



Live Broadcast of University Ceremony: Technology System and Narrative Strategy

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Abstract

In recent years, radio and television technology's rapid development has promoted the popularization of live broadcast globally, which many universities use, particularly nowadays. In 2020, the COVID-19 coronavirus broke out in various parts of the world. Besides online innovation in curriculum teaching, universities worldwide utilize global live broadcasts of graduation ceremonies and opening ceremonies online. The ceremony is an essential means of expressing patriotic education, gratitude education, value education, inspirational education, etc. It brings teachers and students psychological hints and encouragement while enhancing the spiritual identity of teachers, students, and alumni worldwide. It is a highly educational value. With characteristics of truthfulness, timeliness, and participation, live broadcast becomes more and more popular in information transmission in the Post-COVID-19 Era. This paper aims to analyze how colleges and universities establish a live broadcast technology system and narrative strategy of presenting campus culture in the live broadcast.

Keywords: live broadcast, technology system, ceremony, narrative strategy, University

1 INTRODUCTION

Live broadcast refers to various media that broadcast without delay. News programs are the most common forms. With the development of technology, live broadcast platforms are becoming more and more popular in social networks. Media, universities, government, and individuals take live broadcast as an important way to express their opinions and build brands, which is almost indispensable in the post-pandemic Era. The live broadcast is more integrated and more accessible to share than ever before. The audience can connect via mobile phones, desktops, and other communication terminals.

Global Live broadcast is an essential way of self-promotion in colleges and universities today. More than 200 colleges and universities worldwide broadcast their school opening ceremony and graduation ceremony on the internet in 2020. Live broadcast and video are important information buzzwords for colleges and universities to spread during graduation season.

The ceremony is a crucial way to promote the university spirit and appearance, build consensus and connect alumni with alma mater and the live broadcast of major events would provide an opportunity for the

relevant person who cannot share the activities. A successful live broadcast of the ceremony will spread the spirit and achievements of the University effectively.

This article's analysis will be an opening ceremony live broadcast of Jinan University(abbreviated as JNU) in 2020, held on September 21 in Guangzhou, China. It uses the method of "offline + online," Nanfang, Sina Weibo, Douyin, Kuaishou, and other platforms to make global live broadcasts a total broadcast volume of more than 200 thousand. This article will analyze this event from two aspects: establishing the live broadcast technology system and the narrative strategy.

2 CEREMONY LIVE BROADCAST TECHNOLOGY SYSTEM

It is complicated to complete a high-definition live broadcast of the global network. The technical solution is involved, the process convergence requirements are closely linked, and mistakes are not allowed. Taking the live broadcast of the Opening Ceremony of Jinan University in 2020 as an example, there are five campuses in three different cities, so it set up the main venue in Panyu Campus and five sub-venues in other campuses (Main Campus, Panyu Campus, College of

Chinese Language and Culture, Zhuhai Campus and Shenzhen Tourism College).

Generally speaking, programs with more than ten signals must set up with several video switchers. There are 11 signals in Panyu Campus, equipped with the main video switcher and associate video switcher. The assistant director is responsible for switching the Zoom signals from other campuses, outputting the total program to the main video switcher. The main director is responsible for switching the seven signals of the main venue in Panyu, which is named System A. System B in the Main campus is set up because the Main campus needs to complete its agenda.

2.1 SYSTEM A

There are 4 HD camera video signals, 1 Pc signal, 1 LED screen displayer signal, and one secondary broadcast station signal (responsible for switching 5

Zoom conference signals) (Fig.1) in the Panyu Campus's live broadcast technology system.

Panyu Campus connects the other four campuses by Zoom conference and presents a complete ceremony process, including a feature film for first-year students, watching MV, sing the national anthem of the People's Republic of China, introducing the leaders, the president's speech, the teacher and student representatives' speeches, wearing the school badge, reading the student motto of Jinan University, reading the list of lecturers, issuing the letter of appointment of the lecturer group, awarding the flag of the JNU'orientation camp, and singing the school anthem.

College of Chinese Language and Culture, Zhuhai Campus, and Shenzhen Tourism College mainly watch the Panyu Campus ceremony process through live streaming. Main Campus build up System B with seven video signals.

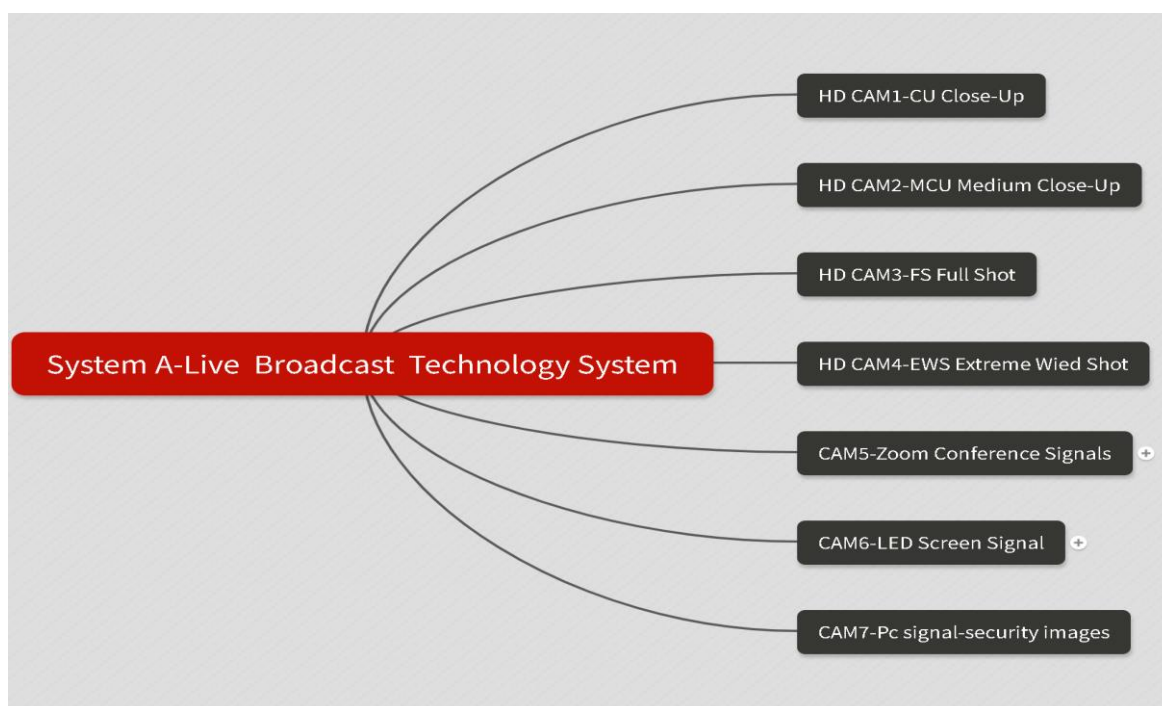


Fig. 1. System A-Live broadcast technology system

2.2 SYSTEM B

There are 4 HD camera video signals, 1 Pc signal, 1 LED screen signal, and 1 Zoom conference signal (connected with Panyu Campus) (Fig.2) in the Main Campus's live broadcast technology system.

Main Campus containing the same feature film an MV for first-year students, sing the national anthem of the People's Republic of China, introducing the leaders, the president's speech. They carried on the agenda of the sub-venue of their own. They introduce the leaders who were different from the Panyu Campus. However, the process is similar to that of the Panyu campus. The personnel is entirely different.



Fig. 2. System B- Live broadcast technology system

3 CEREMONY LIVE BROADCAST NARRATIVE STRATEGY

It is well-known that visual communication is the most effective way to deliver a message. Most people respond more rapidly to visual images instead of texts. We live in a visual culture generation [2] that pictures and videos can be seen everywhere. With the development of smartphones and communication technology, online and live broadcast become part of people's lives. Everyone can express their opinions through social media or live broadcast competing for our attention. How to make your voice, tell your own story, and spread your own culture would be the most crucial thing in the future.

The ceremony is a unified ritualistic event with a purpose, usually consisting of several components, performed on a special occasion. A. Barnfield mentioned that sport on television is comprehended through the conventions of narrative drama [1]. Similarly, the live broadcast of universities' ceremony has the beginning, the middle, and the end, and become a narrative event containing images, videos, history, and culture.

This part will take the live broadcast of the ceremony into the narrative system and analyzes the narrative strategy of the live broadcast of the ceremony

3.1 Narrative Technology of Live Broadcast Director

A live broadcast's director is significant, who carries out duties similar to a film director. Heath mentioned that the goal of the director is to give each scene an ideal picture, and in any case to put his camera in a position that can most effectively record every particular action, every important detail [3]. The director needs to maintain the visual imagination in the whole live broadcast process and tell a good story by selecting shots through the lens

combination narrative chain. Each combination process is a narrative process. The director must mediate the balance of personal narrative style and the principle of the live broadcast. One of the most important responsibilities for a director is assisting staff in the production team schedule the shots, showing the program to the audience present and absent. It is necessary for the director of a live broadcast to have an in-depth understanding of all equipment and workflow of the live broadcast.

3.1.1 Program Monitor

There are usually 4 to 16 signals in a live event (or even more). A live broadcast's director must monitor all signals inputted in a video switcher and output program to the audience, presenting the best view of the event to the audience at any time. Figure 3 shows a program monitor with seven signals of the Opening Ceremony, the live broadcast at Jinan University.



Fig. 3. Program monitor of the live broadcast

3.1.2 Audio Monitor

Live broadcast's director needs to monitor all audio signals from the audio control console and communicate

to the team member via the inner communication system, keeping the various audio outputs to volume and quality suitable for the live broadcast.

3.1.3 Instruction

The director needs to show the view vividly and artistically to the audience by coordinating the camera operator to complete every critical shot of the event through effective instructions.

3.1.4 Narrative style

The selection of the shots represents the narrative style of the director. The different director has a different narrative style. Still, whatever unique style the director was, he must follow the live broadcast's narrative strategy and the ceremony's basic switching principles. The director must conform to the agenda process rules to select video signals presented on monitor screens and ensure every vital detail be focused and enlarged in the ceremony.

3.1.5 Video Switcher

Performs switching between the different video sources. The director selects one of the input channels to broadcast instantly [4]. The most common way in live broadcast is "Cut". "Dissolve" is transitioning from one source to the next by creating a smooth blend, shapes, and patterns that can be inverted, softened by "Wipe". It is necessary to keep the balance of shots and the pace of cuts. Sometimes, the live broadcast director is responsible for this task, and in other situations, instructs a video switcher operator.

Hard cut: A hard cut is an abrupt action. It means simply cutting from clip A to clip B. The ceremony scenes are usually large and fast-paced, so hard cuts are commonly used in the live broadcast.

Dissolve transition: A dissolve transition is a gradual transition from one image to another, which overlaps two shots for the effect duration. The live broadcast director determines the time length of the duration. Dissolve transition can be used when singing the national anthem and the school anthem in the live broadcast.

3.2 Various Types of Narrative Shot

The shot is a director's narrative language; different shots help convey specific narrative emotions and communicate different narrative value. Every shot is specially chosen to give the audience important information to push the story forward. In Table 1, we discuss several shot types commonly used in ceremonies and their functions.

3.2.1 CU(Close-Up).

A particular part of the subject takes up the whole frame. It focuses on specific images. In the ceremony's live broadcast, CU usually used to focus the National flag, University badge, teachers' and students' faces, facial expression, etc.

3.2.2 MS (Medium Shot)

Show some part of the subject in more detail while still giving an impression of the whole subject. A classic application is the speech of the president or representatives of teachers and students.

3.2.3 FS (Full Shot) or WS (Wide Shot)

The subject takes up the full-frame, from head to toe, while still showing character relationships [5]. It is commonly seen during the process of singing the national anthem and the school anthem.

3.2.4 EWS (Extreme Wide Shot)

The view is so far from the subject, and even the subject is not even visible. Often used in the opening and end of the ceremony event, showing the atmosphere of the environment.

Table 1: The function of different type of shot.

Type of Shots	Function
CU (Close-Up)	Depict the facial expressions and emotions of the subject. Attract attention
MS (Medium Shot)	Emphasize the subject. Emphasize the relationship between subject and object
FS (Full Shot)	Connect the subject and environment. Emphasize the body language and movements of the subject
EWS (Extreme Wide Shot)	Show the environment and scale. Keep stable to ensure the safety of live broadcast

3.3 History Narrative and Current Narrative

University history education is an essential measure in the construction of campus culture. History helps students develop a better understanding of the University. It is the most precious spiritual wealth of the University, which records the establishment, development, and change of the University. The university ceremony's live broadcast is a specific narrative work consisting of a period, space, and events, containing history and present.

History narration was showed off by playing videos in the Opening Ceremony of Jinan University(Fig.4), which is widely considered an excellent way to university history education, containing various narrative elements such as images, music, videos, etc. Historical narrative discourses convey the long history of building the University and the idea of running a university, utilizing scene reappearance and multi-perspective narration. It pours out feelings to achieve individual identity with the group and shape the campus culture. By providing multiple perspectives on history and current, the application of technology in the live broadcast can help students understand the university's development of previous and current events.



Fig. 4. History narration and Modern narration

3.4 Multi-Narrative Interactive

The formation of university campus culture depends not only on the management but also on all teachers' and students' connectivity. Multi-campus colleges and universities are prone to separation and isolation between grades, majors, and campuses, with limited communication and interaction between teachers and students, which increases the difficulty of forming a common sense of campus identity. It affects the healthy development of colleges and universities. Therefore, multi-campus universities should set up the main venue and several sub-venues in the live broadcast to connect different campuses(Fig.5) and bring each campus into the

overall ceremonial agenda to achieve multi-narrative interactive connectivity and show a unified campus culture.

Besides, many overseas teachers, students, and alumni need to attend events but cannot due to their location or other reasons. Universities can open its' live steaming up to a much larger audience, and promote themselves more effectively.

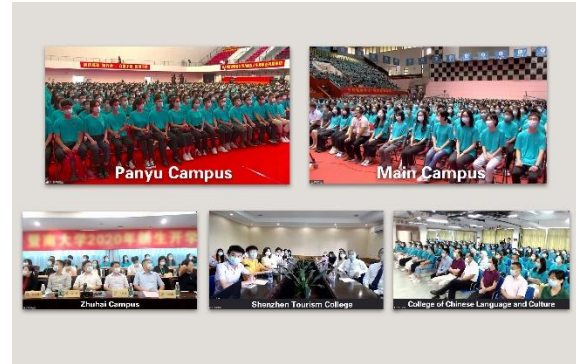


Fig. 5. Multi-Campus connected by live broadcast

4 CONCLUSIONS

This paper takes the opening ceremony of Jinan University in September 2020 as an example; analyze the live broadcast technology system was built up according to the University's specific situation. Set up the main venue and sub-venue via system A and system B. The second aim of this paper was to analyze the narrative strategy of the live ceremony broadcast. It is indicated that the narrative function of different shots and narrative style of the live broadcast's director, and moves on to discuss the historical narrative and Multi-Campus interactive narrative.

There will be more technology applications in the ceremony live broadcast in the future, such as 5G, VR, 8K, etc. There will be more ways to show the style and details in the live broadcast of the ceremony. The narrative will characterize the individuality, academic feature, variety, and creativity of campus culture more effectively by technology.

The most important thing is the University's essential spirit and narrative strategy, while technology is only a presenting tool. In the Post-COVID-19 Era, people have to adapt to the significant shifts in education and social life. Using technology to develop and tell their own stories more effectively would be an essential theme that every university and every person needs to be concerned about in the future.

REFERENCES

- [1] Barnfield, A., (2013). Soccer, broadcasting, and narrative: On televising a live soccer match. *Communication & Sport*, 1(4), 326-341.

- [2] Fan, J. Z., 2001. *Gombrich discuss Design*, Hunan science & technology press. Changsha.
- [3] Wang, F. Z., 2008. *TV Storm*, Tianjin Renmin Press. Tianjin, 148.
- [4] Xie, L. J., 2014. *Practical course of TV program director*, Communication University of China Press. Beijing, 12.
- [5] Zheng, Y., 2007. *TV program director*, Communication University of China Press. Beijing, 103.

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