

A Social Semiotic Approach to Multimodal Discourse of the Badge of Xi'an Jiaotong University

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Abstract—Using the school badge of Xi'an Jiaotong University as an example, this article aims to unravel that both literal expression and visual imagery have the ideographic function. The analysis in this article primarily utilizes the theoretical framework of the visual communication grammar, which is developed by Kress & Van Leeuwen from Halliday's systemic functional linguistics. By analyzing the representational, interactive, and compositional meaning of the school badge, this article shows that school badges have rich connotations and the ability to interpret them should be attached importance. Furthermore, this article aims to make a little contribution to the interpretation of school badges.

Index Terms—multimodal discourse, social semiotics, school badge of Xi'an Jiaotong University

I. INTRODUCTION

Nowadays, people's daily life is changed a lot with the fast development of science and technology, and a quite obvious change is that both language and other social semiotic are involved in daily communication. In this multimodal society, people always communicate and pass on information through the co-employment of semiotic resources. Many foreign linguists have made research on multimodality and social semiotics (Halliday, 1978; Jewitt, 2009; Kress & Van Leeuwen, 1996; O'Halloran, 2011). In China, many scholars also paid much attention to the theoretical framework of multimodal discourse analysis (Li Zhanzi, 2003; Li Huabing, 2013; Zhu Yongsheng, 2007). They give the definition of multimodality and introduce some important theories such as Kress and Leeuwen's social semiotic approach to multimodal discourse and Halliday's systemic functional grammar. Besides, some scholars also try to use the social semiotic approach to analyze the multimodal discourse such as statue, logo and picture (Li Lijuan, 2009; Zhang Junyan, 2013; Li Enghui, 2012; Wendy, L. B. & Jennifer, Y. L., 2014). Their analyses show that the social semiotic approach is really suitable and useful to analyze the multimodal discourse and it helps people to interpret pictures or statues or some other multimodal discourses.

Hu Zhuanglin (2007) points out that in this multimodalized age, the capability of interpreting the multimodal discourse should be attached great importance. The badge is a school's symbol which could well represent school's spirit and pursuit. All most all universities have the particular and meaningful badges. However, not all of them have been correctly interpreted and recognized. The ability to interpret these school badges is necessary, to which should be paid much attention. Though the social semiotic approach is paid much attention to when analyzing the multimodal discourse like statue and pictures, few articles focus on the school badge. Taking the school badge of Xi'an Jiaotong University as an example, this article uses the social semiotic approach to analyze the representational, interactive, and compositional meaning of the badge, hoping to give some help to the readers and make a little contribution to the interpretation of school badges.

II. THE THEORETICAL FRAMEWORK OF MULTIMODAL DISCOURSE ANALYSIS

1. Multimodal Discourse

Many scholars try to give a definition to multimodal discourse. Van Leeuwen (2005) points out that "multimodality means the combination of different semiotic modes—for example, language and music—in a communicative artifact or event". A more specific definition is that "multimodal discourse involves the interaction of multiple semiotic resources such as language, gesture, dress, architecture, proximity lighting, movement, gaze, camera angle, and so on" (O'Halloran, Tan, Smith & Podlasov, 2011).

From the perspective of multimodal discourse analysis, Jewitt (2009) puts forward that "multimodality describes approaches that understand communication and representation to be more than about language, and which attend to the full range of communicational forms people use—image, gesture, gaze, posture, and so on—and the relationships between them".

Jewitt (2009) thinks that there are four interconnected theoretical assumptions underpin multimodality:

The first is that language is part of a multimodal ensemble and representation and communication always draw on a multiplicity of modes, all of which have the potential to contribute equally to meaning. The second is that each mode in

a multimodal ensemble is understood as realizing different communicative work. Multimodality assumes that all modes have, like language, been shaped through their cultural, historical and social uses to realize social functions. The third is that people orchestrate meaning through their selection and configuration of modes. The fourth is that meanings of signs fashioned from multimodal semiotic resources are, like speech, social.

Kress (2012) also holds the same view and thinks that “in a multimodality approach, all modes are framed as one field, as one domain. Jointly they are treated as one connected cultural resources for meaning-making by members of a social group at a particular moment.”

Besides, in China, some linguists also develop the theory of Multimodal Discourse Analysis and point out their own views about it. Zhu Yongsheng (2007) proposes two kinds of standards to judge whether it is multimodal discourse or not. The first criterion has already accepted wide recognition in Chinese academic circles. It is realized by judging how many kinds of modality are involved in the discourse. If there is only one modality used in the text, it can be called monomodal discourse while if there are two or more kinds of modality involved, it can be called multimodal discourse. The second criterion is realized by judging how many semiotic systems are involved. Some discourses only consist one kind of modality while some of them contain more than one semiotic system, such as comic strips (which only involve visual modality, but contain both wordage and pictures).

2. The Theoretical Framework of the Social Semiotic Approach to Multimodal Discourse Analysis

The multimodal social semiotic approach draws upon Halliday’s systemic functional (SF) theory to provide frameworks for conceptualizing the complex array of semiotic resources which are used to create meaning and detailed practices for analyzing the meaning arising from the integrated use of those resources in communicative artifacts and events (O’Halloran, 2011).

In Halliday’s SFG (Systemic Functional Grammar), language contains three systems, that is, semantic system, lexico-grammatical system and phonological system. Among the three systems, semantic system is the core one which involves three metafunctions: ideational function, interpersonal function and textual function. For Halliday (1978), “the grammar of a language is not a code, not a set of rules for producing correct sentences, but a resource for making meanings”. Halliday suggests that every sign simultaneously tells people something about “the world” (ideational meaning), position people in relation to someone or something (interpersonal meaning) and produces a structured text (textual meaning) (Halliday, as cited in Bezemer & Jewitt, 2011).

O’Toole and Kress and van Leeuwen develop Halliday’s idea to the grammar of other semiotic modes. Kress and van Leeuwen (1996) believe that the visual images (e.g. pictures, color, typography) and other semiotic system are similar to language and also can be used to fulfill the three metafunctions. Social semiotics holds the view that language and image often act different epistemological roles in multimodal discourse due to their separate “affordances” (which is closely related to semiotic potential) (Kress, 2003). Language represents narrative world, while image illustrates displayed world.

Kress and van Leeuwen (1996) quote the theoretical concept of “metafunction” from Halliday’s SFG and put forward three metafunctions in VG (Visual Grammar): representational meaning, interactive meaning and compositional meaning. When applied to visual systems, the ideational metafunction organizes the way that “represented participants’ relate to each other to represent the world around us” (Kress and van Leeuwen, 1996). The interpersonal metafunction controls the interaction between the represented participants and viewers and the textual metafunction makes the image form a whole by putting the pieces together as a complete work.

It is Kress and van Leeuwen that improve the theoretical principle of the social semiotic approach to multimodal discourse analysis by reorganize other related theories. And after their theory being completed, many scholars begin to use the social semiotic to analyze the multimodal discourse both in home and abroad. This article also follows their pattern and analyzes the the representational, interactive, and compositional meaning of the school badge of Xi’an Jiaotong University.

III. THE SOCIAL SEMIOTIC APPROACH TO MULTIMODAL DISCOURSE ANALYSIS OF THE SCHOOL BADGE

Badge of Xi’an Jiaotong University belongs to multimodal discourse, since it is made up by image, language and color, whose meaning is realized through more than one social semiotic (Kress & Van Leeuwen, 1996). So this article will use the social semiotic approach to analyze the school badge of Xi’an Jiaotong University.

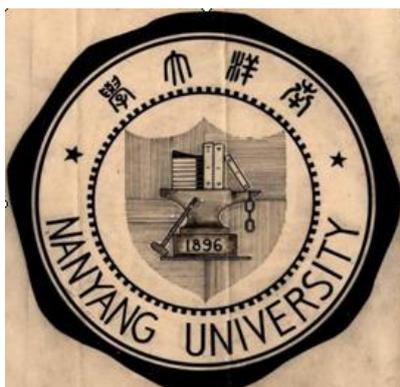
Xi’an Jiaotong University grew out of Nan Yang Gongxue which was set up in 1896. In the year of 1926, its name was changed to Nan Yang University and the president Ling Hongxun decided to use a new badge to this university (which is presented in Figure 1).

In 1956, Nan Yang University was moved to Xi’an to meet the demand of economic development. In 1959, The State Council decided that the Xi’an’s part and Shanghai’s part should become independent and they named the two parts as Xi’an Jiaotong University and Shanghai Jiaotong University respectively. Until now, the two schools badges continue to utilize the original design concept and the two badges of Xi’an Jiaotong University and Shanghai Jiaotong University are very similar.

The shape of the 1926 edition is circular. In the center of this circle, there is an anvil. On the left of the anvil, there is a hammer and on the right a chain is hanging there. Several books written in Chinese and foreign languages are put on the anvil. These designs have the implication of attaching equal importance to the education of engineering and

education of juvenile delinquents and paying much attention to knowledge from both China and the West. On the base of the anvil, there are Arabic numerals “1896”, indicating the starting year of the university. The background of the anvil is a shield, which is used to encourage teachers and students to be loyal to Jiaotong University and to have the courage to make progress. Surrounding the shield, there is a cross section of gear which is similar to the armature of electric machinery, indicating the major of engineering and the traffic specialty. And it also can be the metaphor of the development of transportation. Out of the gear circle, there are the names of university both in Chinese and English, hoping that the university will win far-flung fame. The Chinese name uses the seal script (“zhuan shu”) and the English name uses regular script (“Kai shu”). They hope that the university could be well known at home and abroad (this paraphrase is from Xu Zhengchi’s *The Meaning of Nanyang University’s New Badge*, cited from Zhang Xiaoya).

Comparing the two badges, it can be found that today’s badge of Xi’an Jiaotong University (which is presented in Figure 2) basically continues to use the original pattern of the 1926 edition. Therefore, it is necessary to mention the original edition of badge of Xi’an Jiaotong University when analyzing its meaning.



(Figure1, cited from Zhang Xiaoya)



(Figure2, cited from the official web page of Xi’an Jiaotong University)

1. The Image Analysis

1.1 Representational Meaning

The representational meaning of VG is corresponding to the ideational function in SFG. Kress and van Leeuwen (1996) point out that “any semiotic system has to be able to represent, in a referential or pseudo-referential sense, aspects of the experiential world outside its particular system of signs”. They divide the representational metafunctions into two processes: the narrative process and the conceptual process. They think that narrative process involves ongoing actions or events, in which actors are represented by vectors—either real or imaginary, while conceptual process is related with classification or analysis of participants in terms of their stable and timeless essence, for instance, graphics, diagrams, etc. There are three kinds of conceptual processes: classificational process, analytical process and symbolic process.

According to this definition, the school badge of Xi’an Jiaotong University is a kind of conceptual image and thus the following discussion will focus on the conceptual process of the badge.

In the classificational process, the participants are connected through taxonomy relation, in which at least one set of participants would be subordinate and the other superordinate. However, the taxonomy relation can be covert or overt, which depends on whether the larger, more general class appears or not. In some visual images, “the ‘Superordinate’ is either only indicated in the accompanying text, or inferred from such similarities as the viewer may perceive to exist between the ‘Subordinate’” (Kress & van Leeuwen, 1996). The classificational process of these images is covert. In the covert classification process, the participants are realized in an equal and symmetrical composition, that is, the

participants are equal. The school badge Xi'an Jiaotong University belongs to the covert taxonomy. In this badge, the center image is an anvil with the books on it and the distance between the gear and the anvil is virtually equal. Therefore, the participants of the gear, two circles and the anvil are together used to represent the whole appearance of the school badge of Xi'an Jiaotong University. The equal distance gives the readers a kind of harmonious impression.

In the analytical process, there should be a part-whole structure in participants, in which two kinds of participants are involved, namely, the carrier (the whole) and the possessive attributes (the part). In this school badge, the Xi'an Jiaotong University is the carrier, which is the focus of the reader. The other components of this badge are the possessive attributes. The gear and the anvil are used to stand for the two distinguishing majors of this school. While the chain, hammer and the setting year "1896" which are surrounded by the Chinese name and English name of this university are combine with the center to obviously represent the structure of the school badge of Xi'an Jiaotong University. The whole structure well embodies the academic atmosphere of this university.

The symbolic process is about the implied meaning of the participants. The symbolic process usually consists of two kinds of participants. One participant acts as the 'Carrier', and the meaning or of it has been identified in the relations. The other participant stands for the meaning or identity, that is 'Symbolic Attribute'. The school badge of Xi'an Jiaotong University belongs to the latter. In this school badge, the anvil, the chain, the hammer and the gear are all combined to stand for the meaning of transportation ("Jiaotong" in Chinese) and stress its two distinguishing majors-traffic and transportation. The books on the anvil also symbolize that Jiaotong University also pays much attention to the education of engineering. The English name of this university also shows that this university aims to get the international recognition and popularity. Therefore, all of the components in this badge have the symbolic meaning and the combination of them well embodies the spirit and pursuit of this university.

1.2 Interactive Meaning

The interactive meaning of VG is corresponding to the interpersonal function of SFG. Kress and van Leeuwen (1996) point out that "any semiotic system has to be able to project the relations between the producer of a sign or complex sign, and the receiver/reproducer of that sign". They thought that the realization of the interactive meaning involves four elements: social distance, contact, perspective and modality.

According to the definition of social distance, contact and perspective, it can be found that these three elements are not closely related with the school badges. Therefore, the modality is paid much attention in the following analysis.

For the perspective of systemic functional linguistics, modality refers to the speaker's attitude towards the proposition expressed in the utterance. All means of expressions have modality resources (van Leeuwen, 2005). In social semiotics, modality is often connected with truthfulness. However, it is not a concept that distinguishes the real from the unreal absolutely but one that is related with the issue of representation: reality or fiction, credibility or incredibility and so on. In Visual Grammar, there are three categories of modality: high modality, middle modality and low modality. van Leeuwen (2005) put forwards several modality markers to judge how real an image is. Each modality marker is a continuum which includes two extremes: the highest modality and the lowest modality. For example, in terms of color saturation, the neutral saturation expresses the highest modality while either full color saturation or black and white expresses the lowest modality. The detailed information is presented in Table 1.

TABLE 3. 1
REPRESENTATION OF HIGHEST AND LOWEST MODALITY

Contextualization	Most detailed context	Absence of background
Absence of background	Neutral saturation	Either full color saturation or black and white
Color differentiation	Maximally diversified color range	Monochrome
Image depth	Maximally deep perspective	Absence of depth
Illumination	Maximum representation of the play of light and shade	Absence of representation of Light and shade play
Brightness	Maximum number of different degrees of brightness	Just two degrees (black and white; two brightness values of the same color; etc)

The analysis of the modality of the badge is based on this modality marker. The badge of Xi'an Jiaotong University is often standard red. In Chinese culture, the bright red has the positive connotation—passion, strength, vigor and the strong confidence. This kind of color has often high modality. The red badge of Xi'an Jiaotong University indicates that this school is full of passion and strength and the members in this school have the strong confidence to make more progress and establish a better university. The color of school badge of Xi'an Jiaotong University is sometimes standard blue. The blue represents wisdom, calmness, courage and reason. The pure blue also has high modality. The blue badge of Xi'an Jiaotong University indicates that this school has the courage to meet the challenges and the teachers and students are encouraged to be wise, calm and reasonable, just trying their best to carry forward the fine tradition of this school. In a word, the two color of the school badge give the readers impression that this university has the fine tradition and strength, courage to meet the challenges and make it better. From the above analysis, it can be concluded that the school badge of Xi'an Jiaotong University is high modality.

1.3 Compositional Meaning

The compositional meaning of VG is corresponding to the textual function of SFG. Kress and van Leeuwen (1996) point out that any semiotic system has to have the capacity to form texts, complexes of signs which cohere both

internally and with the context in and for which they are produced. They thought that composition refers to “the way in which the representational and interactive elements are made to relate to each other and the way they are integrated into a meaningful whole”. They also analyze the three resources of compositional meaning: informative value, framing and salience.

Information value is realized through the placement of elements in the image. For Kress and van Leeuwen, the left-right arrangement is a Given-New information structure. The Top-Bottom structure embodies Ideal-Real information. The center-margin composition provides important-less information.

In this school badge, the Chinese name is put into the top of the whole circle while the English name is put in the bottom, indicating that the Chinese name is more ideal and salient while the English name is more real and less salient. Xi’an Jiaotong University grew out of Nanyang Gongxue, which is an old Chinese school, so it is reasonable to place its Chinese name in the spotlight to stress its relationship with the “Jiaotong University”. Compared with the center image, the Chinese and English names are marginal. The center image is more important and salient, attracting the readers attention more easily and offering more information.

Salience refers to different degrees to which elements attract the viewers’ attention, which can be achieved through size, sharpness of focus, tonal contrast, color contrast, perspective and it is also affected by cultural difference. In this badge, “交通大学” is in “*Mao Ti*” (a style of calligraphy) and boldface, and at the same time, its English name “XI’AN JIAOTONG UNIVERSITY” is written in capitals and the typeface is *Times New Roman*. All of these designs embody that Xi’an Jiaotong University strictly conforms to the standard usage of school’s name. The gear and the anvil which quite vividly depict the wheel and the transportation also attract readers’ attention.

2. The Meaning Construction of Multimodal Discourse

Kress and Van Leeuwen (1996) points out that there are some relationships between the image and the language, yet the image is not dependent on the language explanation for itself has its own structure and organization. The image itself could produce the representational meaning, interactive meaning and compositional meaning. The interpreting of image is arbitrary to some extent and in different context there would be different interpretation. The language explanation makes the concrete image more specific and it also can reflect the meaning of the image more clearly. At the same time, the image makes the content of language more vivid. Therefore, the combination of language and image which are both a kind of social semiotic, would communicate meaning more comprehensively and efficiently. The school badge of Xi’an Jiaotong University is made up by the language and the image, the combination of these social semiotic vividly and completely convey the rich meaning, which would embody the school’s spirit and encourage its members. Therefore, these social semiotics are all meaning-making resources, which are well combined to represent the meaning of this badge.

IV. CONCLUSION

Utilizing the theoretical framework of the visual communication grammar, which is developed by Kress & Van Leeuwen from Halliday’s systemic functional linguistics, this article analyzes the representational, interactive, and compositional meaning of the school badge of Xi’an Jiaotong University. From the above MDA of this school badge, it can be concluded that both literal expression and visual imagery have the ideographic function.

In this multi-media age, the traditional literacy is not enough. By analyzing the school badge, this article shows that school badges have rich connotations and the ability to read them should be attached importance. What’s more, it can be concluded that only by combining the language with other social semiotics and paying much attention to the function of all of them, can people have the comprehensive and correct understanding of the multimodal discourses in this modern society.

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