DOING BUSINESS WITH CHINA: COMPARATIVE CONTENT ANALYSIS OF THE BUSINESS-TO-BUSINESS MARKETING LITERATURE

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Competitive Paper

ABSTRACT

A systematic search procedure was used to identify papers concerning B2B marketing to and within China presented at the IMP conference or published in prominent journals during the period 2000 to 2011. Two samples of papers were extracted: 66 papers from the IMP online database and 104 articles from reputable journals selected as the most likely to publish important work in this field. Full text quantitative content analysis was used to explore the frequency with which key theoretical terms were used in these two samples; the key theoretical terms represented the principal paradigmatic approaches used in the field, such as the IMP approach and transaction-cost economics. Notable differences were observed between the relative frequency with which key terms are used in the IMP papers and in the journal articles, with the former making greater use of Western cultural analysis and IMP concepts, and the latter making greater use of transaction-cost economics, the resource-based view, and the commitment/trust theory of relationship marketing. Papers based on Chinese cultural concepts were found in both samples. In general, research in the field was found to be conducted from a mono-paradigmatic perspective. In particular, papers either adopt a Chinese perspective or a Western perspective; there is negligible evidence of cross-fertilization between Western research paradigms and approaches based on Chinese cultural concepts.

KEYWORDS

China, Guanxi, IMP, Chinese Management, Culture, Content Analysis

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INTRODUCTION: WHY CHINA?

China occupies a key position in the global economic system and is expected to become the world's largest economy within the next decade. In 2010, China became the world's largest exporter. Clearly this makes China uniquely important for international business-to-business marketing practitioners, and a particularly interesting topic for business-to-business research. China's rise to hegemonic power has led to a plethora of books by China watchers (Ambler and Witzel 2003; Braham 2004; Clissold 2004; Hutton 2008; Story 2010). Unsurprisingly, a key focus in many "business related" books on China is economic growth. The pace of growth has been nothing short of remarkable. For example, between 1979 and 2007, China's GDP registered an average annual growth rate of 9.8 per cent, while the figure for the period 2001 to 2007 was 10.2 per cent, although growth looks likely to slip to around 7 per cent following the recession in the Western world. If it maintains these growth rates, many economists believe China will become the world's largest economy by the year 2020. For the last two centuries, one country has emerged as the dominant economic power. The 19th century belonged to the UK, the 20th century the US and it looks like the 21st century will belong to China. Economic growth is just one reason why China is viewed in many quarters as something of a "hot topic". Accession to the WTO in December 2001, the country's pivotal role in the Korea six-party talks, Beijing's hosting of the 2008 Olympic Games, and a reputation of being "the workshop of the world" are just some of the other contributory factors that lead to China being regularly featured across global media outlets. Post-WTO, the Chinese government has instigated a number of reforms. There are three fundamental reform processes that China's central government has adopted and is likely to continue: marketization, decentralisation and privatisation (North 1990). First, marketization has led to increased competition through the development of private enterprises and foreign firms accessing the Chinese market. Second, decentralisation means that many previous central government roles and responsibilities are being transferred to provincial government. Finally, privatisation concerns the emphasis on the increasing privatisation of formerly state owned enterprises and the development of new private enterprises. Combined, these reform processes have contributed to China's economic development.

Although one cannot ignore China's social, political and economic development, much existing China-related business and management literature is still dominated by Western theories. One example of this is internationalisation process (IP) literature (Child and Rodrigues 2005; Deng 2007a, 2007b). A number of internal and external factors have resulted in many Chinese firms becoming involved in the internationalisation process. Increased domestic competition, along with an easing of regulations under WTO, has allowed Chinese firms to penetrate international markets. This has resulted in a dramatic increase in Chinese outward investment. However, Child and Rodrigues' (2005) article is one of the few studies that explore internationalisation from a purely Chinese perspective; they propose a theoretical extension of IP theory that considers a "Chinese perspective" as opposed to a purely "Western perspective".

Researchers in B2B marketing will be aware that China research has been a theme both at the annual IMP conference and in the key B2B marketing journals. For example Sandberg (2008)and Low et al (2008)are IMP studies that examine the internationalisation of Chinese firms. Several prior papers have reviewed IMP literature on China as the basis for substantive research into aspects of B2B relationships (Brennan and Wilson 2001, 2008; Fang et al. 2004; Kriz and Fang 2003; Zolkiewski and Feng 2005). Similarly, B2B researchers with an interest in China will no doubt be familiar with the special issue of the *Journal of Business & Industrial Marketing*(volume 22, issue 2) edited by Brian Low in 2007 on "Business-to-business marketing practices in China" (Low 2007). Recent special issues of *Industrial Marketing Management* on "Business-to-business marketing in the BRIC countries" and "B2B marketing in a Guanxi context: Theoretical development and practices" have added considerably to the body of literature (Biggemann and Fam 2011; LaPlaca 2011).

According to Andersen et al (2009:814) "With recent economic reforms, China is fast becoming the world's largest sourcing hub, as more and more companies turn to Chinese suppliers for components and manufactured goods". The contention of this paper is that the extraordinary importance of China in the world economy today, and the role of China as the modern day "workshop of the world" (supplier of many of the world's manufactured goods), mean that the topic of B2B marketing to and within China is particularly important. The purpose of the paper is to analyse systematically the existing body of academic knowledge about business-to-business marketing and China. In particular, the paper investigates the extent to which a distinctively Chinese perspective has been brought to bear within this body of knowledge, and, on the other hand, the extent to which researchers have relied on Western conceptual frameworks.

RESEARCH OBJECTIVES AND METHOD

The broad purpose of this study is to provide an overview of academic research undertaken into business-to-business marketing to and within China over the period 2000-2011. The key research paradigms adopted by researchers in this field are identified, and insight is provided into the relative importance of the different paradigms in the overall body of knowledge. A number of specific research objectives are pursued:

- To describe academic research in the field in terms of key research themes, key research paradigms, key researchers, and the rate of publication of academic papers.
- To conduct a comparative analysis of academic research in the field between work conducted by the IMP Group and research published in selected academic journals.
- To analyze research published in selected academic journals to establish the extent to which mono-paradigmatic or multi-paradigmatic approaches are used.
- In particular, to establish the extent to which researchers in the field use Chinese or Western conceptual frameworks and whether Chinese and Western frameworks are used simultaneously within single research papers.

The methodology comprises, first, a systematic search for research papers meeting the requirements of this study, and, second, the application of quantitative content analysis to the

full text of these papers(Kolbe and Burnett 1991; Krippendorff 1980; Neuendorf 2002). Key terms in the field were identified using both a starting list of terms identified in a previous study by the present authors (reference withheld to preserve anonymity), and through the identification of the most frequently occurring theoretical terms in the word frequency counts of the content analysis. The authors' judgment was used to allocate the key theoretical terms to paradigmatic categories.

The period covered by this review is 2000 to 2011. Two databases of academic articles were created, and were then used for subsequent analysis. Each database (or "sample") was extracted from a larger population of articles through the application of a systematic search procedure, using selected search terms, to online sources. Henceforth these two databases will be referred to as samples, since they are sub-sets of articles extracted from larger populations. However, these are purposefully selected samples not random or representative samples. The intention of the selection procedure was to identify *all* of the articles in the relevant population that concerned B2B marketing to and within China.

The two populations from which the samples were drawn are the online database of IMP papers, and online access to a selected group of journals. The journals included in the study were, first, the most prominent journals in the B2B field: the *Journal of Business-to-Business Marketing*, the *Journal of Business & Industrial Marketing*, *Industrial Marketing Management*; second, highly-rated journals in the field of international marketing: the *Journal of International Marketing*, and the *International Marketing Review*; third, the elite marketing journals, the *Journal of Marketing*, the *Journal of Marketing Research*, the *Journal of Consumer Research* and *Marketing Science*.

The search for relevant articles was restricted to the period 2000 to 2011 (a period of 12 years). This was considered to be the period during which research into Chinese business and doing business with China has become prominent in the literature. As we will see below (Table 1), there is clear evidence in the *journals sample* that interest in China has increased rapidly in the last six years; as one looks back beyond 2003 the number of journal articles concerning B2B marketing to and within China diminishes sharply. The search process involved searching the title and abstract fields of the databases for papers concerned with B2B marketing and "China/Chinese". Other search terms such as "Asian", "Hong Kong" and "Eastern" were also employed, but experimentation with these terms showed that, firstly, the papers they identified overlapped substantially with those found using "China/Chinese", and, secondly, that these wider search terms generated many spurious results. Notably, "Eastern" more commonly returns papers about Eastern Europe than China, and "Asian", when it does not duplicate "China/Chinese", returns papers about other Asian countries such as India, Malaysia and South Korea.

After completing the automated search process on the online databases, the human judgment of the authors was used to decide finally whether or not to include each paper in the samples for analysis. Very little judgment was required in the case of articles from the IMP database and from the three specialist B2B journals; as one would expect, searching for "China/Chinese" in these sources generates a largely clean list of papers focusing on B2B

marketing to and within China. Greater judgment was required with the non-B2B sources, such as the *Journal of Marketing* and the *International Marketing Review*, since these sources predominantly publish articles about B2C marketing. Judgment was exercised to eliminate those articles that were exclusively or largely concerned with B2C marketing.

The result of this process was to create two samples of papers. The *journals sample* comprised 104 articles from prominent academic journals published between 2000 and 2011 dealing with B2B marketing to and within China; the *IMP sample* comprised 66 papers presented at IMP conferences (both IMP Europe and IMP Asia) over the same period and dealing with the same theme. The full text of these samples of articles was subject to content analysis (the Wordstat content analysis module within the QDA Miner qualitative data analysis software was used for this purpose). Two dictionaries of terms were used in the analytical process: a main dictionary of 40 terms comprising 32 theoretical terms (examples: Guanxi, interaction) and 8 key researchers' names (examples: Håkansson, Barney), and a smaller sub-set of only 8 key theoretical terms. The main dictionary was created by a combination of *a priori* reasoning about what constitute important terms in the field, and *in vivo* content analysis of the most frequently occurring theoretical terms and researcher names. For purposes of presentation in the present document the 40 terms in the main dictionary were allocated to 8 paradigmatic groups—"Chinese" (e.g.xinren), "IMP" (e.g. dyadic), "Culture" (e.g. collectivist), "Commitment/Trust" (e.g. commitment), "Resource-Based View" (e.g. capabilities), "Transaction Cost Economics" (e.g. opportunism), "Multi-Paradigm" (e.g. trust), and "Other" (e.g. reputation). Tables 3 & 4 in the results section, below, provide a detailed list of the dictionary terms, and of the allocation of dictionary terms to paradigmatic groups. In the allocation of terms to paradigmatic groups the authors exercised their own judgment. For most terms there is little ambiguity, but some terms are more problematic. For example, the authors have allocated "trust" to the multi-paradigm category (meaning that it is used extensively across several paradigms), but have allocated "network" to the IMP category, when it might also be regarded as a multi-paradigm term.

The two principal forms of analysis were word frequency counts of the main dictionary terms, and cross-tabulation analysis (including cluster analysis) of the smaller 8-term dictionary. The word frequency analysis was used to compare the *IMP* and the *journals* samples.The cross-tabulation and cluster analysis were used to explore whether journal articles tend to be mono- or multi-paradigmatic, and whether Chinese conceptual frameworks are used alongside, or separately from Western conceptual frameworks.

RESULTS AND DISCUSSION

DESCRIPTIVE ANALYSIS OF THE SAMPLES AND OF THE KEY TERMS

This sub-section begins by describing the characteristics of the two samples of papers in terms of year of publication and first authorship, and then examines the frequency with which the 40 key terms in the dictionary were used in each sample.

Table 1: Time-Series of Papers on Business-to-Business Marketing and China

Year	IMP Conferences	Selected Journals
2000	**3**	**2**
2001	**5**	**1**
2002	**9**	**2**
2003	**6**	**6**
2004	**6**	**4**
2005	**12**	**4**
Sub-total	41	19
2006	**2**	**13**
2007	**4**	**13**
2008	**6**	**11**
2009	**7**	**4**
2010	**3**	**16**
2011	**3**	**28**
Sub-total	25	85
Total	66	104

Table 1 shows that in the early years of the present century the topic of B2B marketing and China attracted considerably greater attention at the IMP conference than in the journals selected for this study. Indeed, while 62% of the papers in the IMP sample had been presented by 2005, only 18% of the journals sample had been published. From 2006 to 2011 the presentation of papers on B2B marketing and China continued at a generally low annual rate at the IMP conference, while the number of journal papers on the topic was much higher every year apart from 2009. The final year of the period saw the highest number of journal articles dealing with B2B marketing and China, largely because two relevant special issues of *Industrial Marketing Management* were published in that year (Biggemann and Fam 2011; LaPlaca 2011).

Table 2: First-Named Authors Appearing Twice or More

IMP Conferences (66)		**Selected Journals (104)**	
Author	First authorships	Author	First authorships
Wilkinson, Ian	4	Low, Brian	6
Spencer, Robert	4	Atuahene-Gima, Kwaku	4
Kriz, Anton	3	Li, Ling-yee	4
Brennan, Ross	2	Liu, Yi	3
Cronin, Bruce	2	Barnes, Bradley	2
Kaunonen, Anna	2	Fang, Tony	2
Low, Brian	2	Feng, Taiwen	2
Ramström, Joachim	2	Lee, Don Y	2
Zolkiewski, Judy	2	Wong, Y H	2
		Yen, Dorothy	2

Note: Wilkinson appears as co-author on 2 papers in the journals sample; Fang appears as co-author on 4 papers in the IMP sample; Lee and Barnes each appear as co-author on 1 paper in the IMP sample.

One concern with the type of analysis conducted in the present paper is that there may be substantial overlap between the two samples of academic papers—that is to say, a paper presented at the IMP conference might later appear as an article in a journal (notably, *Industrial Marketing Management*, since the annual conference leads to a special issue of this journal). However, Table 2 suggests that this is not a serious concern, since there is comparatively little overlap between the most prominent first-named authors of the papers in the two samples. Table 2 lists the nine first-named authors with more than two papers in the IMP sample, and the ten first-named authors with more than two papers in the journals sample. Only Low, a prolific author in this field, appears in both lists. When account is taken of second-authorships, only Low, Fang and Wilkinson have more than two papers in each sample.

Tables 3 and 4 report the frequency with which the 40 key terms appeared in the full text of the two samples (that is, in the 66 IMP conference papers, and in the 104 journal articles); Table 3 reports results for the IMP sample and Table 4 results for the journals sample. The columns of each table show, from left to right, the assigned paradigmatic categories, the key terms, the frequency of key term occurrence (a simple count), the mean frequency per paper of each key term (frequency divided by number of papers in the sample), and the "term frequency x inverse document frequency" measure for each term. (Term frequency x inverse document frequency is commonly used in content analysis as a method of identifying the most discriminating terms; term frequency is considered a direct indicator of term importance, while inverse document frequency indicates the concentration of the key term within the documents. The argument is that terms appearing relatively frequently, and within relatively few documents, are particularly important discriminators between the documents (Krippendorff 1980; Salton and Buckley 1988).)

Table 3: Term Frequency in IMP Papers

Category	Term	Frequency	Mean frequency	TF*IDF
Chinese	Guanxi	733	11.1	220.7
	Confucian*	65	1.0	27.7
	Xinren	60	0.9	58.2
	Renqing	21	0.3	19
	Xinyong	20	0.3	18.1
	Mianzi	18	0.3	18.9
	Ganqing	0	0	0
IMP	Network*	1694	25.7	128.9
	Interaction*	582	8.8	72.7
	Actor*	369	5.6	84.7
	IMP	366	5.5	53.5
	Tie*	174	2.6	55.1
	Håkansson	159	2.4	61.4
	Bond*	155	2.3	51.6
	Activities	250	3.8	48
	Link*	185	2.8	33.3
	Snehota	80	1.2	28
	Dyadic	29	0.4	15.8
	AAR	24	0.4	21.7
Culture	Cultur*	1680	25.5	209.9
	Hofstede	177	2.7	79.1
	Collectivis*	96	1.5	60.9
	Individualis*	49	0.7	36.7
Commitment/Trust	Commitment	242	3.7	49.4
	Morgan/Hunt	39	0.6	27.6
RBV	Capabilit*	55	0.8	24.6
	Competenc*	53	0.8	26.1
	Barney	0	0	0
	RBV	0		0
TCE	Norms	135	2.0	42.8
	Opportunism	25	0.4	19.8
	Williamson	15	0.2	17.2
Multi-Paradigm	Trust	782	11.8	105.9
	Resource*	442	6.7	64.6
	Power	317	4.8	53.4
	Reciprocity	26	0.4	17.4
Other	Satisfaction	113	1.7	68
	Reputation	47	0.7	18.2
	Granovetter	9	0.1	10.3
	Lusch	7	0.1	10.1

Table 4: Term Frequency in Journal Articles

Category	Term	Frequency	Mean frequency	TF*IDF
Chinese	Guanxi	589	5.7	134.3
	Confucian*	91	0.9	48.1
	Xinren	38	0.4	47.5
	Renqing	123	1.2	79.6
	Xinyong	23	0.2	26.5
	Mianzi	35	0.3	27
	Ganqing	66	0.6	62.6
IMP	Network*	1580	15.2	274.6
	Interaction*	562	5.4	57.9
	Actor*	251	2.4	101.4
	IMP	99	0.9	56.7
	Tie*	433	4.2	98.7
	Håkansson	101	1.0	86
	Bond*	199	1.9	68.9
	Activities	391	3.8	43.4
	Link*	311	3.0	29.7
	Snehota	57	0.5	40.2
	Dyadic	84	0.8	41.1
	AAR	0	0	0
Culture	Cultur*	1086	10.4	71.6
	Hofstede	89	0.9	49
	Collectivis*	59	0.6	35.2
	Individualis*	26	0.3	16.1
Commitment/Trust	Commitment	889	8.5	143.2
	Morgan/Hunt	137	1.3	53.3
RBV	Capabilit*	201	1.9	41.8
	Competenc*	224	2.2	94.1
	Barney	42	0.4	34
	RBV	33	0.3	51.2
TCE	Norms	302	2.9	96.6
	Opportunism	118	1.1	70.3
	Williamson	65	0.6	47.9
Multi-Paradigm	Trust	1803	17.3	274.6
	Resource*	1092	10.5	64.3
	Power	439	4.2	55.7
	Reciprocity	120	1.2	58.7
Other	Satisfaction	535	5.1	151.4
	Reputation	368	3.5	137.7
	Granovetter	30	0.3	23.2
	Lusch	36	0.3	26.5

Most of the key terms are found in both samples. A few are not—Ganqing, Barney and RBV are not found in the IMP sample, and AAR is not found in the journals sample. The Chinese term Guanxi is used extensively in both samples, but the other Chinese terms are used far less often. As is to be expected, the use of IMP terminology is very prominent in the IMP sample, and less prominent (although far from absent) in the journals sample. The impression from Tables 3 and 4 is that a number of other important paradigmatic approaches—the commitment/trust approach, transaction cost economics and the resource-based view—are used considerably less in the IMP sample than in the journals sample. The following sub-section focuses on the comparative analysis of the frequency of the terms in the two samples, to investigate this impression further.

COMPARATIVE ANALYSIS OF THE IMP AND JOURNALS SAMPLES

Table 5: Top Terms in 'B2B Marketing and China'

Rank	IMP (frequency)	Journals (frequency)	IMP (TF.IDF)	Journals (TF.IDF)
1	Network*	Trust	Guanxi	Trust
2	Cultur*	Network*	Cultur*	Satisfaction
3	Trust	Resource*	Network*	Network*
4	Guanxi	Cultur*	Trust	Commitment
5	Interaction	Commitment	Actor*	Reputation
6	Resource*	Guanxi	Hofstede	Guanxi
7	Actor*	Interaction	Interaction	Actor*
8	IMP	Satisfaction	Satisfaction	Tie*
9	Power	Power	Resource*	Norms
10	Activities	Tie*	Håkansson	Competenc*

Note 1: Three terms appear in all four lists: Network, Trust, Guanxi
Note 2: For explanation of the TF.IDF measure please see main body of text

Table 5 attempts to answer the question: what are the most frequently occurring (a proxy for importance) technical terms in the field of B2B marketing to and within China? However, this is not a question to which a straightforward answer exists because, as we will see, the answer depends considerably on the paradigmatic approach of the researcher. Table 5 shows the "top 10" terms from the 40-term dictionary in the IMP sample and in the journals sample (in each case, using both the frequency count and the TF.IDF measure). Only three terms: network, trust, and Guanxi, appear consistently in the top ten.

Once all of the 40 terms in the main dictionary had been ranked in terms of their TF.IDF measure, it was possible to compare the ranks achieved by each term in the two samples, and to calculate the differences in ranks achieved by the terms in the IMP sample and the journals sample. To investigate the differences of approach between research presented at the IMP conference and research published in the selected journals, those terms with rank differences of greater than 5 are listed in Table 6. The results in Table 6 show that there are substantial differences in paradigmatic approach between the two samples. There is evidence that, when compared to research published in journals, the IMP approach to B2B marketing and China

emphasizes approaches based on Western cultural concepts(Hofstede 2001) and on IMP concepts. Approaches based on the resource-based view, transaction cost economics, and possibly the commitment/trust theory of relationship marketing, are more prominent in the journals sample than in the IMP sample.

Table 6: Relative Prominence of Key Terms in IMP papers and B2B journal articles (2000-2011)

Terms featuring substantially more prominently in IMP literature than in B2B journal articles		
Term	Category	Rank difference (absolute value)
Collectivis*	Culture	21
Individualism	Culture	19
Hofstede	Culture	18
Xinren	Chinese	15
Link*	IMP	13
Cultur*	Culture	11
Activities	IMP	10
Snehota	IMP	9
Interaction	IMP	7
Resource*	Multi-paradigm	7
IMP	IMP	6
Power	Multi-paradigm	6
Terms featuring substantially more prominently in B2B journal articles than in IMP literature		
Term	Category	Rank difference (absolute value)
Reputation	Other	26
Ganqing	Chinese	21
Renqing	Chinese	17
Reciprocity	Multi-paradigm	15
RBV	RBV	15
Competenc*	RBV	15
Opportunism	TCE	14
Commitment	Commitment/Trust	13
Norms	TCE	10
Williamson	TCE	8
Satisfaction	Other	6

Note: Terms are ranked by TF*IDF (term frequency weighted by inverse document frequency)

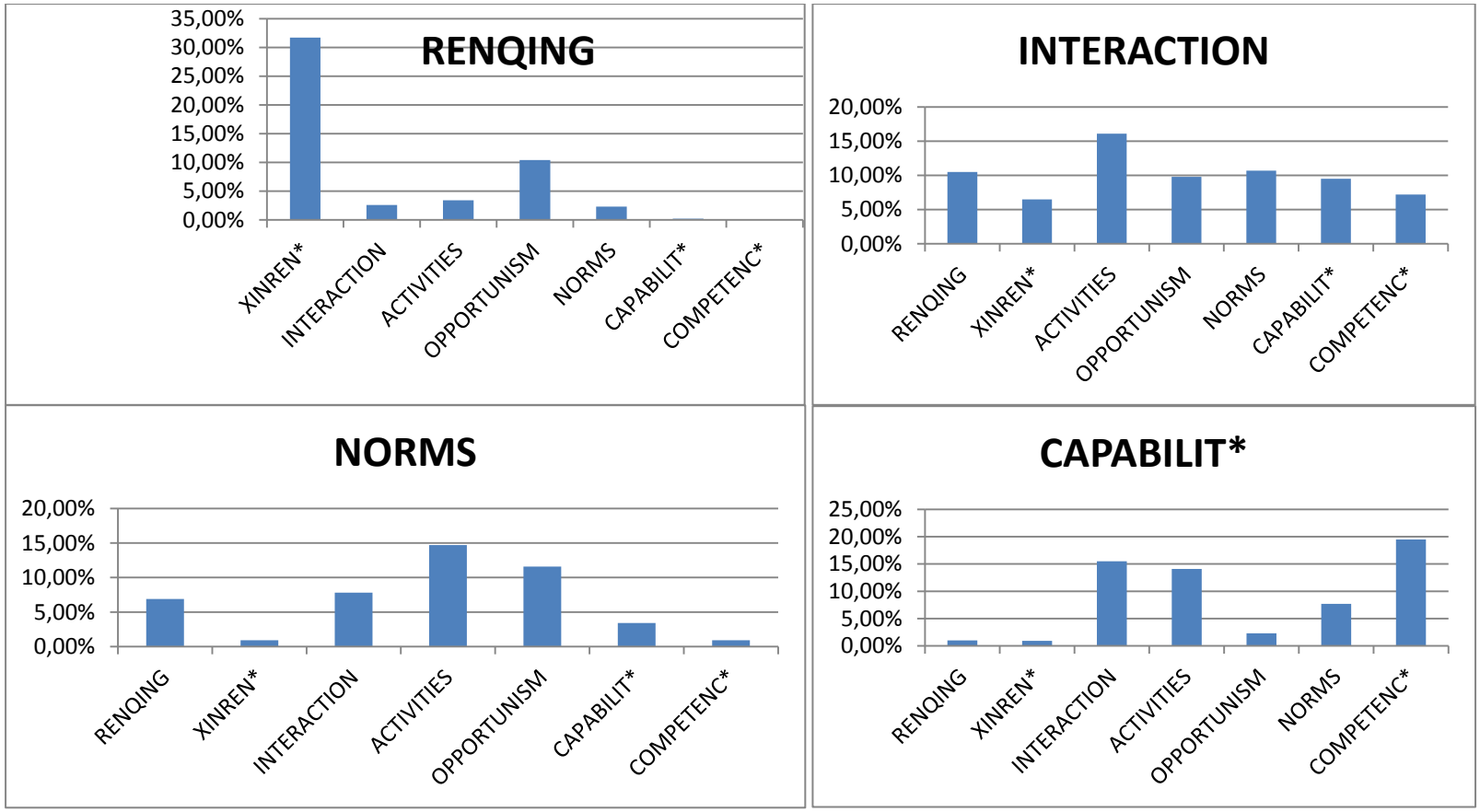
COMPARATIVE ANALYSIS OF PARADIGMATIC APPROACHES

The analysis now moves on to the third objective identified above, namely to analyze research published in selected academic journals to establish the extent to which mono-paradigmatic or multi-paradigmatic approaches are used. The pragmatic decision is taken at this point in the analysis to concentrate solely on the journals sample since, for purposes of exposition, presenting a comparative analysis of both samples would be too lengthy and complex within the constraints of a conference paper. The decision is taken to focus on the journals sample on the argument that articles published in the journals selected for this study

represent the pinnacle of scientific research in the field of B2B marketing to and within China. Consequently, this analysis seeks to understand whether, in the most advanced research in this field, researchers are inclined to adopt mono-paradigmatic or multi-paradigmatic approaches. The analytical approach adopted here is the cross-tabulation of key terms. This analysis proceeds by counting the co-occurrences of terms within articles. For example, where the term Guanxi and the term interaction both appear within an article that counts as a co-occurrence; the co-occurrences of a term with itself are also countedand tend to represent a high percentage of total term co-occurrences. While such a cross-tabulation analysis can be (and was) performed for the 40-term main dictionary, the interpretation of the results of such a cross-tabulation (a 40 by 40 matrix) is extremely difficult. Consequently, the decision was made to focus on four pairs of terms, representing four paradigmatic approaches: renqing & xinren (Chinese concepts); interaction & activities (IMP); opportunism & norms (transaction cost economics); capabilit* & competenc* (resource-based view). Co-occurrences of the paired terms with each other are considered intra-paradigmatic co-occurrences, while co-occurrences with other terms are extra-paradigmatic co-occurrences. If the number of intra-paradigmatic co-occurrences is high relative to the number of extra-paradigmatic co-occurrences, this would suggest that the journal articles tend to adopt a mono-paradigmatic approach.

Figure 1 provides a visual impression of the relative frequency of co-occurrences. One term has been selected to represent each of the paradigmatic approaches (renqing (Chinese), interaction (IMP), norms (TCE), and capabilit* (RBV)). For each of these terms, the bar chart shows the percentage of the co-occurrences of the other seven terms that occur with that term. From Figure 1 one can readily see that the Chinese concepts tend to co-occur frequently with each other, and infrequently with the other terms. The difference between the chart for ‘renqing’ and the chart for ‘interaction’ is striking; all of the other seven terms co-occur relatively frequently with ‘interaction’, while ‘xinren’ co-occurs far more frequently with ‘renqing’ than any of the other terms. Visual inspection of Figure 1 suggests that the Chinese concepts tend to be used separately from the other terms, lending support to the hypothesis that the journal articles *either* use a Chinese framework *or* use a Western framework. Furthermore, there is some support for the contention that, for articles using Western frameworks, individual articles tend to reflect a single research paradigm. Notice that ‘activities’ is the term that co-occurs most frequently with ‘interaction’ (both representing the IMP paradigm), and that ‘competenc*’ is the term that co-occurs most frequently with ‘capabilit*’ (both representing the RBV paradigm). This contention is explored further in the following analysis.

Figure 1: Co-Occurrences of Eight Selected Key Terms (Journal Articles)



Note: Charts show % of occurrences of the term in the column that are co-occurrences with the term in the title. The charts exclude co-occurrences of the title term with itself, so that the sum of the columns is less than 100%.

	RENQING	XINREN*	INTERACTION	ACTIVITIES	OPPORTUNISM	NORMS	CAPABILIT*	COMPETENC*
RENQING	30.9%	31.7%	2.6%	3.4%	10.4%	2.3%	0.2%	0.1%
XINREN*	20.3%	46.4%	1.0%	2.8%	0.3%	0.2%	0.1%	
INTERACTION	10.5%	6.5%	26.6%	16.1%	9.8%	10.7%	9.5%	7.2%
ACTIVITIES	10.0%	12.8%	11.5%	27.3%	7.4%	14.4%	6.2%	2.9%
OPPORTUNISM	18.2%	0.8%	4.2%	4.4%	54.8%	6.8%	0.6%	0.3%
NORMS	6.9%	0.9%	7.8%	14.7%	11.6%	52.6%	3.4%	0.9%
CAPABILIT*	1.0%	0.9%	15.5%	14.1%	2.3%	7.7%	28.8%	19.5%
COMPETENC*	2.2%		30.8%	17.2%	3.4%	5.3%	51.1%	69.1%
Intra-paradigm	51.2%	78.1%	38.1%	43.4%	66.4%	59.4%	79.9%	88.6%
Extra-paradigm	48.8%	21.9%	61.9%	56.6%	33.6%	40.6%	20.0%	11.4%

Table 7: Cross-Tabulation Showing Co-Occurrences of 8 Key Terms in Journal Articles

Table 7 is based on the described cross-tabulation of co-occurrences of eight selected key terms in the journal articles. In Table 7 the count of co-occurrences has been converted into a column percentage (the total for each column is 100%). Hence, each cell shows the percentage of the total co-occurrences of the column term that occur with the row term;for example, 7.7% of the co-occurrences of ‘norms’ are with ‘capabilit*’. The eight terms selected for Table 7 represent four pairs, and each pair represents a theoretical orientation or paradigmatic approach – renqing/xinren (Chinese concepts); interaction/activities (IMP); opportunism/norms (TCE); capability*/competenc* (RBV). The final two rows of Table 7 show the sum of intra-paradigmatic and extra-paradigmatic co-occurrences. If terms co-occurred randomly, then one would expect the intra-paradigmatic percentage to be close to 25%. However, the only two terms for which the intra-paradigmatic percentage falls below even 50% are ‘interaction’ (38.1%) and ‘activities’ (43.4%), representing the IMP approach. This can be largely explained by the high proportion of co-occurrences between these terms and the terms ‘capabilit*’ and ‘competenc*’ representing RBV approaches, suggesting, perhaps, a closer theoretical affinity between the IMP approach and approaches based on the RBV, than between the IMP approach and either transaction-cost economics or Chinese conceptual frameworks.

The ideas explored in Figure 1 and Table 7 are addressed for the last time in Figure 2, which is a hierarchical cluster analysis dendrogram calculated from the matrix of word co-occurrences.

Figure 2: Cluster Analysis Dendrogram for Eight Key Terms (Journal Articles)

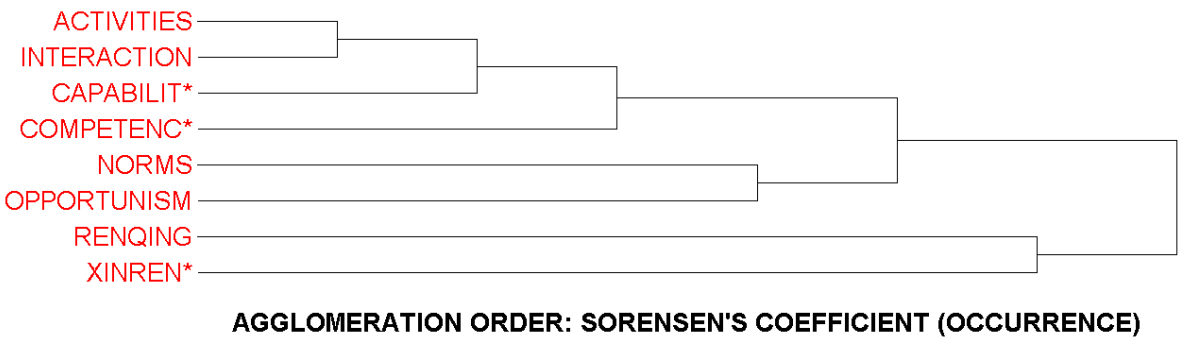


Figure 2 shows, firstly, that the theoretical expectations of term clustering are found in the co-occurrence data extracted from the journals sample. Thus, activities/interaction (IMP), capability*/competenc* (RBV), norms/opportunism (TCE), and renqing/xinren (Chinese) each emerge as clusters from the analysis. However, two other important findings emerge from Figure 2. Firstly, at the highest level of clustering, there is a Chinese cluster and a Western cluster. Approaches based on IMP concepts, the RBV, and TCE, form a separate cluster from the xinren/renqing cluster. Secondly, within the greater Western cluster, the IMP and RBV approaches are relatively close to each other, while the TCE approach is a distinctive sub-cluster.

CONCLUSION AND IMPLICATIONS

The type of analysis presented in this paper is not designed to be conclusive; it is, by nature, exploratory. Nevertheless, the findings are likely to be of considerable interest to researchers, firstly to those specializing in B2B marketing to and within China, and secondly more widely to B2B researchers as a case study of paradigmatic approaches within a specific sub-field.

In terms of journal publications concerning B2B marketing and China the period 2000 to 2011 splits clearly into two sub-periods of six years. From 2000 to 2005 interest in the topic was muted, while from 2006 to 2011 interest grew very rapidly, culminating in an outpouring of relevant articles in 2011 centered around two special issues of *Industrial Marketing Management*. On the other hand, interest in this topic at the IMP conference has shown no such trend and, if anything, there was a decline in interest after 2005. In addition, there is limited evidence that IMP researchers have made substantial impact at the level of journal articles; other than Brian Low and Ian Wilkinson, IMP researchers have published rarely in

the selected journals on B2B marketing to and within China. Perhaps this is because the paradigmatic approaches they favor are not those most favored in the selected journals. Researchers presenting their work at IMP conferences have used predominantly IMP or Western cultural frameworks as their theoretical orientation, while in research published in the selected journals other approaches, notably those based on the resource-based view and on transaction-cost economics, are more prominent.

Finally, it seems that paradigmatic silos are safely in place for research into B2B marketing and China. There is little evidence of research based on multiple theoretical perspectives. Chinese frameworks are used, and Western frameworks are used, but they are not used together. The methodology employed in this study permits this conclusion, but can provide no explanation for this phenomenon. However, intelligent speculation (and, indeed, reading through the articles employed in this study) suggests that a great many of the journal articles published in this field are concerned fairly narrowly with testing hypotheses—based on a pre-determined theoretical orientation—in a Chinese context. No doubt one should not find this conclusion surprising. Arguably, all that this finding confirms is that the majority of scientific studies into B2B marketing and China are pursuing Thomas Kuhn's definition of "normal science", consisting of "empirical work undertaken to articulate the paradigm theory, resolving some of its residual ambiguities and permitting the solution of problems to which it had previously only drawn attention" (Kuhn 1970:27). However, this does suggest a fruitful avenue for future research. Researchers can, and probably should, test the competing claims of different paradigms rather than only seek to further refine their own preferred paradigm. While this may be a truism, it is particularly important in the Chinese context because an entirely separate and radically different set of concepts—Chinese cultural concepts—represent a realistic alternative to Western conceptual frameworks. Even if the Chinese concepts do not, on their own, represent a genuine alternative paradigm (since they are cultural concepts that were not devised as a theory of business or marketing), surely it is worth considering the adaptation of Western conceptual frameworks to take account of the Chinese ideas. But the evidence suggests that the clearest paradigmatic silo exists between Chinese approaches and Western approaches, that there is little or no cross-fertilization between these two orientations, and that Western frameworks are applied unaltered to the Chinese context.

REFERENCES

Ambler, Tim and Witzel, M [2003], *Doing Business in China* (London: Routledge).

Andersen, Poul Houman, Christensen, Poul Rind, and Damgaard, Torben [2009], 'Diverging expectations in buyer-seller relationships: Institutional contexts and relationship norms', *Industrial Marketing Management,* Vol. 38, No. 8, pp. 814-24.

Biggemann, Sergio and Fam, Kim-Shyan [2011], 'Business marketing in BRIC countries', *Industrial Marketing Management*

Business-to-Business Marketing in the BRIC Countries, Vol. 40, No. 1, pp. 5-7.

Braham, L [2004], *China after WTO* (Beijing: Intercontinental Press).

Brennan, Ross and Wilson, Jonathan [2001], 'Managing Chinese/Western Joint Ventures: A Comparative Analysis of the Interaction and Networks and Chinese Management Literature', *17th IMP conference* (Oslo: BI).

--- [2008], 'Understanding the Importance of Guanxi in UK-Chinese Joint Venture Relationships', *24th IMP conference* (Uppsala: University of Uppsala).

Child, John and Rodrigues, S B [2005], 'The Internationalization of Chinese Firms: A Case for Theoretical Extension?', *Management and Organization Review,* Vol. 1, No. 3, pp. 381-410.

Clissold, T [2004], *Mr China* (London: Robinson Publishing).

Deng, Ping [2007a], 'Investing for Strategic Resources and its Rationale: The Case of Outward FDI from Chinese Companies', *Business Horizons,* Vol. 50, No. 1, pp. 71-81.

--- [2007b], 'Outward Investment by Chinese MNCs: Motivations and Implications', *Business Horizons,* Vol. 47, No. 3, pp. 8-16.

Fang, Tony, Olsson, David, and Sporrong, Josefin [2004], 'Sourcing in China: The Swedish Experience', *20th IMP conference* (Copenhagen: Copenhagen Business School).

Hofstede, Geert [2001], *Culture's consequences. Comparing values, behaviors, institutions, and organizations across nations* (2 edn.; London: Sage Publishing).

Hutton, Will [2008], *The Writing on the Wall: China and the West in the 21st Century* (London: Abacus).

Kolbe, Richard and Burnett, Melissa [1991], 'Content-analysis research: an examination of applications with directives for improving research reliability and objectivity.', *Journal of Consumer Research,* Vol. 18, pp. 243-50.

Krippendorff, Klaus [1980], *Content Analysis: An Introduction to its Methodology* (Beverly Hills: Sage).

Kriz, Anton and Fang, Tony [2003], 'Interpersonal Trust in Chinese Relational Networks: Moving from Guanxi to Xinren', *19th IMP conference* (Lugano: University of Lugano).

Kuhn, Thomas S. [1970], *The Structure of Scientific Revolutions* (2nd edn.; Chicago: The University of Chicago Press).

LaPlaca, Peter J [2011], 'B2B marketing in a Guanxi context: Theoretical development and practices', *Industrial Marketing Management,* Vol. 40, No. 4, pp. 489-91.

Low, Brian [2007], 'Business-to-business marketing practices in China', *Journal of Business & Industrial Marketing,* Vol. 22, No. 2.

Low, Brian, Jacobs, Fred, and Johnston, Wesley [2008], 'On Managing the Process of Global Network Legitimacy: A Chinese Company Perspective', *24th IMP conference* (Uppsala: University of Uppsala).

Neuendorf, Kimberly A [2002], *The content analysis guidebook* (London: Sage Publications).

North, Douglass [1990], *Institutions, Institutional Change and Economic Performance* (Cambridge: Cambridge University Press).

Salton, Gerard and Buckley, Christopher [1988], 'Term Weighting Approaches in Automatic Text Retrieval', *Information Processing & Management,* Vol. 24, No. 5, pp. 513-23.

Sandberg, Susanne [2008], 'Take Off Nodes and Initial Stages of Internationalization: The Case of Mid-Sized Firms from the Emerging Chinese Market', *24th IMP conference* (Uppsala: University of Uppsala).

Story, Jonathan [2010], *China Uncovered: What You Need to Know to do Business in China* (London: FT Prentice Hall).

Zolkiewski, Judy and Feng, Junwei [2005], 'Relationship Portfolios, Guanxi and Chinese Business', *21st IMP conference* (Rotterdam).