

# Research on Interaction Hierarchy of Music Social Software Based on Interactive Ritual Chain—Taking QQ Music as an Example

Fei Xiang, Ruoqing Xia \*

Hubei University of Technology, Wuhan, Hubei, 430068, China

\*xiaruoqing@sina.com

\*Corresponding author

**Keywords:** Interactive design, Music software, Interactive ritual chain

**Abstract:** In today's increasingly rich material life, people's social activities are not limited to reality. As a part of people's entertainment life, music has also become a common way of entertainment. The integration of social elements in music software seems to have formed a new social experience. When it comes to software, interaction hierarchy design is particularly important. Introducing the sociological theory basis of “interactive ritual chain” into the study of interaction hierarchy is a new interaction design method emerging in recent years.

## 1. Introduction

In our daily life, music playing software has long been nothing new. As early as 2002, when the Internet was in its infancy, an independent developer released a software called “mp3 Player”, which was later renamed “QianqianJinglisten”. However, at the time when personal computers just started, hardware construction was not perfect, so software engineering and interactive experience design were not mentioned. Therefore, in the next few years, rival software such as “Kuwu Music” and “Every Day Beautiful” focused on the improvement of basic functions of software, never thinking of breaking the boundaries of software and integrating social concepts. In recent years, the idea of “music social” has only begun to gain traction among Internet companies, driven by the success of QQ Music. Different from traditional social behaviors, in the virtual carrier of software, there is no handshake, no hug, nor look at each other and smile. Instead, there are the following words or virtual expressions. The most important “interactive ritual” in the chain of interactive rituals is formed when these words are seen and touched by another user through communication[1].

## 2. Practical Significance of Interactive Ritual Chain Theory in Qq Music Social Module

### 2.1 Interactive Ritual Chain Theory

The interactive ritual chain theory was first proposed by the famous American sociologist Randall Collins. He believes that emotion can connect social solidarity and individual actions, and interactive ritual chain is the basis of social structure. Through interactive ritual, micro-sociology and macro-sociology can be combined. In sociological research, although the interactive ritual chain theory is a relatively young theory, it has already aroused extensive attention and thinking in the academic circle, and has become one of the hot theories deeply explored and studied by scholars in various fields. Durkheim (1995), a French-Jewish sociologist, believes that commitment to religious groups is realized and maintained through collective religious rituals, which form a strong and shared collective excitement and thus connect participants with the collective. On this basis, Collins (2004) developed a set of interactive ritual theory. In his book *Interactive Ritual Chain*, he proposed that the society we live in can be regarded as an interactive ritual chain, in which people constantly shift from one kind of encounter to another, and different levels of encounter reflect different programmed activities that express different meanings. Similar to Durkheim's view, Collins proposed in the interactive ritual chain theory that rituals can stimulate emotions, which in turn will

further respond and enhance people's sense of identity for rituals.

When people have common thoughts or concerns psychologically, they will have similar emotional impulses, which prompts them to use equivalent symbols (such as non-verbal or speech ways) to express the common concerns and emotions, and the sense of moral justice related to these symbols will also be generated. Most of the time, the public opinion guidance on today's "we media" platforms is a rather extreme result of collective excitement. [2]

Cultural capital and emotional energy are two very important basic resources in the interactive process of mixing ritual and emotion. Although Collins believes that interaction is formed in the effective use of the cultural capital and emotional energy that people control, Collins still maintains that the real driving force of interaction is emotional energy.

Relative to cultural capital, emotional energy is the most valuable and highly rewarding. In the process of interaction, individuals always want to maximize their positive emotional energy. It's called positive energy, so people actually have a tendency to positive emotional energy.

## **2.2 Practical Significance of Interactive Ritual Chain Theory**

After several iterations, QQ Music gradually broke through the single software positioning in the past and added functions such as "listening to books" and "live broadcasting", trying to build it into a mass software with a wider audience.

In 2020, QQ Music introduced a new function module "Plop community", which was directly renamed as "community" in the subsequent update, improving the music community attribute of QQ Music. As a sociological theory, the interactive ritual chain theory is mainly embodied as "interactive ritual" and "collective excitement" in the virtual social environment of QQ music Plop community. When the potential users in the community system express their experiences and feelings, other users will see that at this time, the "interactive ritual" has begun to produce reactions. In the interactive ritual chain theory, Collins proposed that rituals can stimulate emotions, which can respond to and further enhance people's psychological feelings about rituals. When people have common psychological problems, they will have similar emotional impulses, prompting them to use equivalent symbols (such as non-verbal language and speech style) to express their common concerns and emotions, thus generating a sense of moral justice for these symbols. This collective excitement potentially increases user stickiness. Users' demand for QQ music software is no longer limited to listening to music, but has become a process with deeper needs such as "listening to music, checking comments and clearing one's mind".

## **3. Analyze the Five Elements of User Experience and Interactive Ritual Chain Theory in Combination with Qq Music Social Module**

### **3.1 Five Elements of User Experience**

The five elements of UX are the concepts mentioned in Jesse James Garrett's UX Elements: User-Centered Product Design.

### **3.2 Strategic Layer - Rooted in Listening**

As the most important part of the five elements, strategy layer is the starting point of user experience. Strategy can evolve and change, and determine the trend of the whole product. Before 2020, the core user experience shaped by QQ Music is listening to music and listening to radio stations. After the development of social networking module, it will be transformed into a music social software for listening to and sharing music, chatting about music and appreciating music.

### **3.3 Scope Layer - Expand User Requirements**

After going through the strategic layer, it gradually goes to the user.

Scope layer: is the first step in visualizing the strategy layer. With the needs of both operators and users, you can figure out how to meet the strategic objectives and what features to provide. At this level, the strategic role of QQ Music's music community is to expand user demand and thus enhance user engagement.

The demand of software operators is user activity that is stable or seeking progress in stability, while the demand of users is constantly changing, and this change will be changed by the development of competitive product market. As a music software, the most basic demand of users is to listen to music. After this demand is satisfied, some users will gradually pursue higher level of demand. Such as comment function, communication function, sharing function. When users start to think about communication and sharing, the software itself needs to be endowed with social attributes to meet the gradual needs of users.

The community attribute of QQ music belongs to vertical social applications to a certain extent. "Vertical social" is a product of the Internet age, a social relationship between people with similar interests. In normal social relationships, the interaction between individuals is contingent, and the individuals have different interests and have no common language, while vertical socialization avoids this problem. QQ music community is a typical vertical social attribute. Every "like", "comment" and "interaction" of users are highly autonomous. In the process of building social attributes, the "comment" function key is crucial. As a stimulant to stimulate short-term emotions, "comment" can be found almost everywhere in QQ music. Music, short videos, tweets and so on are equipped with comment function keys. Users have plenty of opportunities to comment, be commented on, like, and be liked, and the process of vertical social interaction is revealed. In addition, the mechanism of hot reviews ensures the quality and attractiveness of reviews, uses people's emotional fluctuations to induce empathy, and lays the foundation for the ultimate emotional resonance. This in itself gives users the right to choose to create relationships. In the process of interactive ritual, participants transform from short-term emotion to long-term emotion, and accumulate emotional energy, which is an important driving force in the process of interactive ritual. When the audience's emotions are brewing, they will find the words that resonate with them in the comments of other netizens. Under the hot comment mechanism, the words that netizens think are the most essence and the most representative of their voices will be placed at the top. In this case, the sense of belonging and membership brought by the interactive ceremony can form group unity. It also generates group symbols and group morality. Therefore, in the comments section, the following comments under most popular comments are actually more integration rather than departure, and relevant netizens can eventually find people who share the same interests and resonate with them. This is the advantage of vertical social mechanism.

### **3.4 Structure Layer and Frame Layer -- Reasonable Layout and Efficient Interaction**

Structural layer: Information architecture design, whose purpose is to combine scattered requirements into a whole, and reasonable display. In the first level of QQ music navigation page, from left to right: home, live, MV, community, my. In the home page, the layout of function keys at the top focuses on customized music recommendation module. In the home page slide layout, social function attributes are gradually enhanced, accompanied by live broadcast, we media account recommendation and other sections. In the community section, there are only square and follow function keys in the navigation bar. With the decline of the community page, short we-media videos will appear. Under each we-media content card, there are function keys for sharing, commenting and liking.

### **3.5 Expression Layer -- Strengthen the Sense of Ritual**

The interactive ceremony is a process with causal correlation and feedback loop, and the core mechanism is mutual concern and emotional connection. The layout of the playing page of QQ music has a large number of emotional promoting factors. Firstly, there are three navigation keys at the top of the playing page, which are respectively recommendation, song and lyrics.

Song as the first priority of the display page, accompanied by a large vertical MV, near the middle part of the screen is the song information, the number of likes, the song heat, at the bottom of the music player main function keys: play, pause, previous song, next song. Obviously, developers prefer MV as the first priority information for listeners to receive. When listeners listen to songs and watch MV, they will first brew their emotions, which is the basis of interaction ceremony. Then they will share their emotional energy with other users through comments and

sharing interfaces.

As a secondary navigation page, lyrics are obviously not designed as the first priority information, but the role of lyrics can not be ignored. In the lyrics page, scrolling is adopted, and at the bottom, there is a layer of highlighted information design, the content is “long press lyrics, make posters”, this seemingly insignificant design. In fact, it succeeded in symbolizing emotional energy through a simple function. In the interactive ceremony, symbols will strengthen the sense of ceremony, and thus enhance the emotional connection in the ceremony. In the network environment of mutual communication, the symbolization of individual identity has greater stability. [3] In the process of symbolized poster communication, on the one hand, it is the user publicity of Internet products, on the other hand, it is a kind of long-term interactive ceremony.

The recommendation page itself is also a secondary navigation page, but it also has its own functions. The page is composed of song parameters, related songs and related playlists. As the product of other users' independent choices, the playlist also has the transmission property of emotional energy, and the final result of the interactive ceremony is group excitement and group unity. It is in the process of this ring after ring of emotional energy transmission.

#### **4. The Prospect of Music Social Software Based on Interactive Ritual Chain Theory**

The perspective of interactive ritual chain theory can reasonably guide the design of vertical social products, and take this as the basis for design decisions. [4] Taking QQ music software as an example, QQ music social networking module is studied from five layers of experience design, namely strategy layer, scope layer, structure layer, frame layer and expression layer, combined with the interactive ritual chain theory. Based on this, this paper tries to analyze the application prospect of music social networking based on the interactive ritual chain theory.

With the rapid development of the Internet, records, tapes and CDS have been gradually replaced by various music clients. A few simple virtual operations can “modernize” the ritual activity of listening to music. The long absence of the sense of ritual arouses people's nostalgia for the sense of ritual. The function of “self-produced posters” symbolizing music in QQ music greatly strengthens the range of emotional output and gives more people the opportunity to participate in the interactive ceremony within a limited time. At the same time, the abstract emotions that people hope for music, such as high quality, professional and meaningful, are represented symbolically. This ritualized expression effectively enhances the sense of identity between groups. Reasonable design structure layout can guide emotional rhythm, which is the key to generating emotional energy in the process of interactive ceremony. Through the design of page layout and task flow, users can be guided to interact with the rhythm set by the application, accumulate emotional energy smoothly, generate interactive ceremony at the right opportunity, and trigger group excitement and group unity. And a highly cohesive user base.

#### **5. Conclusion**

There are many other software with vertical social attributes of QQ music community, such as NetEase Cloud Music. In this paper, I analyze the social section of software through the five elements of experience design, and introduce the theory of interactive ritual chain to explain the social scientific basis of vertical social networking of music social software. User participation and interaction are the vitality of vertical social applications, and the “interactive ritual chain theory” can effectively combine users and platforms better. And realize the extension of emotional power and emotional needs in interpersonal communication. For developers, the most obvious thing to see is a steadily growing user base. The rational application of the thinking mode of “interactive ritual chain theory” to build the social module of the application can complete the module platform construction more efficiently, and finally form a popular Internet product.

## References

- [1] Randall Collins. Translated by Lin Juren, Wang Peng, Song Lijun, et al. Interactive Ritual Chain [M]. Beijing: The Commercial Press, 2009:130.
- [2] Luan Chunyan, Jiang Xiao. Research on Vertical Social Application Design from the perspective of Interactive Ritual Chain Theory--A Case Study of NetEase Cloud Music [J]. 1003-0069(2021)07-0145-03.
- [3] Randall Collins. Translated by Lin Juren, Wang Peng, Song Lijun, et al. Interactive Ritual Chain [M]. Beijing: The Commercial Press, 2009:135.
- [4] Chen Yan. Research on the Design of Social Networking Sites Based on the Differences of User Needs [D]. Jiangnan University,2013.11-16.