Discussion and Analysis on Television Packaging and Title Font Design in China

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Abstract. When television media enter into the era of brand marketing, television packaging of China starts to emphasize on title design of column. When 3D animation technology and non-linear editing enter into television packaging, tile design methods and patterns of manifestation of the column are diversified. Dynamic 3D title font design has enhanced the rhythm sensation of the frames and attracted the audiences by their deep memory on the column. Especially after utilization of CG technology in television packaging and production, the methods such as lighting effect, assembling, rotation, flicker, flexibility and roll in special-effect techniques can be used for making title font. In this way, artistry of title font of the column can make new breakthroughs.

Introduction

In the late 1990s, 3D animation technology was applied in the fields of movie and television, entertainment and simulation visualization, television title designs with three-dimensional effects have been gradually increased. 3D animation combines computer graphics software with presentation techniques of drawing and photography to create television title design with the sense of three-dimensional space. As a result, the traditional hand-drawn credit titles quitted. As the most important content of television channel packaging, column title design is a pictorial symbol which can attract the audiences and strengthen their memories. In traditional column titles, recognition rate of characters on the screen, motion trail, speed and key diagram of the announcer are basically in a “notified” switching frame between stillness and activeness. As a synthetic art of digital media, dynamic character design has integrated multiple elements such as image, character, video, audio and lighting effect, which constitute an intersected and syncretic unity. This paper conducts explorative discussion on development of television packaging in China, forms of font design for column titles and artistry of the titles with 3D animation special effects.

Development of Television Packaging in China

When television media enter into the era of brand marketing, the fight for target audiences has become increasingly fierce, and television packaging of China starts to emphasize on title design of column. However, “an investigation on audiences in 2000 indicates that for many
small and medium-sized TV stations, about 20% of their audiences are unable to clearly and accurately answer what channels and columns they are watching, which results in great loss of audience rating. Direct economic losses brought by fuzzy brand concept of the column to television media are evident. An important reason which caused this phenomenon is that recognition capacity of traditional communication media is weakened. Searching for new channel brand image carriers is an effective approach to improve brand communication capacity of overall television packaging" [1]. It indicates that visual effects of the columns fail to be well improved. The reasons include the followings: firstly, overall television packaging awareness of provincial TV stations in China is not strong for a long time; television media are propaganda tools of local government, and they are in their own independent generation status; secondly, television channel packaging and manufacturing technologies are in an initial stage. Single technological mean, unprofessional personnel quality and the condition that special-effect photography and post-production effects are seldom adopted in the production of column titles at that time have directly caused simpleness of TV column titles and lack of dimensions and dynamic sense.

At the initial period of Chinese TV development in 1980s, column title relied on subtitle projection and introduction (TV guide) of the announcer to the programs on that day. Television was only a tool for visual information dissemination. With the limitation of design and manufacturing technologies, it did not rise to the level of column title design. Afterwards, intervention of computer movie and TV technologies, especially popularization and perfection of PC platform, a batch of graphic designers and art designers switched to the industry of television packaging, so that TV channels started their transition from simple programs to the design stage emphasizing on TV column image. Lack of concepts and technologies, the image of TV columns at that time was still plain and simple. It can be seen from related data that in the late 1990s, dramatic increase in number of channels and enhanced column awareness make column image break through the scattered state of local packaging. For example, Oriental Horizon and Topics in Focus of CCTV, which started in 1994, conducted visualized column packaging in 1996. Title making is magnificent, delicate, infectious, finger-popping and unique, which drove improvement on title design of other columns of CCTV. Half-hour Economy, Observation and Thinking and News Probe successively launched new column titles, which drove and attracted the attention of provincial TV stations on TV column titles to some extent.

At the initial stage from 1995 to 2000 of television packaging in China, the requirements on visual image of foreign channels of the TV stations were not high. Production of column titles was in a simple imitation state without any competitions. Contents of the columns were just simple program notification. Neither the overall column packaging position of the channel nor the concept of column title design was formed at that time. From 2001 to 2006, when computer media technology was integrated into TV column title design, the concept of overall television packaging design was introduced. Design from planning to manufacturing, including on-air packaging [2] and off-air packaging [3], has been developed. Scenes which cannot be achieved in a traditional photostudio become reality in computers. Titles with lighting obtained through 3D animation system and rotation space implemented by lens have gradually appeared. Overall packaging of BTV, overall packaging of CCTV Science and Education Channel, overall packaging of CCTV Economy Channel, overall packaging of CCTV Agriculture Channel, image design of overall column of CCTV sports channel, overall packaging of Dragon TV
Fashion Channel and overall packaging of Hunan TV became representatives of that period. Their common characteristic is serialization of channel column title design (including characters and graphics of titles).

When a program brand enters into the growth stage, it means that this brand has won initial recognition of the audiences, meanwhile advertising value of the program starts to make a figure. The most obvious feature during this stage is the intensifying competition among various programs, “imitators” come in a continuous stream. Since homogenization of the programs increased by each TV station is serious, new audience groups are seriously divided up, and rating structure starts to be changed [4]. After 2007, television packaging design of China, especially on-air packaging, has formed many excellent channel column titles. Except normal packaging of column titles and advertising videos, overall packaging of channel columns is concerned, thus it further rises to the level of column image construction. For instance, Hunan TV entered into the stage of channel operation and television packaging brand planning in 2003. Meanwhile, it brought out column identification image combining Chinese characters and graphics. In 2006, Super Girl of Hunan TV created an income of more than RMB 0.3 billion, which created the highest record in single TV activity marketing in China. After character design of the titles of Super Girl and Super Boy is determined, packaging and publicity series which takes competitor image as the subject is soon launched. Overall rating is promoted, and meanwhile brand effect is extended. On May 20, 2009, Hunan TV World (exclusive English name) was started in Hong Kong. Hunan TV became the first TV station which obtained the qualification of broadcasting in China. Since then, its orientation changed from “happy China” to “happy global Chinese”. Success of channel column packaging of Hunan TV has affected overall orientation and column image shaping of the channels in China. For example, Hainan TV is oriented as travel channel, Zhejiang TV is oriented as fortune channel, Shandong TV is oriented as “affection as deep as the sea, integrity as firm as Mount Tai”, Anhui TV is oriented as “show-line world”, Qinghai TV is oriented as “beautiful Qinghai and fashionable China”, Jiangsu TV is oriented as emotional channel, orientation slogan of Heilongjiang TV is “dragon world, Kongfu China”, Guangxi TV is oriented as female channel. Provincial TV stations successively brought about their column images after determining their channel orientation. Since then, visual image design of channel columns starts.

**Forms of Font Design for Column Titles**

**Library Font of Title Design**

Timeliness and motility of column title design decide that characters of column title need to adapt to short-time dynamic picture design. To let the audiences remember symbol of the title in a limited time, readability and memorability of the screen font shall be considered. Since TV channels were pushed out in China, boldface has been the first choice for characters of TV column titles for a long time. This is because compared with Song typeface, boldface is thick, strong in visual impact, recognizable and easy to remember. Transverse strokes of Song typeface are relatively thin, which are easy to shake on the screen. Thus Song typeface is suitable for main body, but not suitable for titles. In the final edition of TV column titles, boldface is most commonly used, which includes black variant, Microsoft Yahei, Fangzheng medium black, new Yahei and Fangzheng medium black, classical imitated boldface, Colorful
Cloud, imitation Song typeface and Wei tablet. Usage of these font styles on the screen creates different new visual effects.

**Art Font of Title Design**

Except directly adopting library font, TV column titles will more likely adopt art font designed according to content requirements of the column. Characters in final edition of the title have formed some outstanding design works in practice. For example, characters in the title of Live Your Life extract the symbol “+” as the co-design element of “live your life”, and adopt bright colors such as red, yellow, blue and green to deliver diversity of life; the characters of Happy China Road are shown in exaggerated stroke structure, thus dynamic title characters and images combining the impactive points, lines and planes can give rise to intense visual impact. Font modeling and features of the column can be expressed; in Family General Mobilization, stoke embellishment is conducted based on form combination of black variant, which makes the column have the characteristic of joint entertainment. Interestingness of the column image is enhanced, and people will have cordial feeling. It is found from the cases that to make the columns attract the audiences and deepen their memories, art design of the characters in title font, which is the most important visual communication element, seems to be very important except content quality of column planning.

**Forms of Title Design**

TV column title contains features and connotation to be expressed by the column. The process of title deduction is the process to show overall style of the column. Title design is the “image” of the column at the beginning, and its important function is to transmit the name of the program which the audiences are watching. Meanwhile, title is also the most direct reflection of column orientation, style and contents. Duration of a column title is normally 15 seconds, which depends on specific situations. The creation techniques are diversified from static state to animation, from two dimensions to three dimensions. The forms of title font design mainly focus on the requirements of the column. For examples, title font of Split Second adopts three-dimensional perspective of stokes, which creates a spatial effect of title characters. In the process of broadcasting, multi-dimensional spatial effect will be generated through dynamic state and rotation; title font of Living Space spatially combines each font and stokes and creates a dynamic visual and optical effect by rotation or ray casting; in title font of Olympic Channel, the common stokes constitute graphical characters. This optical-illusion effect lies in ingenious combination of strokes; title font of I Am the Director conducts graphical process to certain parts of the font to highlight the subject to be expressed without interfering with the reading. These different types of title fonts can play the role of catalogue index of the column and meanwhile play an important role in providing column information, establishing visual image of the column, strengthening rating benefits of the column and cultivating stable audience groups for the column.

**Column Title Design with 3D Animation Special Effects**

From the perspective of technology, title making of TV columns has gone through four stages, including manually designed artistic characters, utilization of character generator, 3D animation making and application of non-linear editing. When 3D animation technology and non-linear editing are adopted by television packaging, ideas of television packaging and title
design methods are promoted. Especially after utilization of CG technology in television packaging and production, the methods such as lighting effect, assembling, rotation, flicker, flexibility and roll in special-effect techniques can be used for making title font. In this way, artistry of title font of the column can make new breakthroughs.

**Three-dimensional Title of News Broadcast**

From 1978 when News Broadcast started to 1984, the title of News Broadcast adopted the hand-painted characters in Song typeface, combining hand-painted blue broadcast tower and simple crimson background. During this period, overall trend of news title was simplicity. Limited by making techniques and conditions, title design relied on combination of hand-painted artistic subtitles, icons and patterns. Professional television cameras were used for shooting, and then the editor was used for editing so as to make the title integrated with column contents. Two variations occurred to the title of CCTV News. For example, in the newly made title adopted on April 8, 1985, the background and characters still used tiled color, but at the position right below the title, some pictures of important national news were added. It seems to be connected with publicity of the reform and opening-up policy and new social atmosphere. In another title of 1985, the previous simple and planar broadcast tower model was replaced by a green Chinese map. Meanwhile, the reticular lines represented the confidence of the column to connect with the world. Meridians and parallels were extended towards the depths of the universe utilize the principle of perspective, and then gradually gathered in the depths of space (this title shows that film & TV title making which integrates animation started in China). In the title design of CCTV News Broadcast of 1988, the characters had spatial three-dimensional effect. The colors were brighter and more vivid that those before. Similarly, the process on meridians and parallels adopted the gradual change effect which was more expressive than planar coating. It was a great change compared with the tedious, low-purity and planar style before.

**Appearance of 3D Animation Titles**

In 1990s, the tile of world-focused “Barcelona” Olympic Games adopted unique 3D animation mode. The rich frames and novel making techniques raised a huge technical revolution worldwide. In 1991, CCTV News Broadcast adopted the 3D title freely made by Qi Dongxu [5] team, which became a landmark limestone in the history of Chinese 3D column title making. It laid a firm foundation for later 3D title making [6]. For examples, the title of CCTV “Spring Festival Gala” of 1992 first introduced 3D technology and achieved great-leap-forward development of Chinese TV making level. This manifestation mode encouraged TV professionals to create more attractive column titles. In the title of CCTV News Broadcast of 1998, the forms of background making and font design were more flexible. Metal solid fonts were added, and title characters and the rotary tellurion model were overlapped. Animation effects of the graphical characters and multi-dimensional spatial sense with rich variation in sounds and colors can present the advantages of high-tech making level.

**Utilization of CG special-effect Technique**

CG special effects are utilized in television packaging design. Except image recording and shooting devices, Adobe series which comprise Inferno, Photoshop, Illustrator, Flash, Dreamweaver, Premiere and After Effects are also adopted. Post-composition software can be roughly divided into level-oriented composition software and procedure-oriented composition
Software. Level-oriented software refers to the composition software in multiple levels. Each level corresponds to a section of original material making, such as filtering, image matting and lighting effect. In the end, the frames made in each level are overlapped according to a certain order to form a final composition frame. The procedure-oriented composition software is to take each procedure of image composition as a unit, and each procedure can accept one or more input frames. After processing the original material frames, an output frame will be generated. These design steps are connected to form a procedure, and then the final composition result will be obtained. This type of software design is not limited by levels, thus complicated effects can be designed. Fine adjustment can be conducted to the frames, and therefore it is suitable for making exquisite special-effect shots [7].

Generally, characters of the column title will appear after image of the column is broadcast. In a few seconds, the audiences usually pay attention to the content of the title but will not focus on the relation among characters, image and background music. To combine the appearance process of the frame of title characters with other elements requires creating a text animation. This cannot be achieved without CG special-effect techniques, and therefore various aspects such as lighting, shots and motion time need to be composited, for instance, lighting of title characters, combination of scene frames, motion trail of characters, motion direction and speed of characters, actuality degree of the characters and texture effect of the characters. The title of Day Day UP of Hunan TV combines actual shooting with CG special-effect making. The title frame is made under the following procedure: calculation by pencil and ruler → draft of half-finished design → design sketch of finished hand painting → slate carving → partial presentation of computer-effect characters → combination of final title characters and figures. From two dimensions to three dimensions, from static state to dynamic state, column font design and successive showing of Tiantian Brothers alternately appear. The exciting music and the stoke design of the Chinese character “上” into an upward arrow can present the nature of this column. Utilization of CG special-effect technique in font design for column title has left a profound impression on the audiences. Also, in the title of CCTV-5 Sports Life, the Chinese character “人” combines regular script and boldface, which runs through the whole title scene. The overall scene is the record of daily sports activities and fitness process of people, so that “人” and “R” are taken as the subject symbols in the shot of the entire frame. Each sports frame and each daily fitness process which represents spirituality of Chinese constitute connotation characteristic of Sports Life. The character “sports” in final edition adopts the font of boldface, while “life” adopts the font of calligraphy. One looks like neat and orderly, while the other looks like casual and friendly. The difference between two types of fonts can bring about the feeling of motion and silence. It indicates that title character design has been raised to a motor imaginary space by CG special-effect techniques. What is presented to us is a thinking concept of character creation, which provides a simulative frame for the hypothesis of title character design in China. It is also a road of constant exploration in virtual manifestation forms of future title characters.

References
[2] On-air packaging refers to packaging design and application of televised contents except program contents and cut-in advertisement. Its elements involve channel identification (ID),
channel color, channel sound, advertising slogan, image propaganda film, title, guide system, studio and so on.

[3] Off-air packaging refers to designs of newspaper, magazine, ratio station, website, letter, business card, promotional gift, outdoor advertise ment (vehicle-mounted advertisement and bulletin board), which are non-broadcasting media. It actually is the non-television application of VI in traditional CI. Off-air packaging utilizes the advantages of off-air system such as print media and network media to make up inherent defects of television broadcasting.


[5] Qi Dongxu: Currently he is the professor of Macau University of Science and Technology. He once organized and successfully developed the first computer-made scientific and educational film, *Similarity*, and the first computer-made cartoon, *Mimi Goes Fishing* (1992), in China. He won the second prize for scientific and technological progress of Ministry of Radio, Film and Television. The title of *News Broadcast* of 1991 with 3D effects was completed by the team of professor Qi.
