers, they could invite anyone they wants, and hold any kinds of activities they wish to do together with the club members.

A. Tendency to enlarge the members of the club

Coincidently, except from their peer groups, our participants all shows a tendency to enlarge the members of the club. Most of the participant expressed that them want to invite friends or family member around them. Moreover, some of the participants even want to invite people they want to know about but not known or not familiar with.

B. Facilitating a better relationship through sport events

Though the activities our participants want to hold are various, they all related to sport events. They also wish to talk more and much freely about sport events in the club, and expecting this club could enlarge their peer groups and facilitate a better relationship between the people around them.

C. Sharing activities with peers' preference

On another task, we ask our participants to share information to each of the peers they have referred in the relationship map. Throughout the diaries, our participants all tend to share the information which their peers might interest, and they all try to share through the media their peers frequently use, instead of the media them familiar with.(Figure 4-4)
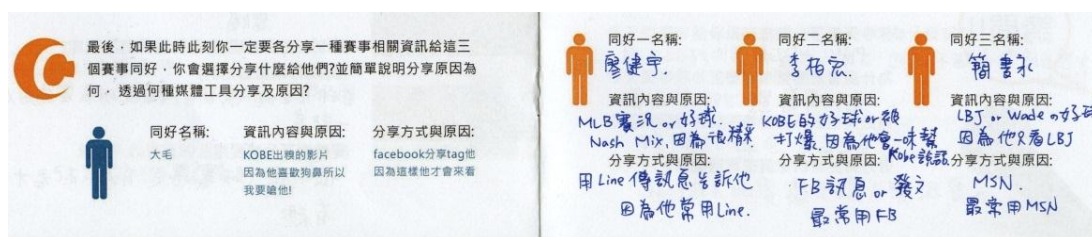

Figure 4-4 One participant recorded how he share information to sport peers

Additionally, those information people tend to share with their peers are slices from the game. For instance, about half of them would like to share the highlight reels about important moments to their friends.

4.2.5 Viewing environment

Since the setting of the environment might influence our participants' viewing and social behavior, in the last task of the probe diaries, participants are asked to draw out two kinds of viewing environment: the current and the ideal. (Figure 4-5)

Figure 4-5 A participant's viewing environment; the left is the current one and the ideal one presented on the right side

A. Current viewing environments

In the current viewing environment task, most of our participant use pc or lab top to watch the sport events and some of them also use other device as the secondary screen to do other activity around sport events, such as checking scores or browsing BBS boards. One participant writes a note beside the iPhone he draws *"I don't want to reduce the screen size of the game!"* Besides, some of them also put many websites and social platform sticks around the pc screen they draw to show the media they use during the sport events.

B. Ideal viewing environment

In the ideal viewing environment task, a robust strong eager to pursuit a higher sensation experience is telling by their drawing: 3D IMAX, supersize screen, high resolution projector, premium sound equipment with comfortable space. Half of the participants also draw out different devices around the environment and one even put a basketball ring right on the screen he draws.

Chapters 5 Discussion

The purpose of this research was to contribute insight to develop a better user experience of sport events on the social TV. As our review in the literature, television program genres play an important role in the use of social TV, so the question if how sport program genre might influence people's use of television. In last chapter, abundant evidences have been discovered from the sport fans' life around sport events. In this chapter, we would further discuss these results, first begin with identify and defining critical characters in sport events which might influence the use of television, then discover how these characters might have impact on peoples' viewing behavior, social interaction and relationship with others around sport events. Finally, we would propose some design suggestion for developing social television around sport events.

5.1 Critical characters of sport events genre

In Oehlberg's study, television genres with bursty rhythms or redundant content were considered as the most sociable. These genres provide plenty of pauses and opportunities for interaction while watching, such as sport events. (Oehlberg et al., 2006) In this paper, we further extending their research by distinguish what elements in sport events might be regarded as "bursty rhythms" and "redundant content" for the sport fans. Simultaneously, the interviews and probe diaries also came to the same conclusion on some special characters that concerned by our participants about the sport events. It has believed that these characters would have impact on peoples' uses of sport events broadcasting.

Unimportant moments

Based on our results, redundant content in sport events were generally owing to circumstances that are too stable or predictable which were uninterested to our participants, such as official game break or large score gap between two opponents. Additionally, periods without supported player or are non-decisive to the result of the game, were also regard as non-utilitarian plays that were unimportant to our participants.

Important moments:

Most of our participants reported there are certain periods during the sport events were considered as "important moments" of the game. We have discovered three common periods during the games which regard as "important moment" by our participants. First of all, burst events were most considered as important moment by our participants. Second, when the participants' favorite player or teams are playing on the court, the performances

would also concerned by them. Third, when the game is going to end and every play might directly influence the final result, as in our participants' word "decisive moments". The importance of periods forms the important moments of the game that our participant would tend to put most of their attention on them.

Burst rhythms:

As our results reveal, both interviews and probe diaries, bursty rhythms were usually referred to abrupt and rare events which unexpected by our participant, such as astonishing or foolish plays or even a fight on the court. These unpredictable events usually pop out anytime during the game which makes the participant feel exciting and pay more attention to them, forms the "bursty rhythm" of sport events.

Significant games:

Based on the results, there is preference differences among sport events, some games would regarded as more significant which might influence the viewing choose priority of our participants. We found three major criteria which mentioned most by our participant to evaluate the importance of the sport games: Games with their favorite team or player. Games are decisive that the results are importance to their favorite team or player, such as playoffs. Games are rare happened which have monumental meaning, such as classical matchup or Olympic Games.

Common sense:

Almost all the participants reported that watching sport events require certain knowledge about the game. Results show similar finding, many sports our participants play are highly related to the sport events they watch. They claim this could help them to be much familiar with the games, such as the rules or the difficulty of astonishing movement which they have experienced by themselves. The knowledge improves their understanding about the game to some extent, generates a much smooth and joyful watching experience.

Live broadcasting:

The value of live sport events broadcasting have robustly affirmed by all of our participants. The real-time firsthand information makes our participants feel they were standing in front of the world, and the unexpected result brings fresh and excitement to them. As all of the participants claim, most of the sport events they watch were live broadcasting, and the re-broadcasting games would not be accepted if unnecessary.

In the later sections, we would discuss how these characters influence peoples' viewing and social activity, and further forms relationship of peer groups and a larger community

around sport events.

5.2 Genre effect on viewing behaviors

Significant games to be scheduled

As shown in the interviews, almost all participants reported they would not watch every broadcasting game, but only to follow those games they think is important. Same results present in the probe diaries further confirm these finding, as most of the game they record on the day they watching were belonging to significant games which we have mentioned above. Most of our informants also reported, only the broadcasting time of these significant games would be put into their viewing schedule, and usually they would watching from the beginning to the end. On the contrary, those games which considered unimportant would be treated much casually, as our participant might cut in in the middle of the game, usually important moments, and might not going to finish if the game is too boring.

It seems reasonable that people only deliberately schedule the significant games, since these games are relatively rare and the importance of live broadcasting make these games become much precious to them. Therefore, we might argue that, although the current on demand television widely spread, the regulative use of television would standstill with sport events. (Lull, 1980)

"I will regret if I miss these significant games" (P1)

Moreover, these criteria of significant games can also be found in many of the most impressive watching experience of sport events which reported by our participant, and they usually overlapping. Therefore, we might be able to conclude that the more overlying criteria a game have the more people would deliberately to schedule the game and watch it.

Less plot, more switch

One of the most robust finding in our research, both interviews and probe diaries, our participants frequently jump between broadcasting channel and other activities while watching sport events and the timing they switch would usually match to important and unimportant moments which we have mentioned above.

That is, they would frequently leave for other activities during those non-utilitarian plays and back to the channel when important moments, especially burst event, and there were no different even if significant games. Moreover, in the interview, many of the participants referred that even if they lose the context of the game, they can easily grab the

situation back by simply check the game statics or listen to the explanations from the game reporter.

As all these evidence shown, switching between different tasks during sport events seems natural and effortless to our participant. To conclude the reason, bursty rhythms and redundant content make sport event a loosely structured genre which we could imagine the game as a cluster of countless independent tiny plays. Therefore, people do not need to stare on the screen all the time, but only to spent little attention on those tiny plays they care. Figure 5-1 shown The loosely structure make them could easily switching their attention during the sport events, but still updating the situation by catch the current context rather than the great plot of the game.(Hawkins et al., 2005)
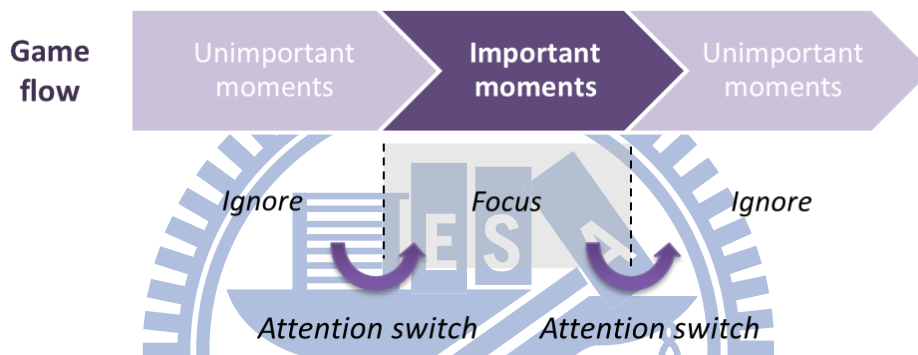

Figure 5-1 Attention switch during sport events

Interestingly, many informants of the interviews also report they would not turn off the broadcasting channel while they leaving, by this way they could knowing the situation on the court by hearing the sound of the game. Some informants even report the constant sound could make them feel they were still watching the game. We might explain this in two ways; first, since the burst events might happen in any moment, the loudly sound from the game might work as a notice signifier. Second, the sound might work as background noises that create a vivid atmosphere to accompany with our participants while they doing other activities during sport events. (Lull, 1980)

Secondary screen promising content quality

In the interviews, although must of our participants currently use their lap top or PC to watch sport event due to the reluctant of their living environment, they all claim once they have choice they would watch the sport events on television, and use their lab top or mobile as the secondary screen to do other activities, such as browsing the BBS board. Similar result found in probe diaries, many of the participants use other device as the secondary screen to do other activity while watching sport events, such as checking scores or browsing BBS

boards.(Figure 5-2) Moreover, many of the participants draw their ideal viewing environment with a large screen and even hi-fi sound equipment.

Figure 5-2 Using secondary screens to preserve content quality

However, the evidences seems go against with Greets' study as they claim *"genres with plot structure are preferred to be watch on television"*. (Geerts et al., 2008) Although sport events are typical loosely structure genre, people still care a lot about the content quality. One might argue that the duration of sport events might be as long as plot-structure genre, such as movies. But as we see the strong evidence above, people who watch sport events would constantly shift to other activities, and they only pay attention to certain moments, such as burst events. Therefore, we conclude the reason might less related to plot, but rather with the inherent sport sensual requirement which better sensory stimulation can enhance peoples' excitement about the game.

5.3 Genre effect on social pattern

5.3.1 During sport events

Loosely structure forming the communication patterns

As we see the results from the interviews, the communication pattern during the game seems highly related to the flow of sport events. Almost all the informants reported that when they chat with collocate viewer during the game, most of time the topics are related to the current content on the television, especially at those important moments. Conversely, only when unimportant moments arrived, such as commercial time, they would tend to shift their talking into unrelated matters, such as daily life anecdotes. Moreover, some of the participants also reported that the talking would occasionally shift to other sport game, and usually related to the current content on the screen.

It might not be surprised when we compare the communication pattern to the viewing pattern which aforementioned. (Figure 5-3) When people watch alone, they focus more on important moments, while when unimportant moments they will shift their attention to other activities. And since communication cost attention, it is much easier for people to talk a related topic while they still paying attention on the screen, while when unimportant moments appear, people no longer need to devote their attention but could easily shift to other unrelated topics.(Hawkins et al., 2005) The evidences also confirmed what Greets' inference in their study *"The communication patterns are also much more dependent on genre, rather than steady characteristic of an individual".*(Geerts et al., 2008) We might argue that loosely structure forms the communication patterns by directing peoples' attention.
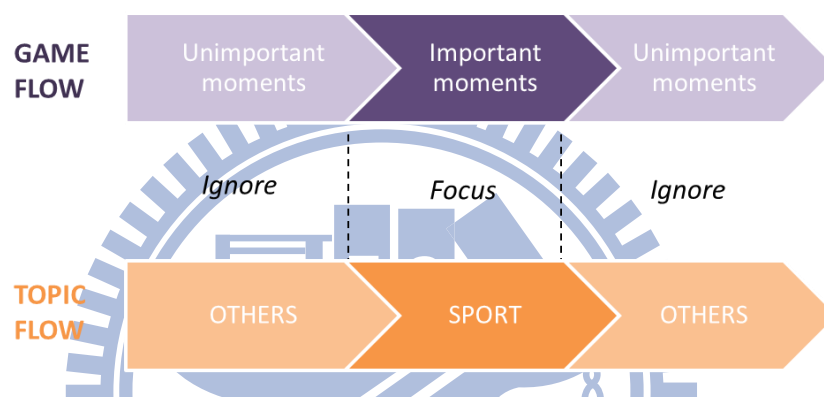

Figure 5-3 Attention directing the communication topic

Common ground synchronizing the social interaction

As we previous discussed, many participants claim the requirement of certain knowledge to enjoy the game, which is the common sense requirement. The impact of the requirement seems much dominate on social interaction while watching sport events. Most of our participants claim they tend to invite people, who at least interest about the game, usually their sport peers, since those people might be much familiar about the sport events, it is much easier to discuss with them. Otherwise, they might have been keeping interrupted by explaining and talking unrelated topics with other viewers who do not understand or familiar about the game.

As we know the communication pattern during sport events are very dependent on the flow of the game, which governor by the shifting attention. The shifting timing of the collocate viewers would be much easier to synchronize if they have similar understanding of the sport events since they both know when to focus and discard the content , it provide match timing to interact with each other. And the shard common ground might also work as facilitator for a deeper discussion. On the other hand, people who unfamiliar with the game

might constant fail the interaction by showing out on the wrong timing during sport events. It is believed the common sense requirement guarantee a smooth interaction experience by synchronize the attention of the viewers. (Figure 5-4)
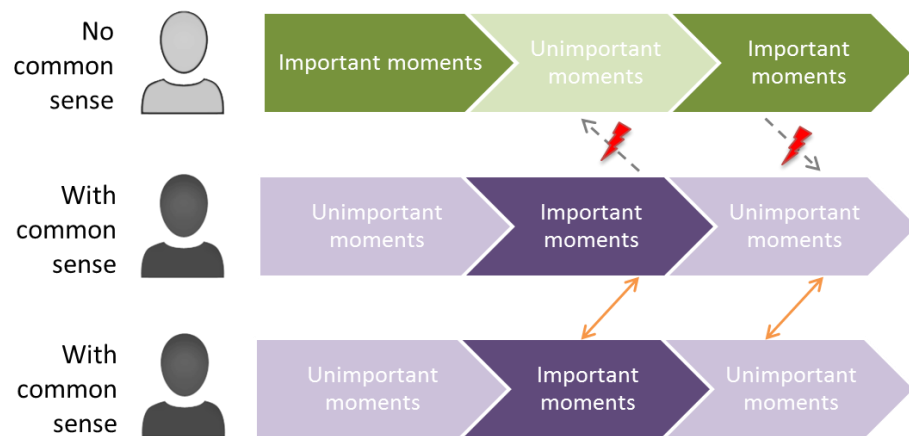

Figure 5-4 Comparing interactions timing with/without common ground

Aggregating sentiments correspond to important moments

In the interview, robust evidences have been found to support a shared phenomenon that there are certain moments would aggregate peoples' emotion during sport events. Our participants all agreed that by chatting or shouting with collocated viewers, or even just simply watching other strangers' discussion and reactions on the BBS boards, they could share their emotion and further generate an exciting atmosphere which they cannot feel when they watch alone. This phenomenon usually occurred when important moments during the game, especially burst events. Once these events happened, they would shouting and celebrating with other collocate viewers, and even if watching alone, they would immediately browsing the BBS to see what other strangers' comments and their reaction about the events. Additionally, many participants also referred that, after the game, they would usually stay on the BBS for a while to see how others feeling about the game they just watched.

Similar finding in the probe diaries further confirmed the phenomenon. Although most of our participant recorded they watch alone, most of the reasons they noted for switching to the BBS boards or even their share activities are because of these events. More interesting, none of our participant could clearly explain the phenomenon and their excitement.

"I don't know, it seems natural to me, I just want to feel the events with others, such huge excitement is something you cannot experience by yourself"(P5)

Before illuminate the obscure phenomenon, we first compare the results with the Sahami Shirazi et al. (2011) research. As we could see in figure 5-5, all the timings of the maximum input emoticon are almost perfectly matched to the timings we found during sport events. Those important moments, such as burst events or the end of the game are timings which aggregating maximum emotion, and the feelings of speechless excitement are just identical with those interviewees in Chalip's study.(Chalip, 2006)
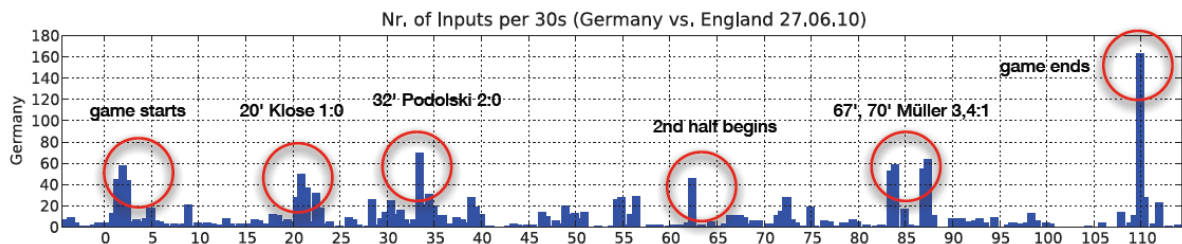

Figure 5-5 Histogram shown aggregated sentiments correspond to important moment

Therefore, we might conclude that these important moments have the capability to stimulate our participants' emotional behavior, and by mutually sharing or even feeling with other viewers, the aggregated sentiments would create the "Liminality" effect, that is *"a sense of ultimate energy that is felt more than understood and shared by all"*. (Chalip, 2006)

Collocate viewer instead of remote viewer
Based on our interview, many of the participants expressed they would not tend to interact with other remote viewers while watching sport events, either peers or strangers, if they watch with collocate viewers. They explain that the real social contact with collocate viewer can replace the virtual social interaction which brings more enjoyment, and they would not even use other secondary device for other entertainment. However, some participants report that if the remote viewers were also familiar with other collocate viewers, they might share the game with him, especially the important moments.

We infer there might be two interdependent reasons. First, the physical contact between collocate viewers might take advantage to replace interaction with remote viewer. Since there are important moments which could stimulate the emotional behaviors, multi-sensory interaction might further enhance the "Liminality" effect, such as high-five, shouting, embracing that enlarge the excitement experience.(Chalip, 2006; Kennedy, 2001)

Second, when people gathering in the same place watch sport events, they might care about the feelings of others as they could directly see each other. If they interact with remote viewers who are unfamiliar with these collocate viewers, those collocate viewers might feel uninteresting, ignore or even reject their behavior, although not explicitly shown.

As the evaluating process shown the behavior might not meaningful or appreciate to others, they would avoid to do it. On the contrary, interaction with remote viewers who are familiar with collocate viewers might be much acceptable, since the collocate viewers could engage the interaction.(Battarbee & Koskinen, 2005)

Contradictory evidence to antagonists

As we now turn to the contradictory preference toward the watching invitation to the antagonist. First, all participant agreed they wants to invite people who have similar idea or opinion, such as support the same player, as we called them the "supporter". However, almost the same amount of participants that would like to invite antagonist who against their opinion, would not like to invite the antagonist. Besides, those participants who like to invite antagonist considered that having both support and antagonist watch sport events together would be the most entertaining situation, but they also claimed these antagonist have to be the acquaintance of them. Conversely, participants who decline the invitation of the antagonist concerning the confronting positions might bring negative emotion.

"I afraid my cruelty critics might hurt and break the feeling of others" (P3)

As we look out to the reason, the antagonist might prompt the debate during sport events, such as mutually critic on both supported player, which stimulate the communication by showing their competence to each other (Lull, 1980), and as they know their acquaintance would not care being rejecting or teasing, it is easier to freely share their opinion and emotion without many concerns. On the other hand, the decline invitation of antagonist might due to the unfamiliar relationship which they mutually care about being rejecting or teasing by others.(Battarbee & Koskinen, 2005)

Group viewing demanding higher content quality

As aforementioned, people have requirement of content quality when watching sport events. The requirement seems become an essential condition when group viewing. In the interviews, our informants reported if they watch the sport events with other peers, a bigger screen and comfortable place would be the prerequisite. Results shown in probe diaries further confirm the precondition, the sport events they saw last time with collocate viewer often took on television, some of the participants even record the a sport bar which providing a better viewing environment.

"when I watch alone, I focus more on the sport game itself, as I often check the game statics for a deeper viewpoint, but when I watch sport events with other collocate peers, I would consider it as an entertainment which ought to pursuit a higher quality of the equipment to heighten the enjoyment". (P2)

As we discuss a lot in previous section, higher sensual quality might stimulate peoples' perceptions of the sport events, which enlarge the "Liminality" effect and create the most enjoyment viewing experience.

5.3.2 After the sport events

Loosely structure promoting social interaction

Since the loosely structure of sport events create plenty of pauses and opportunities for interaction while watching, this character seems also benefit for the daily interaction between sport peers. In pair interview, two participants both recalled no matter what activities they do together with their peers, those topics related to sport events would keep popping out from nowhere, they could immediately discuss about it under any circumstance, such as shopping, dining or even watching movies.

"The news of sport events almost updating every day during the season, and there are so many facets to talk about, especially those important moments of the games." (P5)

Another anecdote finding, some of the participants claim they would regularly update sport news which synthesize with all important moments from every sport events, particularly when they miss those games. Link to results shown in the probe diaries, those information people tend to share with their peers are slices from the game. For instance, about half of them would like to share the highlight reels about important moments to their friends.

"I only share highlights, since they are only things worth to watch after the game". (P2)

All of above evidences showing some similar characters about the communication and sharing materials: they are brief, they are many, and they are all important moments. Hence, we can argue that the loosely structure make the sport events works as a great communication facilitator in the daily interaction.(Lull, 1980) Unlike movies, the fragile plot benefits both sharers and receivers, since they are all handling a smaller context of the games. As figure 5-6 shown, the sharers could easily pick up any slice of important moments to share and the receivers do not even need to watch the game, only news is enough to talk.
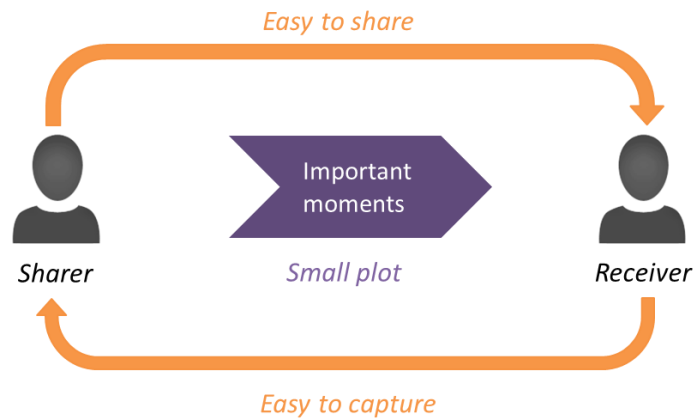
Figure 5-6 Small plot of sport benefits both sharing and receiving

Live broadcasting guarantee the status updating

One robust finding shown in the interviews, every participant claim that once they meet with their sport peers in the daily life, they would immediately start talking over about the sport events they both loved, but the conversation would not lasting long and would gradually shift to other unrelated topics. Following up, some informants reported if they saw their peers are presence on the instant messenger, they might chat with them about the game while watching, especially important moments, as they assume those peers are likewise watching the same game. Similar behaviors also found from the viewing context they record to match the results.

The live requirement about sport events, not only regulate peoples' viewing behavior but to ensure the status update from their peers by the same regulative function. For instance, people could easier to talk over about the game by assuming both of them have watch the live sport events last night. Once again the regulative functions of TV will still remain, guarantee the synchronous status update. (Lull, 1980)

5.3.3 Both during and after

Preference luring social interaction

There is a shared phenomenon supported by many findings in our research: People would tend to play an active role in social activities only if they know others might interest about it. First, we look some results shown in interviews, people would only invite collocate viewers to watch important games, those important moments during sport events are much like to be talked or shared by our participants. And if our participants receive something related to sport events that their peers might feel interested about, they would directly share with the peers, such as a highlight reel about the player who is supported by the peers. Second, as the

results recorded in the probe diaries, all the share activities are point to a common reason: the information would be interested by their peers, and they are all highly related to important moments and important games.

Again and again, these findings prove that people would only being motivated to interact with others if they know the interaction might be appreciated, or saying- have feedback. At this point, we shall not surprise about the interaction content are all highly related to the important moments and important games, since these information would have the best chance to be appreciated by our participants' peers. From the viewpoint of co-experience, the experience of "important information" which evaluated by our participant has the largest opportunity to form a co-experience, either being supported or teased, but it would not being ignored. (Battarbee & Koskinen, 2005) Moreover, as we seen many of the shared information are overlay important moments and important games, we might assume that the more importance overlapping the information is, the more tend to be shared, and a higher chance to be responded.

To add an odd evidence, although all the participants claim they prefer to watch the sport events with their peers, most of the time they watch alone. It might not because only those important games are worth to watch together, but the importance game would guarantee others' appreciation. (Battarbee & Koskinen, 2005) Besides, they are not actually watch alone, as they all claim they would stay on the BBS boards, they are actually watch with a group of strangers who are appreciating the game they watch. Again, a typical stereotype thinking that watching television is a solitary activity.

Different Sharing in public or in private

Through analyzing the results from the interviews and probe diaries, we found most of the sharing activities go two ways: publicly or privately. As most of our informants reported, information they are interested in would usually be shared publicly via their social network, such as Facebook. They further explain that via share publicly, the openly information can be seen by everyone on the sites, just like an invitation to attract people who shared the same interest to talk over about the shared information.

"Sometimes there are situation like you have very interesting information, but you do not know who might share the same interest with you. So you put it on your wall and expecting someone would come and talk about it!" (P5)

Conversely, if the information they tend to share would make them associate with some particular peers who might interested about it, they would share the information privately to

those peers, and usually with annotation. More interesting, as we found in probe diaries, most of our participant would consider using the media which are much familiar by the receivers to share the information. Some participants also expressed that the expectation of being response would be much stronger when share privately.
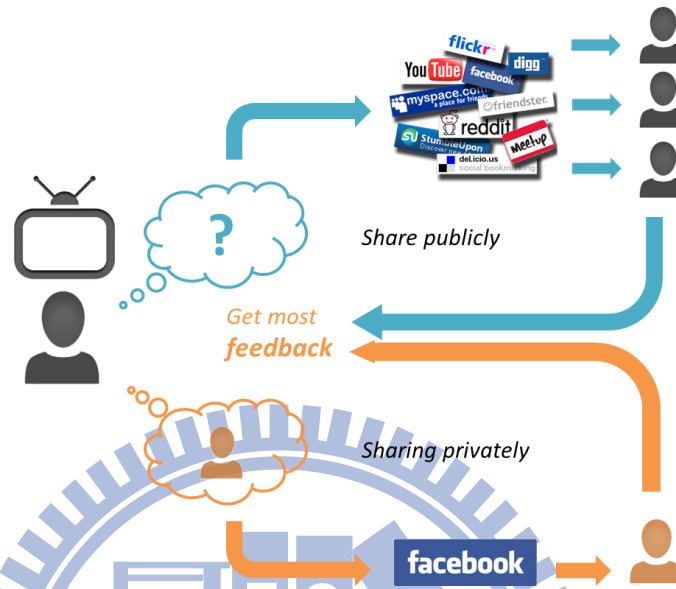

Figure 5-7 Sharing public and privately to get the most feedback

Although the two sharing path shown in figure 5-7 seems quite independently, it is believed the motivation behind is the same: to get the most feedbacks. To our knowledge, most of our participants using Facebook as the public share platform, and most of their peers are also using the site. Therefore, to share the information publicly on the Facebook is like sending an invitation to the largest number of people which create the best chance for discussion. On the other hand, via sharing the information privately to the particular peers, especially via the media they familiar with, they can ensure their peers would receive the information. The add annotation also represent the specific intention which might garb the receivers' attention and raise a higher chance to be reply.

Stranger as the content selection signifier

In previous discussion, we have shown how people could enlarge their excitement by the aggregating emotional discussion on the BBS boards. However, the pervasive impacts of strangers' discussion seems much more than just enhance our participants' emotion during the games, but also their daily life around sport events. As contradictory evidence shared by most of our participants, although they claim sport information presented on related websites is much clear and professional than on the BBS boards, most of the time they still spend on BBS and use it as a main source for gathering sport events information. This evidence has no difference during or after sport events.

Furthermore, many of our participants reported that browsing the BBS board is one of their favorite recreations, and comments on the boards are always hilarious and sometime even knowledgeable. And they would also take those discussions as a reference to choose the game they want to watch. Similarly, many informants in the interviews also stated that sometimes when they leave during the broadcasting, they would keep their eyes on the discussion on BBS boards to help them decide whether to go back to the channel or not.

When comparing the BBS boards with other websites, information shows on the two platforms although not identical, they shared similar quantity and degree of variety, but the biggest different is that each information on the BBS would followed its own comments and popularity which generate by other strangers. This provides a good indication to the most interesting information. Additionally, those comments on the boards might not only offer entertainment for our participants, but also point out the importance of the game, especially important moments. Masses reaction to the game might work as a signifier to hint participants which game is more interesting to watch, and by detecting the aggregated sentiments on the boards to infer the presence of important moments during sport events.

Therefore, we might argue that the presentation of popularity and comments shown on BBS work as a signifier to guide our participants' content selection about sport events. Such social signifier is what current websites lack, so our participants only use it as a complement with BBS, which explained the contradictory evidence.

Conservative attitude towards strangers

Although we have seen the pervasive impact from the strangers, most of our participants present a conservative social attitude toward the strangers on the BBS boards. Throughout the research, all of our participant claim they only passively receive the discussion which generate from the strangers, and usually they do not intend to actively interact or share information. Unless the participants are very familiar with the sport events, or the discussion on the boards brings a strong feeling to them, such as an insult to the player they supported. While we compare the evidence to the previous results, peoples' social attitude seems much openly and actively with their peers, as they do not even care if they familiar with the sport events but to share whatever they wants. Even they do interact with strangers; the content would usually focus on sport events.

"It's not easy to chat with a stranger, especially gossip."(P4)

Since our participants did not know the strangers from Adam, it is hard to evaluate if an experience are worth to be tell or not, because the preference states of others are unknown,

especially when they are not familiar with the sport events.

"Sometimes there are hostility atmosphere on the boards, I wish I could know others' standpoint before I share my thought" (P3)

Conversely, people who are knowledgeable about the game might have a better ability to evaluate whether the information would be appreciated by others based on their rich experience. (Battarbee & Koskinen, 2005)

5.4 Genre shaping the community

5.4.1 Peer groups

Belonging to separate groups

Both results shown in interviews and probe diaries, our participants have a group of people who shared the same interest on sport events, as they called "sport peer group". In the interview, according to participants' description, the peer group is consisting of those people they meet in the past who shared the same interest in sport events. The relationships between them are many, such as classmate, teammate, roommate or family, but the formation process is the similar which by mutually interact on sport events to gradually form a stable relationship between them.
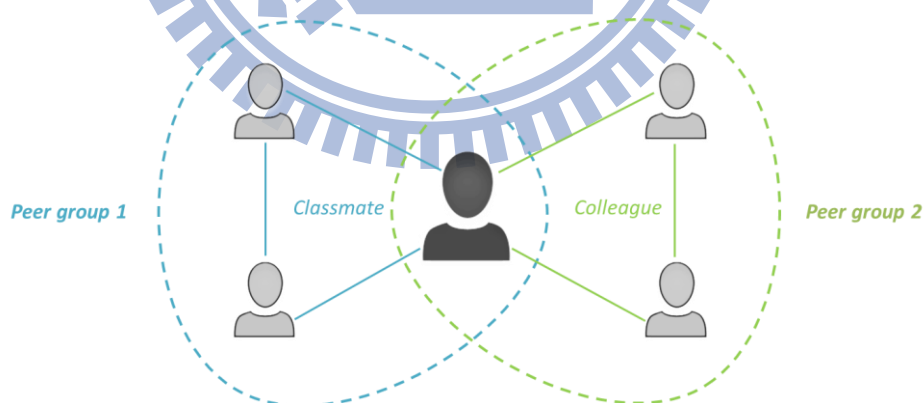
Figure 5-8 People belongs to many small-sized sport peer group

Interestingly, as we further discover from the probe diaries, most of our participants are not actually in a single peer group, instead, they belongs to many separate groups at same time. These groups usually small-sized and the relationship within the group members are identical, such as they are all college classmate.(Figure 5-8) Moreover, people in different group do not know each other, as one informant explain in the pair interview:

"These peers of mime are met at different past periods of life, so peers who met at same periods are acquaintance which form a peer group, otherwise they would be separate and have no interaction between them, since they don't know each other"(P5)

In sum, as most of our participants belongs to separate sport peers group. We might argue that when people interact with one of their peer groups, they would not intend to involve another peer who is out of group, because the unfamiliar relation might cause the fail of interaction. This inference might also supported by the previous evidence we have discussed, when people watching sport events with collocate peers, they would not intend to interact with other remote peers unless they are familiar with each other.

Stronger ties factors

By comparing two peers' diaries within the same group, we found many similarities between those group members. First, information sources of the sport events are alike, such as they all browse the same BBS boards and official sites, and the social network site they use are also relatively similar. Second, the sport events and player or team they loved are usually more than one overlapping. For example, both of them might watch NBA and MLB and supported the same player. Third, their relationship are commonly overleaping, as they might be classmate and teammate as well. Fourth, many of them regard the other one are a more professional fans or at least at same level of understanding of the games. Last but not least, the anecdote evidence shown that they are usually physically close, such as living together.

Although these similarities show in various ways, they point to a core function: facilitating the social interaction. First, similar Information source and the overleaping preference of sport events generate vast of common topics for talk or share and by using the same social media make the interaction much convenient. Next, similar understandings of the game smooth their communication during or even after the game, which is the common sense requirement. Finally, the overlapping relationship and physically close distant create more opportunity for frequently interact with each other.

Furthermore, these similarities appear higher overlapping on the two closest peers than other peers. Hence, we might conclude that these similarities are actually interdepend factors which stronger the social tie between two sport peers. In other words, the more similarities overleaping, the more frequent interaction and the stronger tie can be form.

"My roommate is my best peer, we always watch sport events together, talking and even criticizing around the games, and both of us supported the same team, loved the same game, which is NBA and MLB. It just how easy for both of us to talk around sports"(P4)

Active interaction on favorite issues

In pair interview, two informants within the same group reported that they would take the initiative interaction on their favorite issues of sport events. For example, if one participant's favorite player is Michael Jordan, then he would be the most likely person in the group to share, talk and even send the game viewing invitation about Michael Jordan. Similar results in probe diaries further confirm the evidence, when we ask the two peers within the same group to recall the information the other one usually share, the content they noted all match to each other's favorite sport events, players and teams. As one participant even noted the difference of leading roles they played in the group:

"If the information is about basketball, I would be the one who most actively share, but if it's about baseball, he would be the guy who share passionately to others"(P5)

It seems natural that people would take the leading role on interaction related to their favorite issues, as they would pay more attention on them. The massive receiving frequencies make these issues would have a higher probability to be the information which they think is worth to be shared. Moreover, as they are more familiar with their favorite issues, they might implicitly showing their competence or promoting themselves through the discussion, and form a leading role on these issues within the group. (Lull, 1980)

Relation between sport and sport events

As previously discussed, the sports our participants play might improve their understanding of the sport events they watch by providing related knowledge, and further smooth the interaction with their peers. With some anecdotal evidences revealing in interviews and probe diaries, the impact of sport seems also reaching to the relationship of the peer groups. In probe diaries, many participants and their peers play the same sport which related to the sport events they both watch. Some of them play together with their peers, or at least they know what kind of sport their peers play.

On the other hand, some participants in the interview reported that they often talk about sport events when they playing the related sport. Conversely, some participants also described that when they watch sport events with their peers, they would sometimes referred to the sport they play. More interesting, some participants even claim they might recommend or share the information to people who did not watch the sport events but play

the related sport. Similarly, many of our participants met their current sport events peers because of the same sport they play.

All above evidence shown how easily people could linking their through between sport events and the related sport they play. Hence, we argued sport might play two roles on the relationship of sport peer groups: maintain and enlarge. For example, people could extend the topic from the astonishing movement shown on the television to the similar play they have experienced by themselves before, and vice versa. The extending experiences prolong the interaction which further maintaining a better relationship between them. Moreover, people could use other's sport preference as a hint to meet new sport event peers, since these people might have a better chance to appreciate the sport events they loved.

5.4.2 Larger Community

Player and team forming sense of community
Throughout the research, we have seen the interaction between our participants and the strangers are very much depending on the play or team they support. There are lots of evidence, both interview and probe diaries, supports this dependent relation.

At first, most participant's claim they would stay on the BBS boards which related to the players or teams they loved, then celebrating the game with other strangers while watching the sport events. Some participants even join an online virtual club for the players or teams, such as a team's Facebook page. Later, many participants also report they would habitually browsing these BBS boards or clubs to updating the news and might even join the discussion with other strangers. More interesting, although most of our participant shows a conservative social attitude toward those unknown strangers, they present a relatively open attitude to the strangers who supported the same teams or players. As we could see our participants would more likely to post the information on the BBS or club related to their favorite teams or players.

All above evidence shared a similar concept, the players and teams they loved play a center role on the interaction between our participants and other unknown strangers. (Figure 5-9) The virtual spaces, which related to particular player or team, provide a clear sign for people to know other strangers' preferences. This sign motivate our participants to boldly share they thought to others, as we can see the social attitude become much actively and openly when people meet these strangers who shared same interest with them.
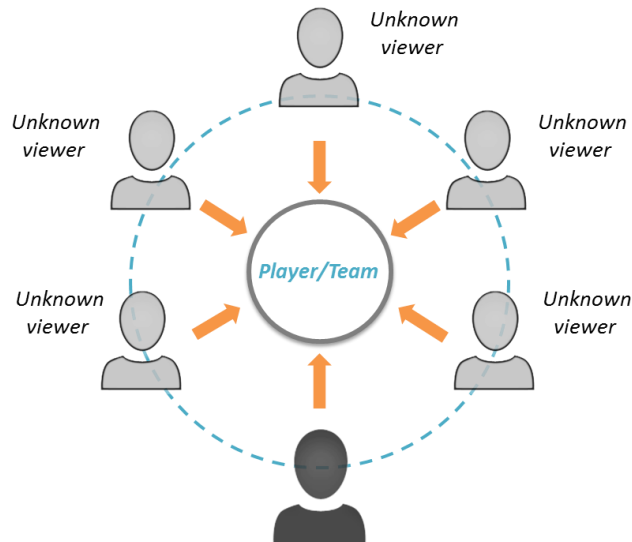
Figure 5-9 Players and teams as a central for connecting to other unknown viewers

Furthermore, we found many of the above evidences can be matched to the notion of "sense of community" which proposed by McMillan and Chavis (1986). People join or appear on the virtual spaces which related to their favorite players or teams to show their membership. They shared emotional connections and exchange of support among members by celebrating the great performances played by their favorite player. The sharing information and discussion on these virtual spaces also have certain influence on peoples' perspective of the sport events. Therefore, we might argue that players and teams provide a solid target for people to aggregating similar thought, emotion and shared faith with strangers who have the same interested, that create a "sense of community".

Attitude changing with the crowd

In the above discussion, it could be found that some evidence indistinctly shown others' reaction might influence peoples' perception about the sport events. Here, we further identify how these influence change peoples' attitude about the game. As we first look the in pair interview, two participants who are junior high classmate, both recalled the reason they begin to watching sport events is to create common topics with other classmates.

"When everyone around you is talking about sport events, you would start following the game, because you want to join the conversation."(P6)

Several findings present similar influence, many participants claim that their current support players or teams are somehow influenced by their peers' preference. Other participants also reported that those teams or players with higher broadcasting frequencies would have more possibility to become their favorites. Moreover, during or after sport

events, our participant would reference strangers' reaction on the BBS board to choose the game they want to watch. One participant even notes the reason he watch a game is because everybody in the room are gathering to watch the same game, and he do not even know what the game is about.

These robust evidences are telling a truth: people's attitude and preference about sport events would affect a lot by others, or more precisely, approaching to others. And the social force appears stronger with closer relationship, since people change and approaching more toward their friends than strangers. As we might infer from these results, the approaching attitude seems expanding people's social fabric of sport events, no matter people aware of it or not. People changing attitude with the crowd, forms a larger community around sport events.

"I want to discover more sport peers from those people around me, and I would like to know if there are more people who watch the same game as me, even strangers."(P5)

5.5 Genre effect on the migration of co-experience

In this section, we integrate the above findings to briefly discuss co-experience in sport events under Battarbee's framework, focusing on how sport genre might play a role on the migration of co-experience to understand more about the social aspects of use experience created in social interaction around sport events. (Battarbee & Koskinen, 2005)

Lifting up experience

As we mentioned above, important and unimportant moments of sport events make sport a loosely structure genre which the plot are fragile and small, people could easily lifting up "an experience" which have a clear beginning and an end, often called "a play". The different importance of the games or moments during sport events also work as an indication for people to evaluate whether their viewing experiences are meaningful enough to communicate them to others.

Simultaneously, the live broadcasting nature of sport events also help people to ensure their viewing experience would be appreciated by other viewers, since they might having the same experience at same time. Finally, as the result shown that people were much actively to interact with collocate viewer rather than remote viewer, we argue that in collocate viewing, people might be easier to evaluate if their experience are appropriate to share or not through observing others' viewing status and attitude in variety modality, such as eye contact or body movement. Although these social cues are sometime subtle and unconscious,

they add great value to the evaluating process which remote viewing can hardly replace.

Reciprocating experiences

Having certain common sense of sport makes sport fans could communicating and exchanging their viewing experience based on a common ground, which often leads to positive feedbacks. The common ground of sport events let fans have more similar viewing experience to lift up and exchange than the one who do not have common sense of the game. Even if people have no similar experience to exchange, the common ground could also help them to understand and rebuild the scenario of the experience shared by others, then offer a sympathetic response. By this point it might not to our surprised that the talking of sport events can always go non-stop among fans' daily interaction, since these similar viewing experience might pull more relevant viewing experience from their memories, the common ground of sport events provide vast of topics for them to interact.

Same concept might also explain why people always want to invite supporter to watch the game with them. The common ground they shared rooting on the player or team they loved which contain many similarity viewing experience for the fans to interact with each other, generating various topics related to the idol they loved and foster the process of exchanging experiences.

Rejecting and ignoring experiences.

Quite often, people without common sense of sport events might be rejected or downgraded when sharing their viewing experience to people who are knowledgeable of sport events. The experience they shared may be too familiar, uninteresting or sometime even bothering to the sport fans, such as the basic game rules. As we found in our results, sport fans would soften the rejection by topic change or inaction, most of them even rather to watch alone instead of inviting people who do not familiar with the game to watch together in order to escape from the embarrass situation.

On the other hand, as our result show, many sport fans also enjoy the opposition situation which they do not mind their sharing experience being rejected by their friends, instead, they love to invite antagonist to watch sport events together. As they all known the rejecting response they made would not hurt anybody's feeling, even bad words were seem as joking or teasing. Therefore, we assume people who watch sport might not afraid of being rejected by their acquaintance, instead, they welcome it without soften process. The intensive and direct rejecting responses open a free gate for people to aggregate and express their feeling with no reservation which foster and stimulate the social interaction.

Chapters 6 Design implication

We believe that the extensive findings and discussion we have just presented could provide thoughtfully insight into the development of future social television on sport events. Moving from research to design, we now briefly propose some possible design suggestion as the guide to support and encourage the sociable television viewing experience around sport events.

6.1 Content selection and sharing

6.1.1 Promoting synchronize interaction during sport events

In the research, we could see people show highly demands on live broadcasting of sport events, and all of them expressed to watch sport events with others would be much joyful and entertaining than watch alone. Combining the concerns, we suggested that designer could emphasis and explore more features aimed at easing and promoting watching sport events together and encouraging synchronizes interaction during the sport events.

For promoting watching together, designer might provide a filtering system which could searching the best sport game based on user and their peers' preference and the significant game criteria which we mention above, and further put these games into their viewing schedule. Conversely, by mapping and noticing the same game they have scheduled could also helpful to bring them to watch together.

Moreover, in other to gathering as many people as possible, both sport peers and strangers should take into consideration, as we could see people already showing the tendency to watch with strangers during sport events. The system should support synchronizes interaction not only with the acquaintance but with the strangers who shared the same interested with the users.

Finally, there are some subtle need should be aware when promoting watching together. First, although antagonists and strangers seems bring good value to the social interaction during the game, people still hold an conservative attitude if they do not acquaintances with the viewer. Therefore, designer should avoid the frustration by only invite the close peers and explicitly showing the preferences of other strangers. Second, encourage the collocate viewing if possible, as we could see the physical contact could take more advantage than

remote viewer on the social interaction.

6.1.2 Using social information as a content filter

The loosely structure and fast updating of sport genres make the sport content are ample, fragile and miscellaneous. To deal with it, people would observe the mass reaction as a guide to choose the content, since others reaction might reflect the importance of the content and watching the comments could also bring pleasure to them. As all these advantage already shown, designer should not only provide the sport content based on the users' preference, but more to allowing the attachment of social information to help the user to find out the content they interested most.

In other to use the social information to its full potential, designer might set variety of social filters to construct a satisfying and efficiently content selection mechanism. For example, instead of showing the traditional popularity, such as most view, most comments, top rated and so on. Designer could also separate the social information from users' peers and other strangers, as sometimes people might only want to know more about their peers' reaction.

Moreover, designer might provide the most desirable sport events content by cross mapping the users' preference and the social information, and provide a customized rank list which allow user could find the interested content in a faster pace. For example, design might provide a "Daily hottest pack" which allow user could updating the most interested sport issues in a short time.

To be mentioned here, the system should both support both during and after the games, as we have already seen people using the social information on the BBS in both way. Designer should always allow the sport fans have the best chance to get into the "sport herd".

6.1.3 Encouraging to share important materials

We have seen the important moments and significant games of sport events are not only determine sport fans' viewing behaviors, but played an important role on the social interaction with others. These important materials motivate peoples' social behaviors by ensuring the appreciation from others. Therefore, it is worth for designer to put more attention on these important materials.

As we discuss above, the more overleaping importance on the information, the more possibility to be appreciated by others. For example, to share burst events from the mega game which related to the receiver's' favorite player might have the best chance to be replied. Hence, designer could use the important criteria and preference of others to help the user to identify the most "suitable" link between the information and the receivers, such as recommending who might interested in the information

Designer should also support and lower the effort of sharing activities. The system should providing features which allow user to easily editing and annotating the important materials and convergence the share channel with others' familiar media. The timing of encouraging sharing activity should always happen once users have received the important materials, since that they would be most desirable to share that time.

6.2 Communication

6.2.1 Supporting attention switching with game flow

As the results reveal, the loosely structure of sport events not only provided plenty pauses and opportunities for interaction, but directs the communication topics by switching peoples' attention while watching. Since the viewing and social activities both cost peoples' attention, designer should support the switching activities with the game flow to smooth the watching and communicating experience during sport events. (Figure 6.1)

Providing the "right timing" for social interaction during sport events would be the first challenge to the designer. People usually talk and interact more while those unimportant moments, since their attention would be less focus on the screen, social activities could be encourage more while these periods. Additionally, the shifting attention makes people afford higher cognitive social behavior, such as editing, annotating and sharing the highlight, or communication via text chat.

On the other hand, although people also claim they would talk, shouting and celebrating while important moments during sport events, they still devote lots of their attention on the screen. Therefore, designer should provide communication tools with lower effort and less time consuming to support their social interaction, such as emoticon or voice chat.
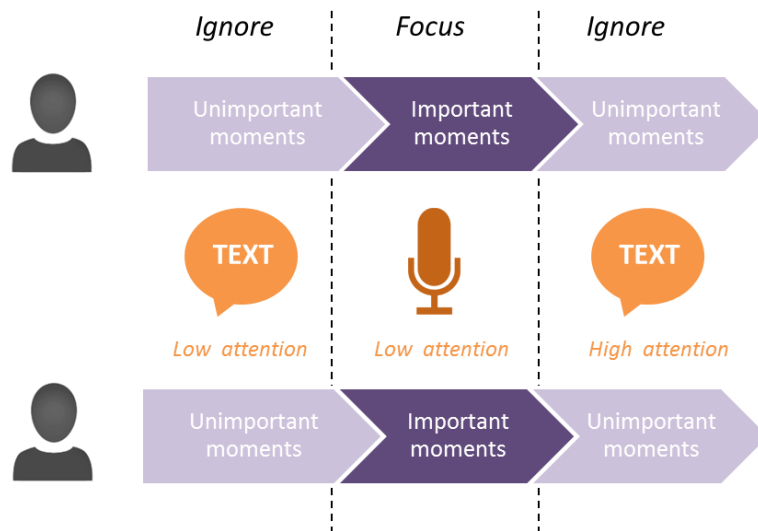
Figure 6-1 Using different communication modalities to support peoples' attention switch

Besides, as we seen in the finding, people might lost the context of the game while the switching their attention to other activities. Designer should ensure the smooth switching experience by helping the user could constantly link to the context of the game. For example, using a special voice cue to notice the important moments happened, such as the burst events. Other solution might be real-time recoding the content and make the bookmarks on those important moments, in case if people miss something, they could check these bookmarks for a quick review.

6.2.2 Maximizing the celebration on important moments

We have seen there are important moments during the games could aggregating people emotion and create the huge excitement and pleasure atmosphere. As this phenomenon seems a signature capability of sport events, we suggest designer should maximize the celebration on important moments to reach its full potentials and further raise the "liminality" effect.

The goal is clear, to make the user to feel and engage the mass reaction and emotion to the greatest extent. As finding indicate that multi-sensory might enlarge the feeling of "liminality" effect. Designer should allow the variety modality for the presentation of the mass reaction and participating of the celebration. For instance, designer might not only use sound and visual to show the aggregating emotion, such as an exaggerative animation, but also to use the sense of touch, such as the vibration of the remote control to make the user actually feel the "crowd".

On the other hand, as we mention above, the social interaction for celebrating should be effortless and less time consuming. Therefore, directly communication tools would be much suitable for the celebration, such as emoticon and voice chat. Similarly, adding kinesthesis for input peoples' reaction might also seems valuable to enlarge the excitement, such as waving the remote control.

To aggregating the emotion to the greatest extent, designer might stimulate the social interaction via rising against situation which encouraging and presenting both supporters' and antagonists' comments. When presenting the reaction, strangers and peers should all take into consideration to reach the largest amount of people. However, when presenting users' reaction, designer should give the chose for user due to the acquaintance concerns.

6.3 Community building

6.3.1 Building community around players and teams

Throughout the research, we found the players and teams not only affect peoples' viewing and social behavior, but create a sense of community by providing a clear target to aggregating the emotion and comments from people who shared same interest. The explicitly presence of preference make people are much willing to interact with the strangers. Since people also showing the tendency to expand their social fabric, we believe the players and teams would be a great starting point to enlarge their sport community.

To enhance the sense of community, the designer might start with creating an attractive virtual space related to a particular player or team for gathering the fans. The virtual space, which is the fans' club, visualize the existence of community and provide a united platform allowing the fans could easily exchange idea and information about the player or team.

Designer should also heighten the users' identification of the community in variety way. Decorating the club together or letting members have a shared iconic might be a good try. For example, people might have the chance to provide the design source or even joint the design process of the club. The fans' avatar in the club might also wear a shirt with the players' logo to display their loyalty to the club.

However, the social interaction and attitude between members might still inactive due to unfamiliar with each other. Therefore, designer might consider providing activities related to the player or teams to stimulate the interaction, such as the performance static forecast

and gambling. Moreover, people might still hold certain conservative attitude toward the fans, at least they are strangers. So, the interaction should treat with caution, such as using the text chat as the main communication modality.

6.4 Status updating

6.4.1 Showing the preference and viewing status

Sport fans are quite sensitive when they interact with others, as we all known people hold a conservative attitude toward strangers and sometime even their peers, and they only motivated to interact when they are sure their behaviors might be appreciate by others. To create a satisfying social experience around sport events, we strongly suggest designer should showing peoples' preference and viewing status as clear as possible. By this way, they might avoid the frustration of interaction via the appropriate social behavior, and further open their mind to interact with others.

More important, the showing viewing status should consider both individual and group. As people might belong to separate peers group, they might hope the interaction would stay in the same group in order to avoid the fail social experience. By displaying the group viewing status, people could avoid to disturb friends' group viewing experience or be disturbed when they watch with their peers.

We recommend designer could create a buddies list based on the structure and interrelationship of the peer groups we have found. Here, we provide some possible features to demonstrate how the buddies list might work like. First, grouping the peers, the visualize separate could help people to interact more efficiently and appropriately. For example, people could send a group viewing invitation or a specific information for every members without disturb peers in other groups.

Second, ranking the social interaction priority, the system might cross-mapping the current viewing status, personal preference and intimacy which based on the stronger ties we found to recommend the most available peers for social interaction. Finally, automatic status change, as people might sometime want to interact with others and other times preferring to focus on the screen due to the switch natural of sport events. Constantly changing their viewing status might make them feel disturbing; therefore the automatic status change might reduce the effort but still ensure the most suitable timing for social interaction while watching sport events.

Chapters 7 Conclusion

Social television is an exciting topic within iTV, but still in its infancy. Since sport events were long recognized as most sociable genre of television, the urgent need for understanding how such genre might possibly affect peoples' use of social television is our concern. Using complementary methods, the sport fans' viewing behavior and social interaction around sport events broadcasting are revealed with interviews and probe diaries. Furthermore, the interrelationships and structure of community build up with sport events were also explored.

7.1 Conclusion of findings

As our expected, social activities around sport events are energetic and abundant, and many of them are driven dynamically by some specific characters of the sport events genres.

7.1.1 Sport genre influence social interaction

Loosely structure creating opportunity for interaction

The loosely structure of sport events not only proved plenty pauses and opportunities for interaction, but directs the communication topic by switching peoples' attention while watching. Simultaneously , the less-plot characteristic also benefits for post-game social interaction, since the fragile content provide amply materials to share and the tiny plots facilitates the process by lowering the effort of dividing and receiving tasks.

Important materials driving social interaction

People shown preference differences when chose the content of sport events. There are some key elements have been identify to form a significant game and important moments of the game which could aggregated peoples' emotion and attention and further create huge excitement and pleasure. These important materials not only determine peoples' viewing behaviors, but work as an interaction booster of social activities among their peer groups. By interacting around these important materials, people can make sure their behaviors would be appreciated by others which motivate them to take an active role on social interaction. Therefore, it is worth for designer to put more attention on these important materials.

Common sense requirement making fluent social interaction

Simultaneously, we found that having certain knowledge of sport events could not only improve the viewing experience, but smooth the social interaction by synchronize the timing of the viewers' attention switching. Besides, the possession of common sense could also

guarantee the understanding of the conversation between peers by setting the talking on a common knowledge background of sport events.

Live broadcasting guarantee the status updating

Since the importance of live broadcasting of sport events has been constantly referred by our participants throughout the research, and they all agreed that it has much enjoyment when watching sport events with others. We might suggest designer could explore features aimed at easing and promoting watching sport events together and encouraging synchronizes interaction during sport events. However, some contradictory evidence about collocate viewers suggests that the group viewing should consider cautiously about members' preference and acquaintanceship, either collocate or remote viewers. Besides, the live requirement of sport events also preserves the regulative functions of television which encourage the post-game interaction by ensuring others' status update.

Content quality enhancing group viewing experience

Interestingly, we also found people who watch sport events do care about the content quality of the games, and the requirement seems much apparent when watch together, as many of our participants claim that to watch sport events on a bigger screen is a prerequisite for group viewing. Instead of the explanation which content quality are related to plot structure, we proposed the inherent need for sensual stimulation of sport events might be the main cause of the requirement. Therefore, Designers should promise the content quality while watching sport events, especially when group viewing.

7.1.2 Sport genre shape community building

Sport characters affecting peers' interrelationship

In this paper, some critical factors have been identified which might influence the relation and social dynamic between the sport peers. Similar information source, preference and understanding of sport events bring abundant common topics to interact which might stronger the social tie between two peers. Higher preference and understanding of sport content also boost people to be active on the social interaction among their peer group. Moreover, sport fans are actually belonging to separate small-sized sports peer groups, instead of a large united cluster. People in different groups do not know each other, so the social activities should stay more within the group.

Strangers pouring great values into the game

Our research shown strangers around sport events pour many positive values into the games. Their comments and reaction offer fresh viewpoint and entertainment for our participants.

People also use the comments and the popularity it shown as a signifier for content selection during or after sport events. Moreover, the enormous aggregating emotion created by large amount of strangers could amplify the excitement of important moments while watching sport events. Still, the conservative attitude shown by our participants suggest designer should with much caution when integrating strangers into the games.

Pursuing a larger sport community

As a final point, we found people who watch sport events have the tendency to pursuit a larger community. They would use the players and teams as a safer bridge to connect with other strangers, change and approach their viewing behaviors toward the mass attitude of sport events to attach to a widespread social fabric. Hence, designer should support people to build a larger sport community when designing the social television system of sport events.

7.2 Contributions

In this research, we have devoted findings of how sport events genre might influence people's viewing and social interaction during or after watching sport events and how their interrelationship of the community building around it. Some critical characters of sport events genre were also identified to differentiate the influence from other program genres of social television. Several design suggestions also brought up to improve a better experience for the uses of sport events broadcasting. Finally, the research might offer a systemically user study framework for the future investigation of genres effect on the uses of social television system.

We hope our findings and suggestions could not only provide insight to the emerging development of social television of sport events, but also extend to related social platforms to help designers to create a holistic and satisfying social experience around sport events.

7.3 Limitations

Although the study we performed offered many insights into the development of social television system on sport events genre. There are couples of limitations we need to state here.

At first, the result of this study are based on interview and probe diaries, instead of longitudinal study in a real environment observing actual interaction patterns during and after watching sport events broadcasting. Although the self-document diaries have been

applied as a supplement to avoid recall bias, these findings should be consult with caution. It is believed the only way to know if the findings are right for Social TV is through a longer field study, observing actual use over time.

Secondly, our research was mainly based on the current sport events broadcasting which the contents are limited to the production from sportscasters or TV producers. As different sports contents might influence peoples' interaction around it, more research might addressed on how different types of sport events broadcasting might bring impact to people viewing and social activities, and how they interact and influence with each other which might break the constraint of the current sports program production.

Thirdly, demographic distribution in this study is rather limited. Although the extensively sending screeners have tried to filtering out the wide range of research candidates, most of our participants were students with young age between twenty to thirty years old. The ratio of male to female were also unbalance, there is only one female among our entire participants. Therefore, more research should address on a wider demographic distribution to understand peoples' different needs of sport events in different ages and gender.

Fourthly, most of the data in our research comes from our participants' viewing experience in private place, such as watch alone or with friends. Public sports viewing experience is rather less found in this study, such as watching in the sports bar or in the sports stadium. We conclude the reason might due to the limited income of our participants since most of they were students or just graduate from school in a few years. It is believed the viewing and social activities in public place might be different from those in private place due to the involving collocate strangers that worth for further investigations.

Lastly, although we believe our findings are shared with all kinds of sport events and all of our participants in the study have also watching more than one kind of sports, many of them only focusing on ball games, especially basketball and baseball. Therefore, our finding might much suitable for the design of social television on ball games, but could still generally apply to all kinds of sports events with caution.

7.4 Future works

With the rising attentions on the development of social television systems from vast researchers and entrepreneurs, we might foresee the social capability would be the core value in the next generation television industries. As many studies reveal, television genres affect a lots on peoples' social uses of television, how to support peoples' interaction and

provide a good social experience around different television genres will remain a significant challenge to the designer, especially those loosely structure genres like sport events which contain abundant and active social activities around it.

Based on our study, we believed there are some issues are worth to be explored. First, different sport events might have unique subtle impacts on peoples' social activities around them, future studies might focus on specific sport events to expose deeper of fans divergent social needs of sport events.

Moreover, people are much satisfying when involving multi-sensory social interaction and they use variety devices and media to meets their needs by the diverse modalities them provided. It is worth for future research to discover new ways of interaction for sport fans to create a much exciting social experience around sport events.

Last but not least, as our result shown, secondary screen seems plays an important role on peoples' uses of sports broadcasting. The extra spaces preserve the content quality of sport broadcasting on the main screen. People could also easily switch their attention by shifting their eyesight on different screens and performing different tasks instead of confusedly manipulating various tasks on a single screen. For loosely structure genre like sport, attention switch are common and frequent, therefore, we believe it is worth for further study on how secondary screen could play a role in television environment which support peoples' viewing and social activities to promote a seamless viewing experience around sport events.

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ClipSync: http://www.clipsync.com/

Joost: http://www.joost.com/pause/

Sofanatics :http://sofanatics.com/

Appendix A: The Research Script for In-depth interview

In-depth interview scripts
Warm up
a.　彼此自我介紹(受訪者與訪問者)
b.　說明研究內容及目的
c.　說明訪談進行流程
d.　保密與配合(是否可錄音，說明訪談內容僅供學術研究使用，絕對不會外流)
Sub issues
a.　Viewing pattern of sport events
賽事觀看喜好:支持球隊與球星、觀看賽事種類、動機、頻率、訊息來源、選擇依據
賽事觀看過程:觀看行為(前中後)、地點、物品、是否會有離開頻道之狀況、動機、時機
賽事相關媒體:軟體、硬體、使用情況和方式
Main issues
a.　Social activities during sport events
共同觀賽對象(與受訪者之關係)，動機、頻率、喜好傾向、邀約狀況
賽事前中後互動行為:動機、時機、頻率、時間長短、內容、物品
媒體使用行為:內容、種類、方式、時機、動機、原因
觀賽環境: 地點、設備、場合、物品
b.　Social activities after sport events
日常賽事相關互動行為:對象、動機、時機、頻率、時間長短、內容、物品、場合
媒體使用行為:內容、種類、方式、時機、動機、原因
c.　Expectation
過去在觀看運動賽事轉播時，良好或挫折的互動經驗
過去在觀看現場運動賽事時，良好或挫折的互動經驗
觀看現場與轉播賽事的差別
觀看運動賽事時所關注的事項
Wrap up
a.　詢問臨時想到的問題或先前未考慮的問題
b.　訪問過程中是否有任何事情讓受訪者覺得不愉快或難以回答的地方
c.　檢視所有記錄的文件並詢問受訪者是否同意研究者帶走

Appendix B: The Research Script for pairs interview

Pairs interview scripts
Warm up
a. 彼此自我介紹(受訪者與訪問者)   b. 說明研究內容及目的   c. 說明訪談進行流程   d. 保密與配合(是否可錄音，說明訪談內容僅供學術研究使用，絕對不會外流)
Sub issues
b. Viewing pattern of sport events   賽事觀看喜好:支持球隊與球星、觀看賽事種類、動機、頻率、訊息來源、選擇依據   賽事觀看過程:觀看行為(前中後)、地點、物品、是否會有離開頻道之狀況、動機、時機   賽事相關媒體:軟體、硬體、使用情況和方式
Main issues
d. Social activities during sport events   共同觀賽對象(與受訪者之關係)，動機、頻率、喜好傾向、邀約狀況、場合   賽事前中後互動行為:動機、時機、頻率、時間長短、內容、物品   媒體使用行為:內容、種類、方式、時機、動機、原因   特殊情況互動經驗:原因、感受   **e. Social activities after sport events**   日常賽事相關互動行為:對象、動機、時機、頻率、時間長短、內容、物品、場合   媒體使用行為:內容、種類、方式、時機、動機、原因   **f. Peer group relationship**   賽事同好圈: 如何形成、成員(與受訪者之關係)   同好互動: 日常彼此的活動(不限於賽事相關)、賽事同好裡誰比較主動、被動、原因   媒體使用情況: 賽事同好間彼此慣用的媒體工具、種類、原因   **g. Expectation**   過去在觀看運動賽事時，良好或挫折的互動經驗   使用媒體工具的挫折與良好(特殊)經驗?   觀看運動賽事對於受訪者的意義為何?   與其他觀者一起觀看的價值與意義?

受訪者對於未來在運動賽事的社交互動上有何期望？

e.　Other Research prototype

介紹目前幾個具代表性的 social TV prototype feature (參考後方附錄)

詢問受訪者對於以下各個社交電視的原型有何看法、喜歡與否、或是想到其他形式

並請受訪者想像他們可能會如何使用這些 prototype 在運動賽事上

1.Panasonic's social TV app

(Text chart: integrate Twitter and Facebook/present on TV)

2.Media center buddies

(Text chart: integrate msn massager/showing individual and group viewing status/ instantly reply)

3.T-remote chart

(Text chart: present on remote control as secondary screen)

4.Amigo TV

(audio chart: present with avatar/ emoticon and animation)

5.Google+ Hangouts

(video chart: video conferencing with group)

6.WORLD CUPINION

(emoticon chart: nonverbal opinion sharing with emoticon via mobiles phone)

7.CollaboraTV

(Text chart: integrate asynchronous social information into synchronous interaction)

8.Video share

(Enhance social sharing of videos: fragment/annotate/ enrich and share)

9.Back talk

(audio chart: integrate remote viewing into an auditory environment)

10.TakeoverTV

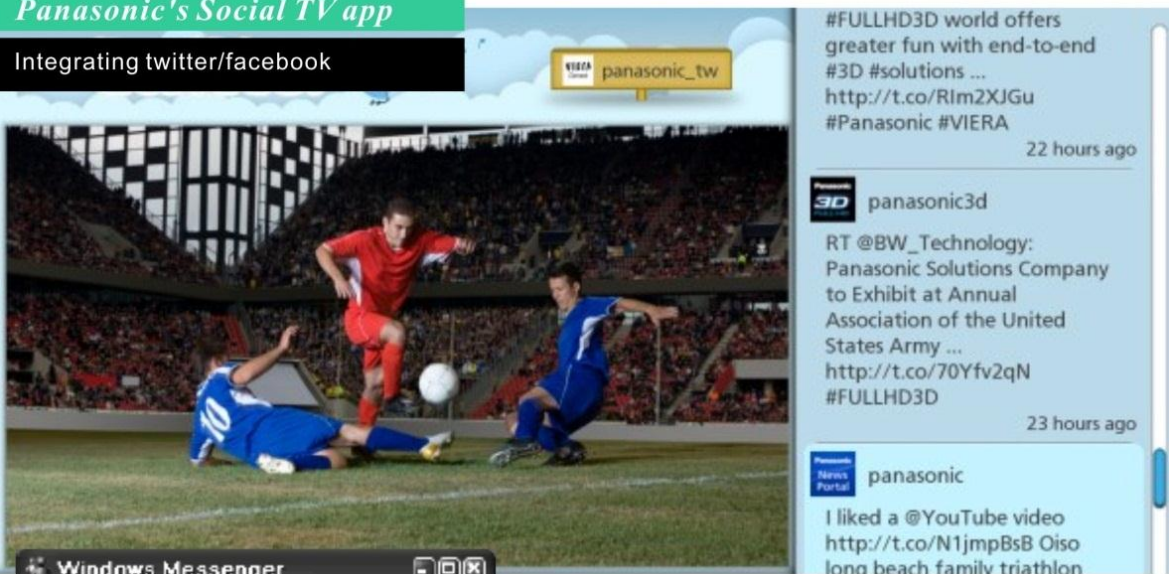(Negotiation of TV content: voting system/ public space)

Wrap up

a.　詢問臨時想到的問題或先前未考慮的問題

b.　訪問過程中是否有任何事情讓受訪者覺得不愉快或難以回答的地方

c.　檢視所有記錄的文件並詢問受訪者是否同意研究者帶走

Social TV prototype:1-3

Panasonic's Social TV app

Integrating twitter/facebook

#FULLHD3D world offers greater fun with end-to-end #3D #solutions ...
http://t.co/RIm2XJGu
#Panasonic #VIERA
22 hours ago

panasonic3d
RT @BW_Technology: Panasonic Solutions Company to Exhibit at Annual Association of the United States Army ...
http://t.co/70Yfv2qN
#FULLHD3D
23 hours ago

panasonic
I liked a @YouTube video http://t.co/N1jmpBsB Oiso long beach family triathlon

MIT media lab

Instant Messaging use remote as secondary screen

Media Center Buddies

Instant Messaging around a Media Center

Tim says to Ian and Tim: Hallo, what are you watching?

Social TV prototype:4-6

Amigo TV

Auditory talk during sport events, with avatar and emoticon

Google+ Hangouts

Video conferencing during sport events
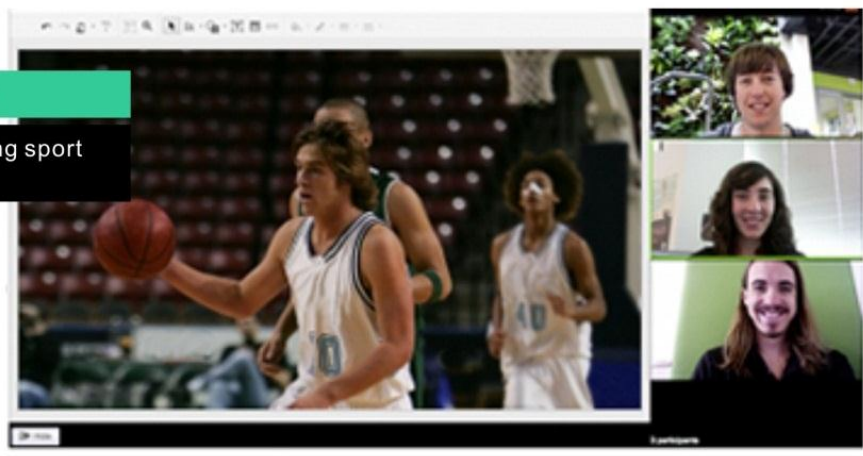
WORLD CUPINION

Real-Time Nonverbal Opinion Sharing through Mobile Phones during Sports Events
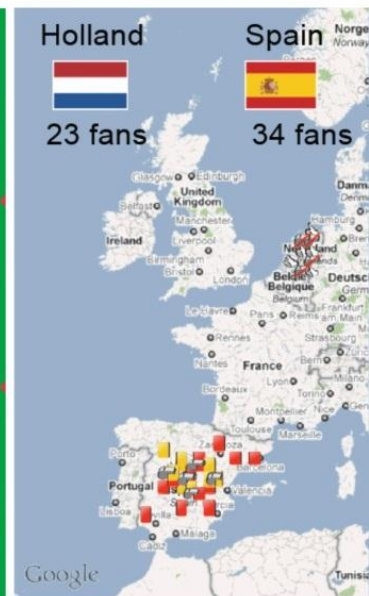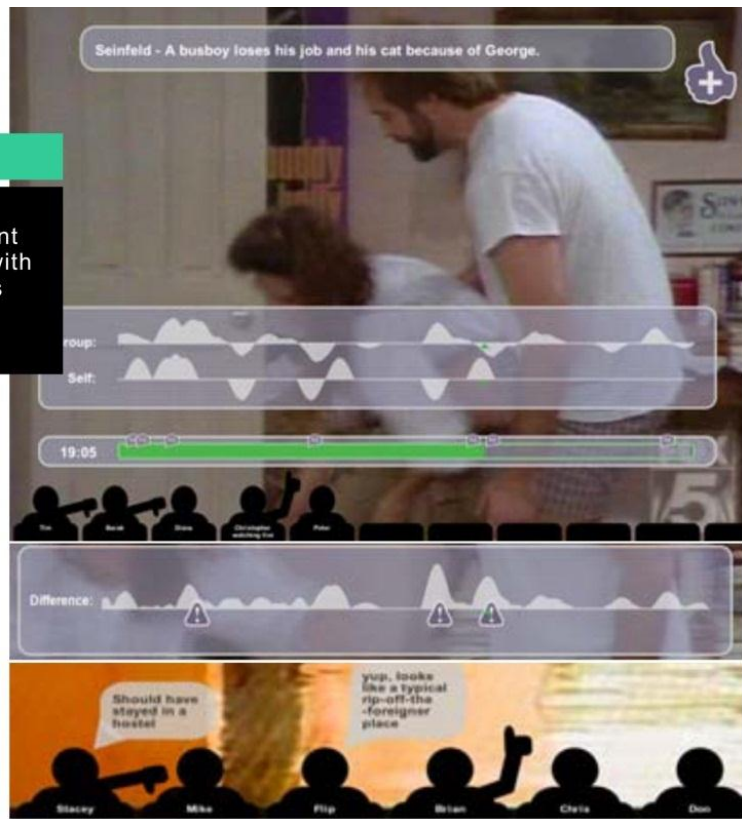
Figure 1: World Cupinion screens: (1) Initial Screen "Match List" (2) Second Screen "Arena" (3) Map View.

CollaboraTV

users to participate in recorded shows,despite watching at different times. This is primarily achieved with a virtual audience, which captures events generated by viewers asynchronously.

Videoshare

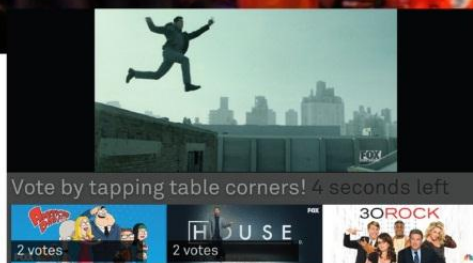Enhance Social Sharing of Videos: Fragment, Annotate,Enrich, and Share

BackTalk

An Auditory Environment for Sociable Television Viewing

TakeoverTV

Facilitating the Social Negotiation of Television Content in Public Spaces

1. Vote state: Tiles at the bottom represent the three most popular shows among local patrons.

2. Non-voting state: user photos are shown at bottom right so that they know their preferences are taken into account.

Appendix C: The Research Script for Group Probe Diaries

WELCOME :歡迎使用我的運動迷日誌

您好，我是國立交通大學應用藝術研究所的學生毛迦霖，首先想感激您能來參與我的運動賽事迷的生活的日誌活動!

我的研究計畫，目的是為了解現今您對於觀看運動賽事關注之重點為何，並探索您對於運動賽事之期待，以在未來整合多元的媒體工具，提供一個更符合您需求的運動賽事節目平台

您得分享內容只會做為學術研究分析之目的使用，除非得到您的書面同意，我們不會以其他名義或目的的使用您所記錄的文本，再次感謝您的熱心參與!

使用說明:

1.每日請挑選一篇特定主題填寫，共有五篇，不一定要按照順序，可依照您當天的活動安排，例如今天有看比賽，就跳到Game time去寫

2.每日結束前請翻至第一篇Everyday，和我分享您當天使用媒體工具在運動賽事上的狀況

3.隨冊附個人像貼紙，可在個人資料或是描述朋友時選擇貼上，而各篇也會依問題提供各類貼紙，請依該篇的範例使用即可。

4.一周內全數填寫完畢後，請盡快使用隨袋所附之回郵信封寄回 **300新竹市大學路東區90號9F之3 毛迦霖同學收**

最後，對於您的熱心與耐心填寫，我將獻上萬分感謝!

PROFILE

1.姓名:

2.性別: ○男　　○女

3.年齡:

4.職業:

5.現居地:

6.手機:

7.使用電腦時間:　　　　小時/天

8.平日興趣:

9.平常所從事的運動:

10.最喜歡的運動賽事:

11.最喜歡的球員/球隊:

貼紙

Start!

EVERYDAY :
我今天用了哪些媒體工具是關於運動賽事的呢?

請在每天結束前翻到這一頁，仔細想想你今天有沒有使用任何媒體工具是相關於運動賽事的，並簡單敘述你從那些硬體裝置來使用它們，並用它做了些什麼，或接收到了甚麼樣的資訊

軟體工具	硬體裝置 (例如:電腦、電視、手機等...)	用它做了些什麼事呢?	在使用這些媒體工具的時候，有沒有遇到什麼好玩或令你映象深刻的事呢?
EXAMPLE ☑ PTT球賽版: NBA ☑ 社群網站: Facebook (例:facebook,Plurk等...) ☑ 其他: yahoo 運動網　緯來體育台 (例:賽事官網/論壇/新聞等...)	電腦 電腦 手機 電視	吃飯的時候逛了一下今天的籃球新聞跟比賽精彩畫面 有看到朋友分享的喬丹經典影片，自己也回貼了一個他更早期的影片 坐車的時候關心一下現在賽事的比數回到家以後看了湖人隊的最後一節比賽	鄉民也太好笑了巴，我看推文笑到飯噴出來!! 沒想到現在喜歡喬丹的還這麼多，竟然回應如此熱烈 用手機想看比賽片段，網路卻慢到像是在看照片一樣真地x...
DAY1 ☐ PTT球賽版: ☐ 社群網站: (例:facebook) ☐ 其他: (例:賽事官網/論壇/新聞等...)			
DAY2 ☐ PTT球賽版: ☐ 社群網站: (例:facebook) ☐ 其他: (例:賽事官網/論壇/新聞等...)			

EVERYDAY :
我今天用了哪些媒體工具是關於運動賽事的呢?

請在每天結束前翻到這一頁,仔細想想你今天有沒有使用任何媒體工具是相關於運動賽事的,並簡單敘述你從那些硬體裝置來使用它們,並用它做了些什麼,或接收到了甚麼樣的資訊
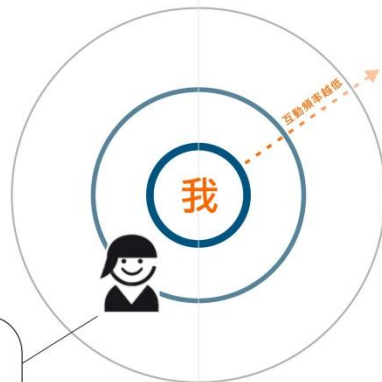
| 軟體工具 | 硬體裝置 (例如:電腦、電視、手機等...) | 用它做了些什麼事呢? | 在使用這些媒體工具的時候,有沒有遇到什麼好玩或令你映象深刻的事呢? |

DAY3
☐ PTT球賽版:
☐ 社群網站: (例:facebook)
☐ 其他:
(例:賽事官網/論壇/新聞等...)

DAY4
☐ PTT球賽版:
☐ 社群網站: (例:facebook)
☐ 其他:
(例:賽事官網/論壇/新聞等...)

DAY5
☐ PTT球賽版:
☐ 社群網站: (例:facebook)
☐ 其他:
(例:賽事官網/論壇/新聞等...)

My Sport Buddy *DAY1 : 誰是你的運動賽事同好?*

請利用附件中的人物貼紙,在下面的同心圓中貼出與你最常互動的三個運動賽事同好,距離中心的你越近代表互動頻率越高,並請依你對他的了解,簡單描述他們,此外如果他們彼此之間也認識,請用線條把他們連起來,並寫上他們的關係

互動頻率越低

我

Example

同好姓名: 大毛
與你的關係(家人/同學/朋友/球隊/球友/其他)
他觀看的賽事:NBA, MLB, 網球
他支持的球隊/球員:Kobe bryant
彼此會透過何種媒體工具聯絡:手機,facebook
是否會一起觀看球賽:會,蠻常的
最常一起聊的話題:NBA, 電影
最常一起從事的活動:打籃球,看比賽, 打電動(nba)

DAY2：說說你們平常如何互動的吧

以下有幾個關於你與運動賽事同好們平常互動及彼此之間的關係的問題，需要你仔細的想一想，沒有正確答案，就照你的記憶及感覺來寫就可以了，內容寫得越詳細越好囉!!

你覺得...

平常誰最有機會跟你碰面?怎麼說?

在彼此的互動中誰最積極主動?誰最被動?原因?

最常分享運動賽事資訊的人是誰?

他多半都分享那些資訊?

你們之間誰是最專業的球迷，為何?
(也可以是自己)

最常一起進行的活動是?(可列舉多項)

回想看看...

上一次跟朋友一起觀看運動賽事是甚麼時候?

看的是什麼賽事?

是跟誰一起看的?為何會跟對方一起看?

在哪裡看的?透過何種媒體工具觀看呢?

是怎麼邀約的呢?透過何種媒體工具呢?
(例:用打電話邀約的)

賽事當下的感受是...

My CRAZY Sports Club **DAY3：打造我的運動賽事俱樂部!**

身為運動賽事迷的你今天有個重要的任務，就是你要為你自己和你的運動賽事同好們打造一個超酷的線上賽事俱樂部，沒有任何規則限制，只有你自己知道他會長個甚麼樣子!

A 想想這個超酷的賽事迷俱樂部裡...
(發揮你天馬行空的想像力，滿足你對運動賽事的渴望!)

除了運動同好，你還會想要邀請誰來呢?

你會想要在這個俱樂部裡做些甚麼呢?

你會想要舉辦那些活動呢?

你覺得這個俱樂部應該會有哪些功能呢?

你對這個俱樂部有什麼樣的期待呢?

WHAT A FAN
WHERE FANS ARE THE FOCUS

B
接著如果你一次只能邀請一個人加入你的賽事俱樂部，你會想要以怎樣的順序邀請你的賽事同好呢? 並請簡單說明原因?

1　同好名稱:　原因:

1　同好名稱:　原因:

同好名稱:
大噹
原因:
每次看比賽他
都很熱情激動
那麼嗨，當然
第一個找他!!

2　同好名稱:　原因:

3　同好名稱:　原因:

C
最後，如果此時此刻你一定要各分享一種賽事相關資訊給這三個賽事同好，你會選擇分享什麼給他們?並簡單說明分享原因為何，透過何種媒體工具分享及原因?

同好名稱:
大毛

資訊內容與原因:
KOBE出糗的影片
因為他喜歡狗鼻所以
我要嗆他!

分享方式與原因:
facebook分享tag他
因為這樣他才會來看

同好一名稱:
資訊內容與原因:
分享方式與原因:

同好二名稱:
資訊內容與原因:
分享方式與原因:

同好三名稱:
資訊內容與原因:
分享方式與原因:

DAY4 : 記錄我今天的賽事體驗

觀看比賽中的你都在做些甚麼呢?請在有看賽事的這天帶著你的本子,並在觀賽過程中沿著賽事的時間軸記下你在觀看賽事時的行為及較為深刻的感覺,不需要刻意,只要自然地依照你平常觀看的習慣,並在賽事間的小空檔簡單填寫即可,以下有範例提示你該如何記錄

(與賽事同好的互動,線上/面對面)

MSN to 小明:
欸,剛剛那動作太屌了
你有沒有看到?

(習慣使用的社群網站)

720度扣籃太屌了
我要分享給大家看看

PTT
(批踢踢賽業坊)

kobe好像打很差
看鄉民都快靠死了,送拉

打的也太無聊了呢
先去洗個衣服好了!

Game Time line

賽事開始　　　　　　　　　**X**:離開　　**O**:回到或正在使用　　賽事結束

請問!!

你今天看了什麼球賽?

為什麼會想看這場球賽?

有跟其他人一起看嗎?跟誰一起看呢?

對方有支持的球員或球隊嗎?

今天的賽事給你最映象深刻的一件事?為什麼呢?

今天賽事你感覺最好的一刻是?

今天賽事你感覺最糟的一刻是?

今天的賽事整體看完給你的感覺是?

My Game Room **DAY5 : 我的賽事觀看地盤**

你都在那裡觀看運動賽事的呢? 觀看賽事的環境長得什麼樣子,又有什麼特別的地方呢?以下請運用貼紙及筆在左邊畫出你平常觀看的賽事的周遭環境,以及在右邊畫出你夢想中觀看賽事的環境

A.我現在的觀看環境

B.我夢想中的觀看環境

A 請利用貼紙和筆拼湊出你平常觀看運動賽事的環境空間,以及在觀看運動賽事下可能會接觸到的物品,並輔以文字說明這些空間和物品對你的用處及意義
(不用在乎圖畫的美醜,重要的是忠實地呈現就好!)

B 請利用貼紙和筆,畫出你夢想中觀看運動賽事的環境空間與物品,並輔以文字解釋這樣的空間與物品對你來說的感覺與意義是什麼?
(不用在乎圖畫的美醜,重要的是努力發揮你的想像力!)

Appendix D: Screener

運動賽事觀看行為調查表

您好,我是交通大學應用藝術所的學生毛迦霖,目前我正在進行有關於未來運動賽事在社交電視上製播的相關研究,以下問卷是為先簡單調查您平常運動賽事觀看的行為,如果您有意願接受第二階段的訪談,請留下您的資料,我將盡快進一步與您聯繫

註:第二階段會有資料會寄給您,所以請您務必要留下郵寄地址喔
*必要

日常運動賽事觀看行為

下列哪些運動賽事是您有在觀看的? *
若下列沒有您可以選擇的選項,請勾選其他並填上您所觀看的運動賽事 (可複選)

- ☐ 籃球
- ☐ 棒球
- ☐ 撞球
- ☐ 排球
- ☐ 網球
- ☐ 高爾夫球
- ☐ 足球
- ☐ 美式足球
- ☐ 其他: _____

您多常看一次運動賽事呢? *
如果您看的運動賽事有球季賽制,請以在球季內的觀看頻率作為考量

- ○ 一天多次
- ○ 一天一次
- ○ 一周多次
- ○ 一周一次
- ○ 一月一次或更少

下列哪些運動相關網站是你有在使用的? *
若下列沒有您可以選擇的選項,請勾選其他並填上您所在使用的運動相關網站 (可複選)

- ☐ 各式運動論壇(例如:ptt)
- ☐ 各式體育新聞網站(例如:yahoo sport、ESPN)
- ☐ 各類賽事官方網站(例如:NBA、中華職棒、英超)
- ☐ 各式球隊或球員官方網站
- ☐ 運動彩卷官網
- ☐ 其他: _____

您大約多久瀏覽一次這些運動相關網站？ *
請就日常生活狀態，以最接近者作答

- ○ 一天多次
- ○ 一天一次
- ○ 一周多次
- ○ 一周一次
- ○ 一月一次或更少一次

下列哪些社群網站是您有帳號也有在使用的？ *
(可複選)

- ☐ Facebook
- ☐ Twitter
- ☐ Google+
- ☐ Plurk
- ☐ MySpace
- ☐ YouTube or Vimeo
- ☐ Blogger.com
- ☐ 無名小站
- ☐ 其他：[   ]

你大約多久登入一次你的社群網站帳戶？ *
請就日常生活狀態，以最接近者作答

- ○ 一天多次
- ○ 一天一次
- ○ 一周多次
- ○ 一周一次
- ○ 一月一次或更少

下列哪些裝置或服務是你現在所擁有或正在使用的？ *
(可複選)

- ☐ 智慧型手機(例:iphone)
- ☐ 平板電腦
- ☐ 隨身聽
- ☐ 個人電腦(筆電或桌電)
- ☐ 電視機
- ☐ DVR 數位攝影機
- ☐ 遊戲機(例:Wii, X-Box 360, PlayStation 3)
- ☐ 數位相機或單眼相機
- ☐ 其他：[   ]

基本資料

您的姓名 *

[   ]

您的性別 *
- ○ 男
- ○ 女

您的年齡 *
- ○ 19 - 24
- ○ 25 - 34
- ○ 35 - 44
- ○ 45 - 54
- ○ 55以上

您距離上一次參加一對一訪談是什麼時候？ *
以最接近者作答
- ○ 三個月以內
- ○ 超過三個月以上
- ○ 從未接受過訪談

您的教育程度？
- ○ 高中以下
- ○ 高中以上
- ○ 大學
- ○ 碩士
- ○ 博士
- ○ 其他：[   ]

您目前的工作狀態
如果您願意的話請在其他寫下您的職業
- ○ 全職工作
- ○ 兼職工作
- ○ 在家接案
- ○ 家庭主婦(主夫)
- ○ 待業中
- ○ 全職學生
- ○ 其他：[   ]

運動賽事特質影響觀者觀看的行為與態度

賽事高低潮的轉換影響觀者的觀看行為

賽事高潮期間會與其他觀者共同分享感受賽事情緒
- 與同好共同觀看時，賽事有精彩鏡頭或突發事件時，彼此會圍繞賽事談論
- 獨自觀看重要的賽事時，賽事高潮當下會打電話與同好即時討論
- 賽事當下突然出現精彩動作或是特殊事件時，觀者會立即去討論區以了解其他觀眾發生的始末

賽事低潮期間會轉移到其他活動來維持賽事的娛樂性
- 賽事低潮時，觀者會上PTT觀看賽事社群網站與選距離賽事進行時間就會以排遣賽事無聊
- 賽事低潮觀者會與同觀看的朋友閒聊到日常的話題上
- 觀者會在賽事低潮時瀏覽PTT上各項賽事版面，藉此時段收更新其他場次資訊
- 賽事低潮時觀者會從事日常例行性事務或繼續手邊正在進行的工作以節省時間
- 賽事低潮時觀看台觀看到其他賽事

賽事中部分段讓觀者感到無趣而形成低潮
- 賽事空檔、廣告、暫停、中場休息等，非正規賽事進行時間就會離開
- 比分差距過大，局勢大穩定容易預知結果的賽事對於觀者來說缺乏刺激感
- 賽事節奏過慢，會覺得賽事很無聊
- 非觀賽重點期間，例如支持球員上場期間，非勝負關鍵期間

賽事中特定片段讓觀者感到興奮而想觀看在賽事上
- 觀賽重點期間，例如支持球員上場期間，勝負關鍵期間
- 精彩動作鏡頭、球員鏡頭等趣味鏡頭片段
- 特殊事件發生：平常較不容易看到的情況，例如:紀念性的一刻，打架鬧事等

賽事重要度的差異影響觀看賽事的行為

重要的賽事會撥出時間關注並且全程觀看完
- 重要的賽事因為勝負關鍵，觀者會特別撥出之時間，而排除其他事情來觀看
- 重要賽事一定會全程看完，因為怕錯失精彩畫面而感到遺憾

一般賽事配合日常生活作息來觀看，且不見得會觀看完
- 一般的賽事勝負，會配合日常作息，發現有機出自己又有興趣觀看時，才會觀看
- 一般平時觀看賽事的狀況，多半會想從賽事後段才開始看賽事，因為是勝負關鍵
- 通常一般賽事若是比分已差距過大，或是球員表現大差就就會關掉

觀者有自己認定需要特定關心的賽事
- 具有紀念性意義，所支持球員或球隊有紀念性意義的賽事是選擇觀看的原因之一
- 勝負關鍵重要的賽事，是觀賽的重點之一，例如季後賽、國家隊
- 賽事內有無自己支持的球員或球隊是在選擇觀看賽事時的因素之一
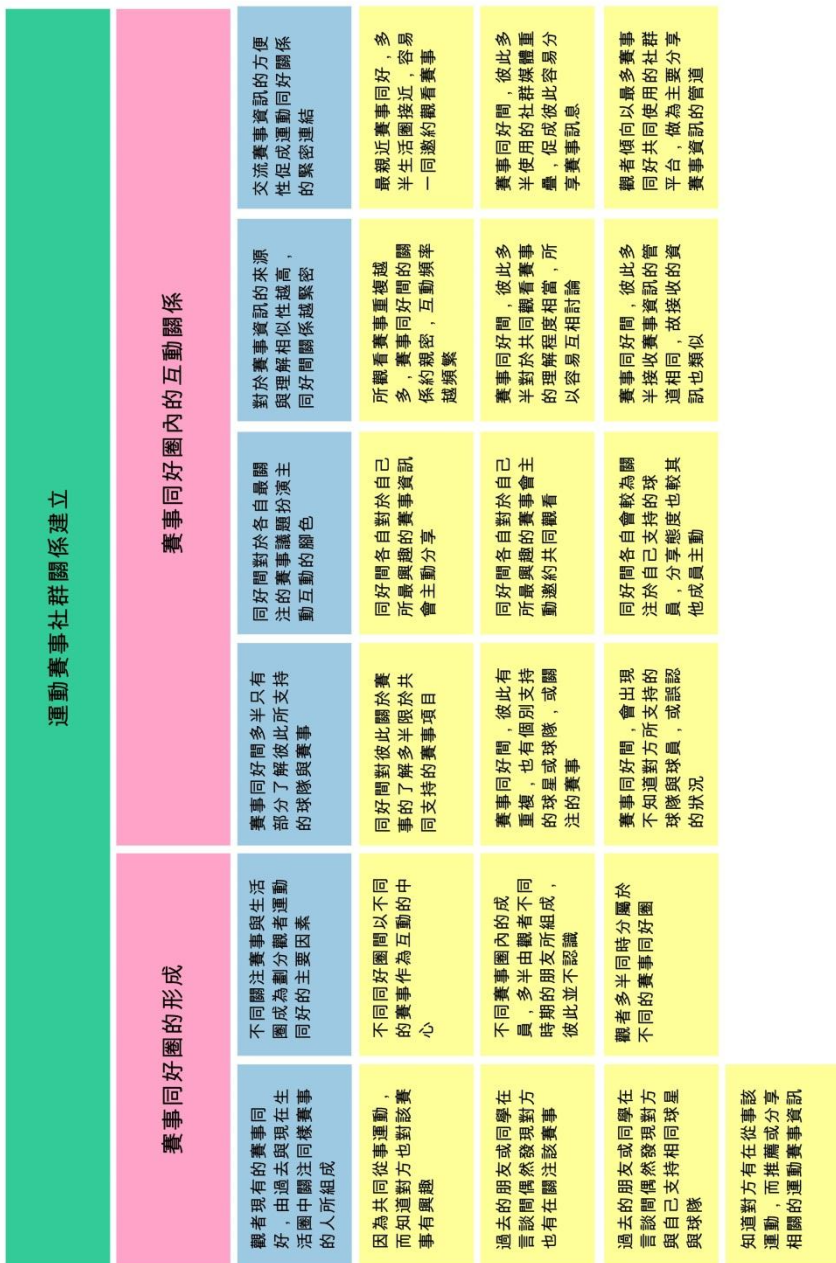- 經典賽或是平常難以見到的對戰組合，會特別注意收看

運動賽事特質影響觀者觀看的行為與態度

觀者在觀看賽事內容時所關注的重點

觀者注重賽事觀看的感官體驗
- 觀者喜歡現場賽事帶給臨場感與賽性感官上的觀者感官上的刺激
- 當有選擇性，觀者會跳到直播較好的電視上，而另外再使用電腦進行其他社交活動

賽事的不可預期性為觀者帶來刺激感
- 節奏緊湊、比數拉鋸的賽事會覺得比較刺激好看，因為無法預知結果
- 喜歡直播的賽事，無法預知結果的緊張感，讓球賽變得很刺激，有種見證歷史的感覺
- 戲劇化的賽事內容帶給觀者出乎意料的感受

觀者會圍繞著所支持的球星與球隊來觀看賽事
- 賽事當下會關注所支持球員和球隊的表現，看他們成功也會種成就感
- 支持球員或球隊表現大差、不如預期時，心情會很差
- 賽事內有自己支持的球員或球隊是在選擇觀看賽事時的因素之一

平時難以見到的賽事內容會讓觀者留下深刻映像
- 賽事內容的戲劇化程度是讓觀者映象深刻的原因
- 對支持球員或球隊表現有紀念性意義讓觀者映象深刻的原因

觀者對於賽事內容理解的需求

觀者所從事之運動有助於對賽事內容的理解
- 所觀看的賽事多為自己有從事的運動，容易理解賽事的內容，對賽事的感受力較強
- 觀者因為自己有從事該運動，而藉觀看賽事學習加強自己在該運動上的表現

脫離賽事的脈絡下，觀者欲藉由賽事各項資訊與訊息，來掌握賽事狀況
- 中途插入觀看賽事時，觀者會依據賽事各項資訊資來嘗試理解場上的狀況
- 離開賽事時，觀者會想要藉由賽事所傳出的聲音來掌握賽事目前進行狀況
- 離開賽事時，觀者會預計重點觀看的時段來作為回到賽事前觀看為的參照

不熟悉的賽事會透過各種方式來學習理解
- 如果想要接觸不熟悉的新運動賽事時會特別花心思去理解，例如去修學校的體育課
- 觀看賽事當下，如果朋友中有另外一個比較懂該賽事就會跟他討論學習
- 不懂的賽事日常也會與較熟悉該賽事的朋友討論，或透過討論區中的資訊來學習

觀看賽事時的互動脈絡

賽事特質對於同好觀者間互動行為的影響

在彼此可以負擔的條件下，希望追求良好的感官體驗
- 會期望能到場地越大，設備越好的場地觀看
- 付出代價越高，彼此對於該賽事的精采度就會期望越高
- 有時會準備賽事相關的運動用品，以此提升彼此觀看賽事與互動間的樂趣
- 最希望的是能跟同好一起去現場觀看，可以感受現場的氣氛
- 距離近才邀約，希望彼此能夠讓賽事都方便，不會造成負擔

賽事理解程度相當有助於形成觀者間良好的互動體驗
- 賽事的理解程度相當，容易對分析性的賽事的內容作討論
- 賽事的理解程度相當，較能夠與同體會賽事高潮與低潮的時刻
- 賽事的理解程度不同，較難對方了解精彩賽事規則與狀況
- 賽事的理解程度不同，話題容易會變較不理解的一方帶入閒聊的話題上

賽事的高低潮轉換會影響與觀者間的互動話題
- 賽事有精彩鏡頭或發賽事件時，彼此會對該事件討論
- 共同觀看賽事時，賽事進行當下時話題多半鎖定在賽事本身的內容上
- 賽事低潮時，話題較會轉換到日常生活的話題上以維持觀看賽事的樂趣
- 賽事當下片段若跟其他場賽事或球員有關聯，就會把話題轉移到該賽事或球員上

熟識同好間正方對立，會刺激促進互動產生
- 最有趣的狀況是具正反方意見的同好共同觀看，這樣可以刺激彼此的討論
- 會與支持相同球隊或是想法相近的同好共同觀看以形成共鳴
- 希望可以邀約熱絡但支持敵隊的同好，因為對立容易刺激產生更多話題

觀看賽事時與同好觀者的互動脈絡

在賽事觀看時會顧慮到與對方互動對方的感受
- 在與同好共同觀看時，不會想要用公開討論區與其他陌生觀者互動
- 與不熟悉的朋友一同觀看，會怕自己的意見或批評情看到對方
- 喜歡與熟悉的同好一同觀看，因為知道對方不會放在心上而可以盡情評論
- 在與同好共同觀看時，不會與對方不熟識的其他同好進行互動

與遠距同好在賽事間的互動行為
- 賽事當下如果看到朋友也在線上，會推測同好也在觀看而主動用線上軟體聊天
- 獨自觀看重要的賽事時，賽事高潮當下會打電話與同好即時討論
- 賽事低潮時會瀏覽雙觀看好網站分享的資訊，並對有興趣的資訊予以回應
- 與同好共電話時，會打給另一個共同好分享賽事熱的狀況

觀看賽事時與同好觀者的互動
- 與同地觀者觀看時互動的真實性可以取代與遠距陌生觀者的互動
- 與同好間互動比較取可以線上平台上的社交活動，為賽事帶來更多的樂趣
- 如果與朋友共同觀看，就不會想要使用電腦上公開討論區觀賽討論
- 共同觀看賽事件大突發時，才拿電腦搜尋觀看，一同討論

- 透過彼此共同分享對於賽事的情緒與意見，能營造出良好的觀賽氣氛
- 藉由分享賽事高潮時的情緒，能加強觀者對於該賽事件的感受
- 觀看現場時，置身所營造出氣氛與群眾所營造出情緒中，會加強觀者對於該賽事的體驗
- 在賽事間與朋友的討論可以增加觀看賽事時的樂趣，並尋求觀看賽事上的共鳴
- 會因為現場共他觀者情緒激動的氣氛而感到該現場賽事映象深刻

觀看賽事時的互動脈絡

觀看賽事時與遠距陌生觀者的互動脈絡

觀者透過討論區上其他觀者的評論與反應，來理解賽場上的即時狀況	參與或觀看遠距觀者在賽事間的互動，能讓觀者感受到群眾現場，增加賽事的樂趣	陌生感對於在公開討論區互動時造成的影響
賽事當下突然出現精彩動作或是特殊事件時，觀者會立即去討論區以了解大眾即時的看及事件發生的始末	賽事高潮時段，觀者會立即去討論區一同觀看或參與討論，感受群眾熱烈的氣氛	觀者在公開討論區上除非反應強烈或熟悉的賽事資訊才會主動發表
離開賽事的期間會持續觀看討論區上的資訊，並透過大眾的當下反應決定是否回到賽事上	觀者在賽事結束後會上公共討論區，因為好奇其他觀者對於同一賽事的反應與意見	觀者在公開討論區，較不主動發表意見，因害怕負面回應，多半以接收資訊為主
離開賽事的期間會持續觀注討論大眾上的資訊，並透過大眾的當下反應決定是否回到賽事上	觀者在觀看賽事時，專注待在該討論區的看上，因為可以即時看到大眾的反應	因為不熟識，故討論區上的內容多半與賽事相關的內容為主，較少閒聊機會發生
	當討論區上對某事件反映非常熱烈，但觀者因為接收不到而無法共同分享的情緒感到挫折	觀者期望能夠知道其他陌生觀者再發表意見時的立場與傾向

日常相關於運動賽事的互動脈絡

日常與遠距陌生觀者的互動脈絡

日常與遠距陌生觀者的互動脈絡	陌生感對於在公開討論區互動時造成的影響
日常會習慣性的上公開討論區，做為平日消遣活動，同時也為賽事資訊的主要來源	觀者在公開討論區上除非反應強烈或熟悉的賽事資訊才會主動發表
觀看公開討論區上其他觀者對於各項賽事資訊的反應，會覺得很有趣	觀者在公開討論區，較不主動發表意見，因害怕負面回應，多半以接收資訊為主
觀看討論區上有些專業的其他觀者對賽事精闢的見解，可以對比賽有更深的了解	因為不熟識，故討論區上的內容多半與賽事相關的內容為主，較少閒聊機會發生
討論區上的其他觀者對於某些未來賽事的討論會影響自己觀看賽事的選擇	觀者期望能夠知道其他陌生觀者再發表意見時的立場與傾向

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日常相關於運動賽事的互動脈絡

日常與賽事同好間的互動脈絡

觀看者自己感興趣的分享，公開會求同好的共鳴
- 自己興趣的資訊會發表在社群網站上，並讓有興趣的朋友一起來討論
- 無論熟悉或不熟悉的賽事資訊或心得都會公開的在社群網站上與朋友分享
- 當覺得某賽事資訊很不錯，但卻不知道誰，就只能公開發布在社群網站上
- 重要的賽事才會約朋友聚在一起觀看，因為知道彼此都有興趣
- 關於重要的賽事的資訊比較會與運動同好討論，因為推測對方也有在關注
- 有些資訊會直接聯想到也可能對該同好，有興趣的同好，便會針對性地分享給他
- 會與運動同好在一見面的時候就聊到賽事相關的話題，因為彼此此都很關注
- 賽事當下如果看到朋友也在線上，會推測對方也在觀看而主動用線上軟體聊天

觀看者對於同好感興趣資訊會針對性收到，並期待對方的回應
- 若自己有興趣的資訊會聯想到有興趣的朋友，並針對性地分享給他
- 針對性分享資訊給同好時會加上自己的註解，並期待對方的回應
- 會用手機傳送重要賽事資訊給同好，因為手機較私密，也可以確保他收到

日常與同好間媒體工具的使用行為
- 在即時需要邀約觀看賽事或分享資訊給同好時，會直接打電話給對方
- 透過彼此共用的線上軟體在賽事中或賽事結束後與同好討論與分享賽事資訊
- 共用的社群網站主要用來分享與接收感興趣的同好間對於賽事感興趣的心得與資訊
- 觀者會量考量使用不同好熟悉的媒體工具進行互動

賽事特質對於同好觀者間日常互動行為的影響

賽事特質主要討論與分享內容的類型
- 具有紀念性意義或經典難得的賽事
- 賽事中有彼此觀注的球員或球隊
- 賽事中的精彩動作或特殊的突發事件
- 勝負關鍵重要的賽事

賽事直播的內容特性常做為日常互動的開頭
- 運動同好在一見面的時候就聊到賽事相關的話題，因為關注該賽事
- 賽事內容通常會作為同好間話題的開頭，之後可能會轉到其他話題
- 會突然想到或因為看到賽事相關事物，而與同好聊起賽事相關話題

賽事豐富的片段性內容成為同好間互動不斷的媒介
- 即使共同從事其他活動，賽事話題仍然會不經意提到，占了彼此此話題中很大一部份
- 賽事片段內容每天不斷更新，又有許多面相可以討論，具有豐富的話題性

運動賽事社群關係建立

賽事同好圈的形成

藍色項目	黃色說明
不同關注賽事生活圈成為觀者運動同好的主要因素	觀者現有的賽事同好，由過去與現在生活圈中關注對同樣賽事的人所組成
不同同好圈間以不同的賽事作為互動的中心	因為共同從事運動，而知道對方也對該賽事有興趣
不同賽事圈內的成員，多半由觀者不同時期的朋友所組成，彼此並不認識	過去的朋友或同學在言談間偶然發現對方也有在關注該賽事
觀者多半同時分屬於不同的賽事同好圈	過去的朋友或同學在言談間偶然發現對方與自己支持相同的球星與球隊
	知道對方有在從事該運動，而推薦或分享賽事資訊

賽事同好圈內的互動關係

藍色項目	黃色說明
賽事同好間多半只有部分彼此所支持的球隊與賽事	賽事同好間對彼此了解較多的了解隊與賽事的支持共同支持的賽事項目
同好間對於各自最關注的賽事議題扮演主動互動的腳色	賽事同好間，也有個別支持的球星或球隊，或關注的賽事
對於賽事資訊的來源與理解越重視，同好間關係越緊密	賽事同好間，會出現不知道對方所支持球隊與球員，或誤認的狀況
交流賽事資訊的方便性促成運動同好關係的緊密連結	
最親近賽事同好，多半生活圈接近，容易一同邀約觀看賽事	同好間對於各自最關注的賽事資訊會主動分享
賽事同好間，彼此多半使用的社群媒體重疊，促成彼此容易分享賽事訊息	同好間各自對於自己所最感興趣的賽事會主動邀約共同觀看
觀者傾向以最多賽事同好共同使用的社群平台，做為主要分享賽事資訊的管道	同好間各自會較為關注於自己支持的球員，分享態度也較主動
所觀看賽事重複越多、賽事同好間的關係約親密，互動頻率越頻繁	
賽事同好間，彼此多半對於共同觀看賽事的理解程度相當，所以容易互相討論	
賽事同好間，彼此多接收多賽事資訊的管道相同，故接收的資訊也類似	

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運動賽事社群關係建立			
擴大賽事社群的連結			
觀者期望能夠擴大自己現有的運動賽事社群	觀者會受到大眾對於賽事資訊接收的態度	周遭生活圈對於賽事的傾向會影響到自己支持或觀看賽事的態度	觀者會以共同支持球員或球隊作為與廣大賽事社群連結的中心
觀者希望能夠從生活圈中發掘出更多共同對賽事有興趣的同好	離開賽事的期間，會因為該賽事討論區上大眾反應激烈，而再回到該賽事上觀看	一開始是因為周遭的人在看，自己就因此有著看，而因此有了共同的話題	賽事當下會待在該支持球隊或球員的討論上，與其他觀者一同加油
觀者希望能夠知道更多有在觀看相同運動賽事的陌生觀者	在接收賽事資訊時，會特別好奇並關注大眾反應最熱烈的資訊	會因為旁人支持的球隊或球員，進而支持到自己所支持的隊伍或球員	觀者會加入相關於支持球員或球隊的粉絲團或討論區
	常被撥出的球隊是喜歡的原因之一，撥出次數多容易累積喜好成為同儕間的話題	看到身邊一群人在觀看運動賽事時，觀者會一起運動好而會去觀看	觀者每天習慣性的到支持球隊或球員的討論區觀看與回應
	會跟隨大眾對於球隊或球星的觀感，進而影響到自己支持的態度		若有相關於支持球員或球隊的資訊，觀者會偶而到討論區上與其他陌生觀者分享

運動賽事相關媒體工具的使用行為

觀者透過不同媒體工具接收特定賽事資訊

- 社群網站提供一個統一的平台讓觀者能夠隨時接收各同好所分享的資訊
  - 賽事中或日常時主要都在社群網路上接收運動同好感興趣的資訊
  - 觀者瀏覽社群網站上的資訊以排解賽事低潮期的無聊
- 觀者透過專業賽事頻道或網站，接收到清楚及可信任度高的賽事資訊
  - 官網在賽事相關數據上及圖表上整理得較清楚，很容易可以找到想要的特定資訊
  - 運動精華新聞由專業人員彙整剪輯而成，觀者可以快速收取更新賽事近況
- 公開討論區資料的多樣性與豐富性，使得觀者可以輕易找到自己有興趣的資訊
  - 平常會習慣性的上公開討論和賽事資訊的主要來源
  - 其他觀者會把各式賽事相關資訊放在討論區上，訊量富多樣，很容易可以找到自己有興趣的資訊
  - 觀者透過討論區上其他觀者的評論與反應，來理解賽場上的即時狀況

觀者透過不同媒體工具特性進行社交互動

- 社群網站提供一個統一的平台讓觀者能夠輕易與所有同好分享資訊與討論
  - 觀者有自己的心得想要分享給運動同好，便會透過公開或私下的方式分享，並與共同對該有興趣的觀者做討論
  - 在看重要賽事時，如果剛好看到運動同好也在線上，便會猜測對方也在看賽事，對方討論賽事
- 觀者可以透過手機即時連絡上有興趣的賽事同好告知特定賽事資訊
  - 重要賽事前觀者打電話提醒其他同好要記得關注該賽事
  - 重要賽事高潮精彩時，觀者會打電話給對該賽事也有興趣的觀者討論與分享
  - 重要或傳前觀者會打電話或傳訊邀約其他同好共同觀賞賽事
- 公開討論區集結眾多的觀者，讓觀者能與其他觀者能與大眾互動，分享賽事情緒
  - 討論區上各資訊會呈現其他觀者對於該資訊的評論與反應，可以很有趣也也
  - 參與或觀看遠距觀看在賽事間的互動，讓觀看者感受群眾情緒增加賽事的感染力