

UNDERSTANDING CHINESE AND BRITISH CONSTRUCTION: A PROBLEM OF METAPHORS

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Globalization means that more and more construction projects involve participants from different countries or different cultural backgrounds. This challenges previous approaches and is creating a new context for the industry. Besides the obvious language barrier, people from different cultural backgrounds may also have different faiths, assumptions and behaviour norms which can and do cause conflicts. This paper considers the way we understand construction in different countries exploring the issue of the use of metaphors. Metaphors not only are part of our language for communication, but also form much of the bases of our thinking and consequently our action. They are the way we relate experience and connect to new situations. There is a tendency to understand construction in different situations superficially by interpreting activities from one's own cultural perspective. The deeper operation however cannot be understood in these terms as perception, appreciations and behaviours are set within different metaphorical frames. This will be demonstrated from interviews in China and Britain where practitioners narrate their experience of their work. It is argued that Chinese and British construction practitioners have similar metaphorical frames. The paper discusses one such frame that of seeing 'project as battles' which operates differently in each culture. It is concluded that this new area of construction management research may provide more effective communications and deeper understanding of cross culturally situated projects.

Keywords: communication, practice, metaphor, situated learning.

INTRODUCTION

As Stiglitz (2006) states: 'globalization ... entails the closer economic integration of the countries of the world through the increased flow of goods and services, capital and labour'. The advent of international finance has caused many countries to develop rapidly and construction is at the forefront of this growth. The internationalization of finance and location of skills has meant that projects are taking place with people drawn from many countries. Thus, one problem of globalization is the requirement for us to undertake complex projects in a cross cultural setting using non-native language. It is now very common that construction projects involve participants from different countries, and the expectations of design, efficiency and management are more and more set globally. For example, the ENR's Top 225 international contractors generated \$390.01 billion in revenue in 2008 from projects outside their home countries, representing a 25.7% increase from 2007 (Reina and Tulacz 2009). Even with domestic construction projects, the international factors are more and more evident. CITB-ConstructionSkills estimates that 20% of the construction workforce in

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London and the South East do not use English as their first language (Schellekens and Smith, 2004). It takes great effort from all the participants to work together in these circumstances towards any sort of common goal. This challenges previous approaches and has created a new context for the industry.

It is almost universally agreed that good communication is a key feature of successful construction projects (Dainty *et al.* 2006). In construction, communication is required at multiple levels from complex strategic action of clients and users through to the practicalities of day to day activities on the construction site involving many organizations and people (Emmitt and Gorse 2003). The dominant model of communications used in construction is based on Shannon and Weaver's model of information exchange (Emmitt and Gorse 2003). This considers ideas in the sender being codified into language, transmitted through a variety of media which are interfered by noise, to be received by the receiver to be decoded and assimilated. This is a powerful model that is useful for electronic distance communications but has been identified as having problems with more complex and immediate relationships. As Finnegan (2002) states:

Its prime emphasis is on transporting the message. But in the active practices of interacting human life, does a message possess some objective and independent existence even in its initial formulation, let alone over the 'transmission process'?

The Shannon and Weaver model assumes that there is absolute meaning in a message which is independent of the receiver and the context. The use of language in practice is a much more subtle activity that involves performance in a situation. Concentration merely on the message and the words in the message in isolation loses meaning. If we consider communications between participants in a cross cultural project, we have the difficulty of the complexity of the project itself, as evident by the problems in a single cultural situation, as well as the complexity of the cross cultural interaction itself. Undertaking a mere translation of words fails to start to comprehend what is being attempted in a cross cultural situation. The words themselves lose meaning during the communications due to the difficulty in describing the complex and dynamic aspects of the project and this difficulty is magnified by the cross cultural misinterpretation and suspicion. Thus, it is not surprising that in cross cultural situations, we are apt to make mistakes. It is better to see meaning as being generated by the listener from the context, one aspect of which is the culture as well as from the association the words/phrases of the communication have (Finnegan 2002). The later of these is from our use of metaphor and metaphor and culture are strongly connected.

Culture has a contradictory position being seen as a superficial aspect of humanity displayed in particular artefacts, icons and histories, whilst being deep so that we do not understand each other (Wright 1994). It is generally understood that people from different cultures have different views on the world and hold different assumptions about life and work, so they behave differently (Hoecklin 1994, Harris *et al.* 2004). There are differences in values, attitudes, perceptions, and behaviour norms which affect people working in a cross cultural environment. Much work is often undertaken in presenting the culture of the country of work such as from cultural websites¹ but in a descriptive and rule based manner rather in the way that it operates. What we appreciate from such descriptive information is that the culture is different but we do

¹ For example: <http://www.kwintessential.co.uk/resources/global-etiquette/china-country-profile.html>

not understand the significance of this. Thus, conflicts occur through the process of misreading and misinterpreting the signs and symbols of other cultures. Tone *et al.* (2009) is an example of not understanding deeper cultural significances in construction. Thus, it is difficult to prepare for cross cultural working situations as the real problems are very contextual and solutions to one particular problem may not be readily applied to another situation. Most of the deeper cultural knowledge is not formally referenced, indexed, and filed; rather, it is diffusely distributed as experiences of people within society (Hampden-Turner and Trompenaars, 2000). However, as regards communication, we tend to assume quite a superficial difference that can be overcome by good translation and understanding of customs and sticking to technical tasks (Mahwinney 2001, Xu *et al.* 2002). We believe that much more needs to be done to understand differences, to appreciate these in a positive way and to work effectively together (Xiao and Boyd, 2010). The idea that we distinguish differences in an exaggerated way may hide many similarities. It is not that these differences are not important but that they assume a greater importance than the similarities. In everyday practice, we meet different people but within our culture we learn to work with these. There is something about 'alien' cultures which draws us to feel distant. Thus we need to do more to learn to work together. This requires us to understand a deeper meaning in our communications, and appreciating the use of metaphors can help us do that.

Metaphor is a language device which makes meaning in one area through the use of a word from another area (Ortony 1993). For example, we can say that 'our organization runs like clockwork'. Here, the reference to 'clockwork' is used to suggest that the organization runs in a smooth, efficient and controlled manner. Thus, what is said using metaphor is not literal and any word by word translation will be inadequate. There are many species of metaphor in linguistic analysis and the differences between analogies, similes, idioms and even clichés are subtle. We are not consistent with our use of metaphors but we use them for effect as well as giving greater meaning. Many expressions involve what are called 'dead metaphors' where the difference between the two areas has been lost; the word has become literal. For example, we have lost the original meaning of 'broadcast' as the spreading of seeds and know it only as a radio or television activity.

This paper outlines the background to the study of metaphor, revealing some of the methodological problems to this research. The paper uses in-depth interviews from Britain and China to explore similarities and differences in the use of metaphor. These interviews were based on Knowledge Event Management approach (Boyd and Xiao 2006) which used structured debriefing to work on stories of events that practitioners related. Given the significance of metaphor in communications we believe that this is a good place to explore both to characterize differences but also to learn to work together. Initial analyses have produced an interesting and challenging new perspective. Conclusions are drawn from this initial evidence about where more work is required.

METHODOLOGY

We have explored a number of different research approaches to cross cultural analyses and appreciation (Xiao and Boyd 2007, Xiao and Boyd 2008, Xiao and Boyd 2010). Cross cultural research is fraught with methodological difficulties as well as practical difficulties (Loosemore 1999). We have championed a much more reflexive approach to enquiry where we use ourselves as research instruments (Xiao and Boyd 2008). Our

attempts to appreciate greater meaning in cross cultural situations naturally put a challenge on language and translation. In analysing our language use, to try to achieve this transfer of meaning, it is clear that we search for visual, figurative and, indeed, metaphorical examples. The later of these has become a very fertile ground for research and is the subject of this paper.

If we consider metaphor as being the non-literal aspect of communications, it is a very difficult subject to research as the meaning of the communications is hidden behind words. We had interview data from both China and Britain using our deep dialogical technique of structured debriefing from Knowledge Event Management (Boyd and Xiao 2006). This became a resource to search to find the use of metaphors. This required a self training in order to sensitize ourselves to recognizing metaphors as they appear natural. As we use language, we do not work through a rational process of understanding what we do; we speak instantly and seek meaning instantly. Thus, the process is not natural and the methodological implications of this invasion of a communication process must be acknowledged. This meaning was dug out of the recorded interviews by our working together in a laborious and iterative way continually checking for meaning by providing other examples and gradually approaching a shared understanding. In that sense, we used the lens of metaphor to explore greater meaning in narratives of practice and see all the social constructivist problems that this entails (Czarniawska 2004). Thus, in many ways, the meaning of these narratives was created in the dialogue of the researchers rather than the researchers determining the absolute meaning of the original source. However, the dialogue and the results are rich and challenge a number of common interpretations thus are a worthwhile in opening a debate. We do, however, see a potential use of metaphorical understanding as a way of assisting people to develop 'cultural intelligence' (Ling *et al.*, 2007).

METAPHOR IN LANGUAGE AND RESEARCH

The appreciation of the metaphorical nature of the human world is not new, being a significant feature of ancient Greek philosophy particularly Aristotle (Ortony 1979). Metaphor is significant in our thinking about the world but also, and importantly in this paper, it is part of how we appreciate communications. Fundamental to an idea of metaphor is that we do not see the world in a literal way but see it in terms of other familiar and experiential aspects. Indeed the pictorial view is very much associated with the picture theory of meaning associated with the logical positivists (Ortony 1993). This reduces metaphor to a simple functional role as a representation which can be analysed and categorized with metaphor being put-down as inferior to literal language which we were meant to aspire to (Black 1993). Metaphor then resided in the world of literature and analytical linguistics.

However since the 1950s, with Black's (1954) paper, alongside the growth of a social constructivist awareness of the world metaphor has become a new and powerful area of study. Indeed, following Lakoff and Johnson's (1980) text, several authors see metaphor as fundamental to our way of dealing with the world and the explanation of human ability to have individual conception in a social world. In this theory, communication is not a mere information transfer but an on-going attempt at creating a shared meaning through interaction. It is this much richer view of metaphor that drives this paper. In this new theory of metaphor, metaphor is a foundation of our conceptual system. For example, in the metaphorical phrase, 'Love is a journey', Lakoff and Johnson (1980) distinguish between the Source domain, that is where we

draw metaphorical expressions from (e.g., love), and the Target domain, the conceptual domain that we try to understand (e.g., journey). Much of their work is based on explaining how we map from the source to target domains.

The use of metaphors in construction research is limited but influential. Green (1996) following Morgan (1986) uses metaphor as a lens to identify and emphasize the character of clients' organizations. In this, he is not only using metaphors to enhance the communication of his analysis but also providing a tool for practitioners to allow them to relate better to, and act on, the world through appreciating the operation of the world in metaphorical way without having to have it all related to them. This then is a common use of metaphor as a way of giving more, and more succinct, meaning to a situation than can be found from a literal explanation. Latter work by Green *et al.* (2007) again uses this metaphorical lens but provides a new metaphorical world being one of the playing of a drama. Practice, in particular value management workshops, is seen as a performance that may use scripts and even the stage setting of the workshop. Green (1996) is using metaphors as a tool but without acknowledging the significance, nor the problems, of their use. Brochner (2009) takes a more linguistic turn by indicating where and how Aristotle used metaphors of construction in his descriptions of the world. Aristotle considered metaphors as part of rhetoric (i.e. to create effect) but dismissed them for serious prose (Ortony 1993). However, of interest here is the fact that construction itself provides a powerful metaphorical base. We would add that it induces a problem in that construction can use construction terms in a metaphorical way thus confusing communications. More recent work by Rooke *et al.* (2008) uses metaphorical sense of complexity drawing on its ability to describe the features of successful organizations more ably but also containing the capability to create new solutions. This they contrast to the act of modelling which is to do with predicting and by its nature fixing solutions. This in itself is a powerful use of metaphor and a challenge to conventional positivist thinking. What is significant in Rooke *et al.*'s (2008) is the deep idea that communication is not just about information transfer but that the context influences meaning as does the listener in developing the interaction. Thus it is possible to postulate that there is no absolute literal meaning to any communication but that meaning has to be worked at (Black 1993).

METAPHOR AND CULTURE

The preceding section has shown the value of metaphor in everyday life and how it helps us with meaning in communications and theorizing. However, this is not without difficulties and it is evident that these difficulties become exaggerated in cross cultural situations. From the anthropology's view, culture defines and distinguishes national and tribal groups (Wright 1994). The essence of culture is the shared ways that groups of people understand and interpret the world which enable them to see the same things in the same way and holds them together (Hoecklin 1994). This shared pattern includes how a particular group use their language. Metaphor, as an important part of a language, is closely related to the culture it comes from and is deeply embedded in (Kövecse 2007). Just as Lakoff (1986) pointed out that the meaning of metaphor extends beyond simply a way of naming but more importantly to a way of thinking.

Different cultures do share many understandings as we all live on the same planet, have the same human bodily needs and experience similar social problems, therefore, we can understand each other to a certain extent. This leads us to have some common metaphors. For example, affection is universally linked to and viewed as warmth (i.e. AFFECTION IS WARMTH) due to the correlation in our childhood experiences

between the loving embrace of our parents and the comforting bodily warmth that accompanies it (Kövecse 1986).

However, in different cultural settings the same word or object may have quite different meanings. For example, in the Western culture, 'dog' is regarded as man's best friend as it is faithful and therefore always related to positive qualities, but in Chinese culture, 'dog' is usually used to describe negative features. On the other hand, to the Chinese, dragon and phoenix are two animals symbolizing king and queen respectively, while in the Western culture, they represent fierce and monstrous images (Sheng 2007). The Chinese also believe that the world is composed of five basic elements (metal, wood, fire, water and earth) and everything has two opposite elements, i.e. Yin and Yang. As a result, many metaphors are derived from these concepts. These cultural elements shape the composition of metaphors and how people use them, and they may not be shared between different cultures. Chung (2005) found that the metaphor of MARKET IS OCEAN and MARKET IS A FOREST in Malay, which are not frequently used in either Chinese or English, can be traced back to the ancient Malay society which depended on the ocean for trading and earning a living, and moving to new areas of the forest as a way of exploring new territory. The variations in words, meanings, images between cultures means that extra effort is needed to go far beyond the face value to understand the deeply embedded meaning when cross cultural working is required.

RESULTS

The results presented here are preliminary analyses from audio diaries and debriefing recorded by construction practitioners from both China and Britain as part of a research project in knowledge management. While the audio diaries might be more descriptive without much metaphorical embellishment or richness, the debriefing recordings which involved a communicative dialogue revealed much more effort to describe deeper meaning thus utilized metaphor.

Lost in translation?

Naturally, the construction practitioners use metaphors in their communications. A lot of rich meanings will be lost in the translation if the metaphors are not correctly understood and appreciated.

Let us consider the statement by a director of a Chinese state owned design institute (which does a total job of design, consulting, project management and contracting) when talking about their response to a client's request to produce two sets of drawings for a project, one for official approval and one for actual construction in order not to have to comply with government's regulations:

开发商有实力, 他可以用这种实力去与政府扛。

This can be translated word for word as:

Developers have actual power, he can use this kind actual power go with government carry/shoulder.

The meaning of this is to do with the ability of the developer to get things done. The key metaphorical words are carry/shoulder (扛) depending on translation. This is a meaning concerning an ability to push the opponents about through strength and to have and to use this capability in a deliberative way. Firstly, it is very visual in the physical movement of things which in English might be expressed metaphorically in a

rugby situation as a shoulder charge. But in reality it is not physical and involves manipulation and negotiation. This is a typical Chinese situation not only in construction but every aspect of daily life in China. Such manipulation of regulations can happen in Britain but in a different way.

Another example is where the director was requested by the client to use their relative's subcontracting company. He referred to the problem in these terms:

承包商都有资质,但全是挂靠的。

This can be translated word for word as:

Contractors all have qualification, but all are hang lean on.

The meaning of this is to do with using another companies' qualification to overcome government regulations that require contractors to be qualified. The key metaphorical words are hang (挂) and lean (靠). These are not positive words but are used to refer to something which is not right. The reference is to leaning or hanging on the tree without you being part of the tree. By using both words the fundamental nature of the situation is emphasized.

These two examples show that in cross cultural situation you cannot just rely on word to word translation. In both cultures people will use metaphors in the communications and you need to understand the meaning behind the words and also the reason for use. It takes a long explanation to provide an equivalent meaning. Metaphors do it very succinctly and effectively, almost creating a visual communications in the listener. The frequency of the situation also determines the need for metaphor in order to simplify and speed any communications of this idea.

Projects as Battles

Many of these debriefing dialogues presented what we call 'metaphorical frames' (Schon and Rein 1995). These are metaphorical thinking systems that determine the thought and language which display an overarching approach to a subject. The one frame that we identified from the recordings is 'Projects as Battles'. These displayed a series of words/phrase metaphors particularly related to relationships and solutions. This can be found in both China and Britain.

Let us consider the statement of the same director in their relationship with the client. He refers to the nature of projects he did, considering the same project mentioned earlier:

最近我们两个项目全部是在这种矛盾的关系中走过去的。

This can be translated word for word as:

Recently our two projects all are in this kind spear shield relationship in go through.

The meaning of this is about the conflicting relationships in the opposite needs of government and clients. The key metaphorical words are spear (矛) and shield (盾) which are opposites in a battle, one attacking and one defending. The director was required to do both and the intensity of the difficulty and frustration of this is emphasized by putting the words together.

In the British situation, a site manager referring to his relationship with the consultants indicated:

You always have to cover yourself.

Here, the metaphorical word is 'cover' which is providing a physical protection for a situation. We are also aware it means being continually vigilant that the consultants will try to blame you or to get you to do something that was not priced in the job. Therefore, it means recording details and confirming instructions rigorously. Here the 'Project as a Battle' metaphor requires defensive actions.

In another British situation, a contractor's QS referred to his approach to dealing with a subcontractor:

You have to beat them with the contract.

Here, the metaphorical word is 'beat' which both means hit them but also overcome them and win. The contract is viewed as a weapon where the subcontractor does not have a sufficient grasp of it.

The British situation renowned for its adversarial relationships and the use of 'Project as a Battle' metaphors is frequent. This determines not just the description and analysis of a situation but also the response to it, namely aggressive or defensive. Although it has been much reported that Chinese culture favours 'harmony', itself a metaphor from music, it has not been clear how this manifests itself. In reality, Chinese projects suffer the same problematic execution as British projects, e.g. late and inaccurate design information, subcontractor labour quality problems and client change. However, 'winning without fighting' is an influential idiom in Chinese military theory that informs their operationalization of the 'Projects as Battles' metaphor. This theory of The 'Art of War' has come down within the culture from writings of Sun-Tzu 500BC. This cannot be translated as compromise or negotiation nor even stealth but working with a deep understanding of your antagonist in order to move them to do what you want. The antagonist is 'unbalanced' into accepting defeat. In a British situation, it is much more of a head on collision where it is a battle of the strongest or of rightest. In later years this has been tempered by the adoption of partnering (itself a metaphor), trying to move the metaphorical frame away from 'Projects as Battles' to one of 'Projects as Family'. Such a change will be different in a Chinese situation where the metaphor operates differently.

These examples demonstrate that it is possible to determine differences and similarities in Chinese and British projects through understanding metaphors. More examples like these could not be presented here due to the space limit of this paper. However, much more work is needed on methodology of selection of metaphors and how the evidence of their meaning and use is presented.

CONCLUSIONS

This paper presents some findings from our preliminary exploration into the use of metaphor and their application in construction industry. Although the idea of metaphor has been used in construction research, none has fully explored the significance of metaphor in communications and in particular cross cultural working. There are some basic similarities to metaphors being used in construction in both China and Britain. The one identified and presented here is 'Projects as battles'. We observed that this metaphorical frame shapes and determines the relationships between people. Understanding this metaphor and its influence on people's thinking and behaviour can lead to better relationship in construction project team. Metaphors are experiential in character which is a lot more connected to the practice world than the sterile academic language. We need to work more on the metaphorical character of

our thinking and our communications. As we have shown here, much communication uses metaphors but these can be very difficult to interpret from a different culture. In cross cultural project situations, we need to be aware of the use of metaphor in communication in order not to miss the richness and the embedded meaning of metaphors.

It has been shown that a metaphorical view forms much of the bases of our thinking and consequently our action but we are restricted to appreciating this through language and words which gives us methodological problems in this research. Thus, more research needs to be done to identify the differences in metaphor and metaphorical frames in different cultures. This will help us to handle better cross cultural construction through better communication and cultural appreciation.

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