

Emotional Energy, Ritual, and Chaining: A Study of Live E-Commerce Interaction

Lingzhao Deng, Jie Lou*, and Xi Pei

Abstract—Based on the perspective of interactive ritual theory, this paper studies the interaction mechanism between anchors and users in e-commerce live broadcasting activities, and analyses the interactive effect of emotional experience process. Research conclusion: the closed scene created by network live broadcasting gives full play to the aggregation and flow effect of emotional energy, and under a series of ritual chaining actions, the anchor inspires the users' desire to buy through group solidarity, specific symbols, and conferring a sense of justice. Moreover, in the network environment, the interaction between the elements of the interactive ritual chain is more significant, and has a significant effect on the promotion of consumers' purchasing desire. In order to further increase consumers' desire to buy, anchors should fully assume the role of spiritual leaders, improve the integration of professional knowledge in the live broadcasting process, produce more original content, enhance the team's backstage interactive support, and enhance the online adhesion with users through digital props and concessions. The article through the offline online sales scenarios detailed comparison, one by one analysis of the ceremony and chain effect in the process of e-commerce live to promote the role of the chain, extend the interactive ceremony chain theory of the online field scope, for the new situation of corporate brand Internet marketing planning and live e-commerce to provide theoretical reference.

Index Terms—Interactive rituals, live e-commerce, emotional energy

I. INTRODUCTION

E-commerce live broadcast is a new online shopping mode that has gradually emerged in China in recent years. It has now become popular all over the world, is based on the evolution of e-commerce into a new stage, the underlying reasons include the rapid development of information technology, the huge terminal network user base, the short video dividend for live broadcasting e-commerce to cultivate the market and so on (Xiang *et al.*, 2022). In the process of live e-commerce, the majority of audience groups and the anchor gathered in a virtual scene (live room), the anchor and the audience through a variety of ways to interact, including and not limited to pleasantries and chats, product introductions, live demonstrations, etc. The users interact with the time and even cover the whole day 24 hours. Users in this kind of anchor constantly send out similar emotional energy under the stimulation of a strong desire to buy, so more and more platforms, merchants began to use live e-commerce way to achieve product sales (Xiang *et al.*, 2023; Baker, 2010). Various types of anchors in the platform to

carry out live with goods. Single sales repeatedly exceeded the billion mark. Why is this Internet-based e-commerce marketing model experiencing phenomenal explosive growth? Why are consumers' shopping behaviours in live broadcasts stimulated like never before? The anchor happens to use a variety of interactive forms in the live broadcast, and what is the mechanism of benign stimulation of consumer purchase desire by these forms?

II. LITERATURE REVIEW

Some scholars have analysed the impact of live broadcasting on online shopping behaviour from the perspective of online shopping characteristics. The study shows that although the expression of interactivity and the purpose of interactivity are different between traditional online shopping and live shopping, their significant impact on perceived pleasure is the same. Consumer authenticity in live shopping comes from the anchor's introduction and display of product information, functions, brands, production processes, etc., which is not the same as the content of advertising communication, but both reflect the consumer's demand for authenticity of product quality (Rufi *et al.*, 2016). Whether it is traditional online shopping or on-site shopping, entertainment is an important factor in triggering consumers' emotions. In addition, some scholars have analysed the influence of e-commerce anchors' attributes on consumers' willingness to purchase online through the rooting theory, in which the charm attribute, recommendation attribute, display attribute and interactive attribute of e-commerce anchors affect the excitement state, sense of value and sense of trust within consumers (Yu and Na, 2022; Burgos, 2021).

Studying the effect of live broadcasting from the perspective of interactive ritual chain theory has also been studied by communication scholars in recent years. The interactive "field" of webcasting provides users with the exchange of emotional energy and cultural symbolic capital. One of the outcomes of the interactive ritual chain is that it can effectively stimulate individuals to internalise deep private emotional experiences in the shared emotional structure (Jeon *et al.*, 2019). Although previous studies have systematically analysed the interaction scenarios between anchors and users through the communication theory of interactive ritual chains, they are still based on the application of traditional theories, and have not iteratively updated the theoretical premises and models from the form of the live room (Morehart and Butler, 2010; Ran and Wan, 2023). For example, the redefinition of cyberspace, the concept of digitisation of emotional symbols, and the extension of emotional energy in the network era (Yang *et al.*, 2023). In this paper, we take the theory and perspective of interactive ritual chain to explore the interaction process between

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anchors and users in the process of e-commerce live broadcasting. It explores the users' feelings in the live broadcasting process in terms of personal emotional energy, specific symbolic symbols, group solidarity, sense of justice and moral consciousness. Countermeasures to enhance users' purchasing behaviour in cyberspace scenarios are explored.

III. INTERACTIVE RITUAL CHAIN THEORY SYSTEM

Randall Collins was the first to propose a theory of interactive ritual chains (Ran and Wan, 2023). Before him, a number of scholars had studied the role of rituals, but there was no systematic elaboration of their mechanism of action (Fischer *et al.*, 2014). He argued that macro patterns of social relations are composed of layer after layer of micro social scenarios, where micro individuals are emotionally connected to each other through interactive exchanges, and that this emotional, as well as attentional, mechanism derives from group solidarity and specific group symbols, a state of real-time sharing. The continuous contact between individuals extends to form the structure of group interaction, which is an interactive ritual activity at the bottom of the social structure level. Increasingly, the scene is fixed in a relatively closed place through mutual contact and emotional exchange, which improves the efficiency and effectiveness of the interaction, thus generating a more macroscopic structure. As a result, different groups in different interaction scenarios produce inconsistent group solidarity effects due to different micro-factors.

Based on the theoretical model of interaction ritual chain, this study analyses the adaptation of e-commerce live streaming scenarios, interaction processes and traditional interaction rituals. This study also verifies the application of the interactive ritual chain theory in the process of modern webcasting and proposes suggestions to enhance the interactive effect (Gonzalez, 2011).

A. A Framework for the Chain of Interaction Rituals: Four Premises and Four Outcomes

Interaction rituals, which are also daily programmed activities performed by interlocutors from the exchange of capital and emotions, consist of a four-fold premise; (1) two and more people are gathered in the same place so they are able to interact with each other by being physically present whether they intend to pay attention to each other or not; (2) boundaries are set for outsiders so participants are aware of who is attending; (3) people are focusing their attention on a common object or activity and know each other's focus of attention by communicating that focus of attention to each other; and (4) people share a common emotional or affective experience.

The four premises have a clear influence on each other. And it should be noted that (3) and (4) reinforce each other, and when people begin to notice the behaviour produced by each other day by day, as well as to perceive the feelings of each other, and are also very familiar with each other's consciousnesses, the desire to share their emotions increases, and even to take such consciousnesses as their own. Crowds become more and more fervent in their cheering, appearing to be extra solemn and respectful when participating in rituals involving religion, and such an atmosphere grows stronger

and stronger, and can attract individuals to become more engrossed in such scenarios and interactions, triggering their own curiosity. For example, a talk event that starts with a small number of participants and then the crowd grows larger and larger, the trust in the presenter increases with the number of followers, leading to the presenter later on becoming the representative of an authoritative point of view, when in fact he is not an expert scholar in a certain field.

The interactive rituals, in which the preconditions are fulfilled, lead to a series of results in the context of mutual attention and close interaction, which include these aspects: (1) group solidarity, where members of the group perceive themselves to be different; (2) individual emotional energy: a positive, pleasurable mood and a willingness to take action on it; (3) specific group symbols: a distinctive sign that allows members to feel a sense of belonging and an identity symbol that differentiates them from other individuals; (4) a sense of morality: a sense of justice that reflects respect for the symbols of the group representation to avoid aggression by those who violate it. (4) Morality: the ability to reflect the group's sense of justice, respect for the group's symbols, and avoidance of aggression by those who violate them. The Basic framework of the interactive ritual chain theory is illustrated in Fig. 1.

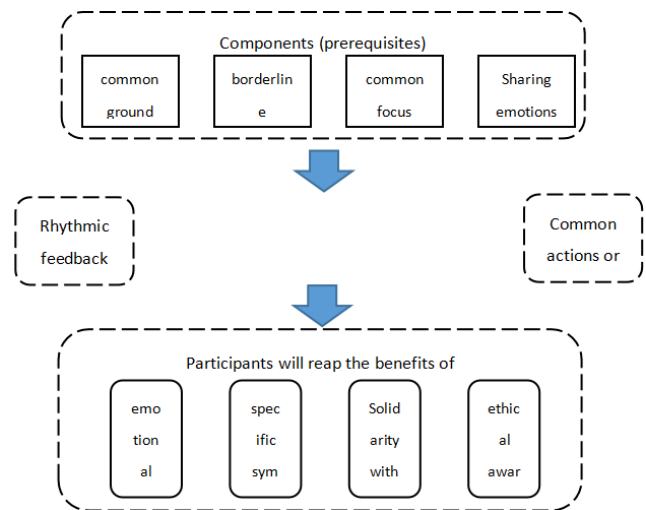


Fig. 1. Basic framework of the interactive ritual chain theory.

B. Personal Motivation Model

Collins not only proposes a core theory of interactive ritual chains, but also gives a formula for a model of motivation to act: people are involuntarily moving towards resources that enable them to access high-level emotional energy debriefings, a mechanism driven by rational behaviour and consistent with actual performance in marketised contexts. The exact formula is expressed as follows:

$$\text{Personal Motivation} = \frac{\text{Emotion Energy}}{\text{Emotion Energy} + \text{Material Costs}}$$

According to the formula proposed by Collins it is seen that personal motivation is positively correlated with emotional energy and negatively correlated with material costs, and that the greater the material weight, the less pronounced the increment in personal motivation that results from an increase in emotional energy.

IV. ORIGIN AND MEANING OF THE CONCEPT OF EMOTIONAL ENERGY

Emotional energy is a central component and outcome of interactive rituals. Turgot raised the central question of sociology: the mechanisms that generate moral solidarity sustain society; these mechanisms function by attending to, reinforcing, and transforming emotions. Parsons' sociology draws on the most specific, actorless aspects of Turgot's theory and expresses itself in the same terms: society is held together by values. But values, insofar as they exist (to what extent they are shared and under what circumstances they are shared remains unsettled), have an affective conception. In terms of the conflict theory of sociological theory, Weber's core concepts are also implicitly emotional: legitimacy is a stable basis for power, hierarchies of status groups and the stratification they lead to pervade everyday life, and religious worldviews stimulate economic action at certain critical moments. The vast majority of Marx's and Engels' analyses are structural, and emotions must play an important role in analyses of class mobilisation and class conflict, whether it is the issue of mutual distrust that prevents class mobilisation or the great unity that the proletariat acquires in the context of revolution. In these respects, Marx and Engels' theory of conflict comes close to Turgot's dynamic view. When trying to translate these concepts into observable variables, one is talking about particular kinds of emotions.

The sociology of emotions aims to answer the central question of sociology. What binds society together—the “glue” of solidarity—and what fuels conflict, the “glue” of solidarity? The “glue” of the “glue” of solidarity. The energy of a mobilised group is emotion; it is also the force that supports stratification—a sense of hierarchy, encompassing dominance, subordination or resentment. Explaining what makes people feel these different emotions can have important implications for the core theories of sociology. These classic sociological theories implicitly address emotions, but usually do not refer to them directly and explicitly. This is because our theories are macro-supremacist, or at least study social life at an abstract and collective level. If we attempt a sociological micro-transformation not a micro-reduction, but a grounding of macro-concepts about real interactions in the macro-spatio-temporal dimension, we will recognise the importance of affective processes. In other words, the micro-conversion of macro-concepts introduces the concept of emotions.

Affective factors are not present in all microsociological theories. Mead and the symbolic interactionists emphasise cognition, emergence and process; Schutz and phenomenology emphasise cognition, conventions; from an exchange theory perspective, rewards and behaviour are valued; and expected states theory also emphasises cognition. These theories do encompass emotional elements within them, but they are not the central elements in these theories. On the other hand, the sociology of emotions has only recently begun to separate itself from the general problems of sociology and is largely regarded as a specialised field.

However, several important schools of micro-sociology have only recently begun to view the core micro-dynamics of emotion as a social process.

The concept of Emotion Energy (EE) is highlighted in all models of the interaction ritual chain. The concept of Emotion Energy is singled out as the ultimate sought after outcome of interaction rituals. Emotion here is not the notion of affection, love, or friendship between people in conventional situations, but rather long-term and ongoing social emotions. We can compare it to the concept of “drive” in psychology. Emotional energy cannot be measured, but it can be depleted and replenished to achieve a state of dynamic equilibrium. The process of interaction both depletes and recovers emotional energy. Ineffective interactions and emotional inputs without feedback reduce an individual's emotional energy, while interactions with spiritual leaders and good feedback increase the amount of emotional energy gained. Normally, a person of high status can gain more emotional energy because he or she can dominate other members to obey him or her and increase the coverage of his or her own interaction behaviour, which reflects the unequal nature of the “interaction ritual”.

V. RITUALS AND CHAINING OF LIVE E-COMMERCE BROADCASTS

The four elements of the anchor-user interaction ritual in the e-commerce live love model reflect new characteristics:

A. Common Place Facilitates Emotional Energy Clustering: The Property of Physical Enclosure in Online Live Streaming Rooms

The theory of interactive ritual chains asserts the property of physically enclosed places, with the aim of recognising that individuals can explicitly interact with each other. In live streaming, the mechanism of mutual influence is not only generated between the anchor and the user, but the influence of user-user interaction is also prevalent, and the influence of that aspect may be greater than that of the anchor on the user. Similarly, the involvement of different salespeople can have a greater impact on the overall sales process. This situation is quite obvious in offline shopping scenarios, for example, if a user buys a toy product in a shop, the salesperson's marketing to the user is carried out through the introduction of the product, live demonstrations, and the statement of sales services, etc. However, the user's price/performance ratio of the product and its reliability (quality issues) embody a greater degree of concern in this regard, and it is not possible to persuade the user through the on-site sales tactics or demonstrations. But if the scene of another user (in the same physical scene) can prove the conclusions of the sales staff to verify the quality of the product in the process of pre-use is very good, then the potential user desire to buy a great promotion. This is why in fixed sales scenarios there is often the case of the “trust”, i.e., the person with converging sales interests posing as a user to persuade another user to buy the product. The impact of offline sales scenarios is illustrated in Fig. 2.

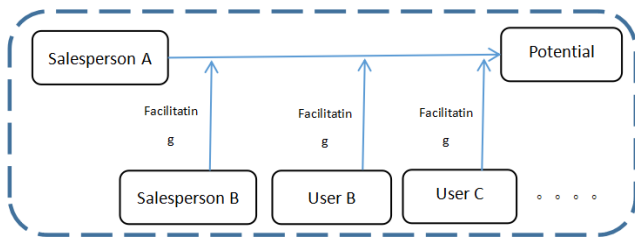


Fig. 2. Impact of offline sales scenarios: the role of different actors.

In the live broadcasting room, the construction of the closed scene becomes cyberspace, the anchor acts as the main salesperson A, the auxiliary salesperson B is replaced by the assistant broadcasting who does not necessarily appear in the film, and the user is the fan who interacts with the anchor in the live broadcasting room, which can be classified as active and inactive fans. Active fans and anchor high frequency interaction, not only will consult the characteristics of the product, logistics, after-sales service, etc., but also actively appreciate the anchor; inactive fans do not directly interact, but will watch the live broadcast, with potential purchasing power. In the network live broadcast will still use “support” to promote sales, and the norm, because the fans will observe the evaluation of other fans, and can view the real-time performance of sales from the network data, so the anchor even spend a large cost of “brushing” behaviour also become easy to understand. The impact of webcasting sales scenarios is illustrated in Fig. 3.

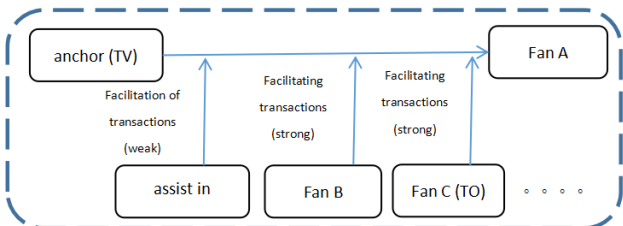


Fig. 3. Impact of webcasting sales scenarios: the role of different actors.

Emotional energy generates flow among group members, so closed scenes help emotional energy to gather. The emotion of the anchor, the environment of the live room, the goods sold, and the stories told can all have an impact on the emotional energy of the users, who still have no other energy to distract their attention in closed network environments, especially when they come across their favourite anchors and the pervasive events planned by the live room.

B. Salient Boundaries Promote Group Solidarity: Outside User Boundaries

The second property of the interactive ritual chain is that the interactive process needs to set distinct boundaries for outsiders. Here is a list of common offline commercial/non-commercial examples in life: at an insurance appreciation party, customers and their friends and family gather in an established conference venue, where the user’s status is referred to as VIP, and only VIPs can enjoy insurance discounts as well as the benefits that come with the convenience of insurance; dental specialists will fully display the acquired physician credentials in the consultation environment to enhance their professionalism and reliability, and by applying for a dental high-value membership reflects the superiority of queue-free and temporary appointments;

trade union clubs are granted trade union membership through the payment of dues, so members can actively participate in the activities organised by the trade union and obtain the rights of trade union membership; student association groups achieve the authentication of club membership by joining the club, and the members are more actively involved in the activities of their exclusive associations, and so on. A common feature of the above cases is that the identities as participants are bounded, and the participants can be significantly identified as co-participants, or partners with the right to co-participate, and as groups without the right to participate. From the interaction effect, the obvious boundary attribute can enhance the user’s sense of identity and participation, and if applied in business scenarios, it can create better sales performance.

The sense of boundaries between live broadcasts on e-commerce networks is easy to establish. First of all, the most typical is the live broadcast online fans, this part is directly involved in the interaction of the user group, and each other can also perceive each other’s existence; secondly, the anchor in order to increase the number of online fans will generally import the private domain traffic, that is, other platforms of the community fans, this part of the fans than passing by the live broadcast room to stop the fans are more loyal, and the anchor is more familiar with; in addition, live broadcasting room in the fans will be the ranking of the contribution of the fans, for example Reward for the anchor, or the amount of money spent in the anchor live room ranking, etc., which will be segregated from non-participating groups. Of course, in the field of the Internet, not only the live room will have boundary labels, social media, network forums and so on have such characteristics, this paper only discusses the network live broadcasting, other network scenarios do not extend the discussion for the time being. The boundary characteristics of offline and online scenarios is illustrated in Fig. 4.

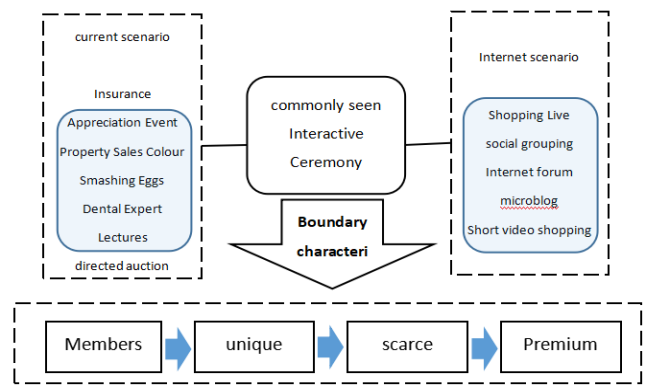


Fig. 4. Boundary characteristics of offline and online scenarios.

C. Specific Symbols Maintain a Common Focus: KOL-Centred Interaction Patterns

The concept of KOL (Key Opinion Leader) originates from marketing, but has gradually become known to the public on the Internet over the years. From the perspective of traditional business model, the typical representatives of KOL include celebrities, image spokespersons, spokespersons of companies or organisations, famous scholars and experts, etc. These people release their opinions or comments on public occasions, such as concerts, press

conferences, industry forums and other scenarios, and they can play a large enough influence to trigger a wide range of discussions among the masses. Issue more consistent views on the same issue, it will produce cross-pollination effect, which has been argued in communication science. According to the size of KOL's audience, KOL can be divided into phenomenal, heavyweight, small and medium-sized KOL level.

On the Internet, "Netroots" has become a synonym for KOL, and the number of fans of Netroots ranges from a few thousand to tens of millions or even hundreds of millions. Netroots with sufficient fans have a strong realisation value, which is why tens of thousands of celebrities and grassroots are competing to be bloggers and anchors in the era of self-media, and their incomes are much higher than the income level of ordinary urban workers. In the e-commerce webcasting scenario discussed in this paper, the anchor acts as a KOL role, and the focus of all live participants generally includes two aspects, one is the anchor itself, whose image, voice, movement, clothing, etc. are the focus of fans, for example, the anchor will be uniform clothing style in different live events, or the use of iconic language, as well as interactive praise, etc., and the other is the product promoted by the anchor, as well as the live interactive activities designed for the promotion of the product. The second is the product promoted by the anchor, and the live interactive activities designed to promote the product, such as sitcoms, singing, dancing and other forms. In short, everything presented by the anchor in the live broadcast is the focus of user attention, the more obvious and prominent this focus, the better the interactive effect.

As the anchor's interactive activities continue to diversify and the number of fans grows, so does the anchor's experience of accumulating users. The anchor's specific symbol can be a picture, a catchphrase, a fixed colour scheme, or a fixed beginning/end of a short video. As long as the user can identify the anchor through the "specific symbol", it meets the definition of anchor specific symbol. The effect of adopting specific symbols is the process of emotional internalisation. In the process of webcasting, the readily available terminal system makes the specific symbol work more efficiently and effectively.

D. Sense of Justice and Shared Emotions: Open Channels of Communication

As with the offline sales scenario described earlier, word of mouth among users about the benefits of a product can be extremely persuasive. Users understand the merchant's desire to sell as many products as possible to generate revenue, and the positive feedback from users dispels any wariness of the merchant's desire to make a profit. As a result, the merchant has this incentive to promote sales goals. Emotional sharing has become easier in the live streaming room by simply typing in a comment on current events at the keyboard or interacting with the anchor online without worrying about the appearance of offline scenarios where voices rising and falling over each other will drown each other out. And with multiple people sharing at the same time, without the constraints of time and space, the frequency of words and even emotional exchanges can reflect the user's current emotional state. Anchors can certainly take the lead in

triggering a certain focus topic, whether that focus is for commercial purposes or anchor account growth and development purposes. User feedback to the anchor, user feedback to the user, the user in the live broadcast of the purchase behaviour, appreciation behaviour, are all positive externalities of emotional sharing.

Group justice is easy to bring the group impulse consumption, resulting in "group excitement" effect. When this kind of effect points to the consumer behaviour in the live broadcasting room, it will bring "explosive single". This is undoubtedly the result that every businessman would like to see, so the continuous atmosphere, repeat the specific symbols, positive interaction can make the users of the live room are happy to order in the excitement, that is, group justice. A very important aspect here is the ability of individual consumers to clearly see the records of orders placed by other consumers, as reflected in the number of items sold. The offline sales scene only through the seller's yell, the number of transactions on the scene roughly estimated turnover, so the network live sales system transparency, information exchange without barriers to make the user's emotional sharing extremely smooth.

VI. CONCLUSION

The closed scene created by webcasting gives full play to the aggregation and flow effect of emotional energy. Under a series of ritual chain actions, anchors stimulate users' purchasing desire through group solidarity, specific symbols, and conferring a sense of justice. There are still some shortcomings in the research of this paper, such as the impact of unexpected events generated in the live broadcast, whether specific symbols will have a counter effect on groups with different characteristics, and the psychology of regret after impulsive consumption, etc., which need to be perfected in the subsequent research. Under the network environment, the interaction between the elements of the interactive ritual chain is more significant, and the promotion effect on consumers' purchase desire is obvious. In order to further enhance consumers' purchase desire, anchors should fully assume the role of spiritual leaders, improve the integration of professional knowledge during live broadcasting, produce more original content, strengthen the team's backstage interactive support, and enhance the online adhesion with users through digital props and concessions.

CONFLICT OF INTEREST

All the authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Lingzhao Deng wrote the paper and conducted the research; Jie Lou and Xi Pei interpreted the results and revised the manuscript. All authors had approved the final version.

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