A Study on Chinese Management Style: A Paradigm that can be Emulated by Growing Economies

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Abstract
Out of the countries that rose in mercurial fashion, after the Second World War, China has emerged as a dominant Nation in the World, giving a stiff competition to the well developed Western Nations in all facets. Despite the fact that work extracted under duress will not excel in qualitative terms, almost all the mega projects that China has undertaken after its emergence from the ambers of the Second World War have always been of spectacular success raising every Nation’s eyebrows. This empirical research is an attempt by the authors to study the causal factors attributing to Chinese successes in the projects by comparing the randomly selected projects that are executed both in China vis-à-vis that in India during the last ten years. The authors have found few factors on which scanty research material exists, which seems to be contributing to the spectacular successes of projects in China compared with that in India.

Keywords
Guanxi, Mianzhi, Minzhu de jing me jie he, Projects.

I. Introduction
For a very long time, the Peoples Republic of China (in short China) has been in existence, oblivious of the Global Nations development, which all have been exposed to the growing Western Nations dominance. The masking by the Western dominance from all facets - be it technological, managerial, or cultural on China had cast a profound effect on the Chinese management techniques. Especially the word ‘ji’ that appeared in Chinese literatures, over 2300 years ago is strikingly important depending upon the context in which it is used. Ji is a neutral word and it can be understood as a set of human wisdom or to mean a carefully devised scheme to deal with various situations [1]. These stratagems seem to hold a key to all the secrets, myths of the Chinese management techniques. Especially the word ‘ji’ that appeared in Chinese literatures, over 2300 years ago is strikingly important depending upon the context in which it is used. Ji is a neutral word and it can be understood as a set of human wisdom or to mean a carefully devised scheme to deal with various situations [1].

The Six basic Confucian values, that dates back to 2500 years have impacted to a great extent on the way the Chinese think and behave. These values are:
- Moral cultivation,
- Importance of interpersonal relationships (Guanxi),
- Family and group orientation (Minzhu de jing mi jie he or Ethnographic Bonding),
- Respect for age and hierarchy,
- Avoidance of conflict and need for harmony,
- The Concept of Chinese face (Mianzhi / lian)

These above six values are all pervasive in every Chinese walk of life, and they dominate in the Business dealings by Chinese [3].

The Researchers who have been investigating this phenomena in China for nearly two decades, have found that, all the six basic Confucian values figure in most of the Business dealings in China, and of them three factors, viz., Guanxi (in Simplified Chinese) or the interpersonal relationship, Family and group orientations or Minzhu de jing mi jie he (in Simplified Chinese) and the Concept of Chinese face or Mianzhi /lian (in Simplified Chinese) appears to be playing very significant roles in determining the successful out comes of majority Chinese Projects. This has been very apparent in the projects implemented in China during the last 10 years and which assumed Chinese National fame.

II. Understanding the Dominant Factors that Play Significant Role in Chinese Business

A. Interpersonal relationship

(Guanxi):
Guanxi is a multi-dimensional concept formed out of affective, normative and instrumental ties [4]. When there is a close bond between two individuals, the tie that develops between them is very profound, and forms the affective aspect of Guanxi. Such a tie is always permanent and establishes a stable relationship between the two individuals in social context, and will enable the individuals to procure material resources from one another. In the case of normative tie of Guanxi, it is due to two individuals are tied up with each other through an invisible Guanxi bond and are expected to return favors whenever it is sought from them. Guanxi is intangible. It does not specify the frequency of return of favors and members are tied up with each other through an invisible Guanxi bond and are expected to return favors whenever it is sought from them.

Guanxi is utilitarian and not emotional. Especially between firms, it is based on exchange of favors rather than emotional bondage between them.

B. Family or Group orientation or Ethnographic bonding (Minzhu de jing mi jie he):
Chinese are ethnically bonded right from the Confucian era, and are the ardent followers of the five cardinal relationship principles [5] The 2500 years old Confucian Analects 13:23 compared to the modern business relationship in China is tabulated below [6-7].
III. The Change in Confucian’s Five Cardinal Relationships in China

These five cardinal relationships have given rise to creation of a harmonious Chinese society with a strong ethnic bondage between the Chinese and the key to this lies in the four Confucian principles, namely [5,8].

a) Stability of society is based on the five cardinals of relationship.
b) Chinese family forms the prototype of their core society.
c) There exists a reciprocal virtuous behavior among Chinese.
d) Chinese society believes in self-cultivation.

Interestingly, these tabulated, five cardinal relationships also help in developing the Chinese interpersonal relationship (Guanxi), such as the Relationship between Company and Business partners (stakeholders). Chinese, following the Confucian concepts try to create family atmosphere amongst their employees, treating the enterprise as the ‘big family’ [6,9].

The fostering of harmony relationship attitude in Chinese, make them voluntarily disseminate their functional expertise to fellow Project partakers beyond what is formally required to enable their fellow partakers in project to improve their efficiency [10].

C. Chinese face (Minanzhi / lian):

Face can be defined as the respect, pride and dignity of an individual in society due to his social standing [11]. It is also, a measure of one’s position in social networks and is built up by a history of socially sanctioned behaviors. Without face, one’s opportunities in the Chinese collective society are gradually diminished [12]. Researches based on etic or culture general (across the Globe) approach is of the view that face is Universal and is in existence in all cultures of the World,[13-19]. However Researchers of the emic or culture specific approach is of the view that face is unique to Chinese and cannot be generalized to all other cultures [11,20].

According to Goffman [13], ‘positive social value of a person that he effectively claims for himself’ is the sociological construct of a face. Extending this further, Brown & Levison[16] have constructed a model that describes both positive and negative aspects of a face. According to them, the public self image that every individual claims for himself consists of two aspects namely, the self image or personality part which is positive one, and the negative aspect of face forms part of the basic claim to territories, personal preserves and freedom of action & freedom from imposition.

When an individual obliges others in any Business dealing or otherwise, he is supposed to be giving face, which implicitly means enhancing, elevating, or affirming the face of other with the expectation of increased loyalty and reciprocity from the recipient. [21-25].

IV. Some of the Notable Achievements by China and India in the Last Ten Years in Implementing Mega Projects

A. The mega Projects of the decade in China

1. Bird Nest Stadium in Beijing for Summer Olympics 2008:

The sheer mega scale construction of this steel structure demonstrates, how close is the Chinese ethnic bonding, when it comes to such project undertaking of National repute, and when, the whole Nation’s pride and honor was at stake [26]. The Bird Nest Stadium plans were finalized in 2003, with the approval of designs submitted by Swiss architects Jacques Herzog and Pierre de Meuron of Herzog & de Meuron firm, and the project work commenced on 24 Dec 2003. A total quantity of 110 thousand Metric tons of steel, was used to construct this unique and marvelous structure. At $423 million, the stadium was built for almost, one-tenth the cost that it would have cost to build such a venture in the West. It is not because of cheap labor availability in China, but the dedication and personal involvement of personnel working on the project, to give face to their Country, and the Guanxi they established by forming a unified team [27].

The Stadium was built with all ultra-modern and with the latest state of the art facilities, such as Rain water harvesting with purification plant to feed the entire stadium and surrounding areas for local population, dwelling around the Stadium location. Bowl shaped seating arrangements to accommodate 100,000 spectators. Play fields having the provision for heating during winter and cooling during summer, by laying conduit pipes running below the surface of the fields [28]. The end result has been a World class, steel fabricated stadium, delivered for use in Olympics and completed much before the anticipated target date. The stadium was handed over to the Olympic Organizers on 28 June, 2008, nearly 2 months ahead of the Olympics start [29].

Fig. 1: Bird Nest Stadium. Source: Beijing Olympics-2008 web site.

2. Spectacular Rail link between Qinghai and Lasha:

This rail link is probably one of the marvelous engineering feat by Chinese to demonstrate to the World that nothing is impossible, when it comes to Chinese way of handling mega projects that are of gigantic proportions [30]. The 1142Km (710 miles) stretch from Qinghai in Western part of China to Lasha in Tibet was completed in a record time of 4 years [31]. The project started in 2001 and was completed in October, 2005. The route has 11 stations, Five observation stations, and 18 unmanned halts [32]. For a stretch of 960kms (600 miles), the line runs at an altitude of more than 4000 meters above sea
level, reaching the maximum altitude at China / Tibet border in Tanggula Mountain. A further extension of 270kms (168 miles) from Lasha to Xigaze has been completed in 2010, the work of which was commenced in 2007. The salient aspects of the 21st Century engineering feats are:

a) Special Oxygen system in the Fenghuo tunnel located at 4,904m above sea level to supply 80% oxygen level in the air.

b) Building of rail route over a distance of 550km on the terrain that is of permafrost. In summer, the ice will melt and will make the ground soggy, which will make the train tracks to sink due to the tracks becoming unstable. Hence, special cooling pipes were sunk in these beds to make the tracks stable.

c) In Kunlun mountains area, detectors have been installed along the entire rail line to detect any tremors, since the area lies in seismic zone and is prone to earthquakes.

d) The 1338m long Fenghuo Shan is the highest railway tunnel in the World at a height of 4905m above sea level, and the Yangbajing tunnel is the longest tunnel in the rail route with a distance of 3345m [33]

e) The trains run at 100km/h on frozen ground and at 120km/h elsewhere.

Despite all these engineering feats that are daunting in nature, the rail route was completed one year ahead of its scheduled opening, all because of the “ethnic bonding” of the task force entrusted with this onerous US$ 4.2 billion project [34].

3. Three Gorges Project:
Yangtze river is the World’s third longest river (6300Kms), next only to Nile and Amazon rivers, flowing from an altitude of over 4000 m from Tibet, meandering through the plains of several provinces in China, before it joins the Yellow sea at Shanghai. At Sanduoping, in Yichang in Hubei Province, the river passes through a stretch of 200 Kms of spectacular and deep canyons, and the area is called the Three Gorges. The Three Gorges, are composed of the Chu-tang Gorge, Wu Gorge, and Hsiling Gorge. All of them lie adjacent to each other in a east to west direction [35]. Three Gorges Project (TGP) is the World’s largest water conservancy project built by China, with a dam height of 185 m, and 2304m long and over 28 million cubic meters of concrete poured for the Dam’s construction [36].

What is more spectacular in its implementation is the dedication and involvement of the TGP project team, with over 20,000 workers involved in construction activities of the Project on 24X7 basis for a period of 16 years from 1994 to 2010 the last 15 years, when the project commenced on Dec, 14, 1994. With 600Km long reservoir, and 32 high capacity turbines, each generating 700 MW of power, and with a 5 stage ship lock system for both up and down stream, TGP is unquestionably, the World’s greatest mega Project completed by humans of the Globe [37,38].

What is incredible to note from all these three mega projects in China that have been completed during the last ten years is the fact, that all of them have been completed with both time and cost under-run by any Projects Management Standards, in comparison with any of the similar projects that have been constructed in rest of the World Countries. Further more, all these three projects have been completed with great finesse!

B. The mega projects of the decade in India

1. 6 Lane Golden Quadrilateral project
The Golden Quadrilateral is a highway network connecting India’s four largest metropolises: Delhi, Mumbai, Chennai and Kolkata, thus forming a quadrilateral of sorts. Four other top ten metropolises: Bangalore, Pune, Ahmedabad and Surat, are also served by the network. The largest highway project in India, initiated by Atal Bihari Vajpayee (Former Prime Minister of India), is the first phase of the National Highways Development Project (NHDP), and consists of building 5,846 km (3,633 mi) of four/six lane express highways at a cost of ₹60,000 Crore (US$ 13.3 billion) [39].

The vast majority of the Golden Quadrilateral (GQ) is not access controlled, although safety features such as guardrails, shoulders, and high-visibility signs are used. As of 31 October 2010, 5,806 km (3,608 mi) of the entire work has been completed and work on remaining 40 km is under progress. In September 2009, it was announced that the existing four-laned highways would be converted into six-lane highways [40]. The project was reported at various stages to be behind schedule, mainly due to land acquisition constraints and disputes with contractors which had to be re-negotiated [40].

The Golden Quadrilateral project is managed by the National Highways Authority of India (NHAI) under the Ministry of Road, Transport and Highways. The Mumbai-Pune Expressway, the first controlled-access toll road to be built in India is a part of the GQ Project though not funded by NHAI, and separate from the main highway. Infrastructure & Financial Services (IL&FS) has been one of the major contributors to the infrastructural development activity in the GQ project [41].
2. NTPC's Super Thermal Power Stations project

Super Thermal Power Stations (STPS) are a series of ambitious power projects planned by the Government of India. With India being a country of chronic power deficits, the Government of India has planned to provide 'power for all' by the end of the eleventh plan. This would entail the creation of an additional capacity of at least 100,000 Megawatts by 2012. The Ultra Mega Power projects, each with a capacity of 4000 megawatts or above, are being developed with the aim of bridging this gap [40].

The STPS are started by Government of India in the 1990s, but met with limited success. The Ministry of Power, in association with the Central Electricity Authority and Power Finance Corporation Ltd., has launched an initiative for the development of coal-based STPS's in India. These projects will be awarded to developers on the basis of competitive bidding. Ramagundam Super Thermal Power Station, one of the biggest thermal power stations in India, is a coal based power station situated at Jyothinagar in Karimnagar District. The station started power generation in 1983. The station generates about 2600 MW of power annually. The fuel for the power generation is taken from the South Godavari Coal Fields and water is taken from Pochampad Dam. The power generated from the power plant is shared by the south Indian States of Andhra Pradesh, Karnataka, Tamil Nadu, Kerala and Pondicherry.

Following are some of the super thermal power station in India: Coal Based Power Stations. With 15 coal based power stations, NTPC is the largest thermal power generating company in the country. The company has a coal based installed capacity of 24,395 MW.

COAL BASED (Owned by NTPC) STATION STATE COMMISSIONED CAPACITY (MW) [42].

- Singrauli Uttar Pradesh 2,000
- Korba Chhattisgarh 2,100
- Ramagundam Andhra Pradesh 2,600
- Farakka West Bengal 1,600
- Vindhyachal Madhya Pradesh 3,260
- Rihand Uttar Pradesh 2,000
- Kahalgaon Bihar 2,340
- NCTPP, Dadri Uttar Pradesh 840
- Talcher Kanha Orissa 3,000
- Feroze Gandhi, Unchahar Uttar Pradesh 1,050
- Talcher Thermal Orissa 460
- Simhadri Andhra Pradesh 1,000
- Tanda Uttar Pradesh 440
- Badarpur Delhi 705
- Sipat-II Chhattisgarh 1,000

Total 24,395 MW

3. Delhi Metro Rail Project

The history of planning a Metro Project for Delhi dates back to the 70’s. The concept plan envisaged a network of 58 km underground & 195 km surface corridors. The total network plan contains 16 sections to be implemented in a sequence based on passenger kilometer carried per kilometer length of each section, which is expected to be completed in three phases. The first phase of the network, which is now complete, comprises of 65.11 km of route length with 13.01 km underground called Metro corridor and 52.10 km surface / elevated called Rail Corridor. This network of 3 phases has been completed by 2010 [43].

It is very contrasting to note from the above three mega projects of the Decade in India, that all of them are clearly time over-run and cost over-run projects, and it is well known that there has been allegations of scams regarding financial embezzlement in India, for these and many of other projects as reported in Indian media from time to time.

V. The Research Gap

When the researchers compare the mega projects executed by China and by India, in-terms of the three most important aspects for a Project, namely, Time, Cost and Performance, and by going through various literature surveys, they could easily discern, a marked difference between China and that of India. The researchers proceed to identify the reason for this variance.

VI. Methodology

The aim of the current research is to find, if there are differences in Management styles of China, when compared to India ? Since most of the current literature in this direction points to the three identified factors by the researchers, the research commenced with the following three null hypotheses.

H01: There is no Nationality Effect on Personal Connection
H02: There is no Nationality Effect on Face
H03: There is no Nationality effect on Ethnographic Bonding.

In order to find, if there is any significant difference between China and India with respect to these three identified factors a Pilot survey was conducted in both China and in India, with an instrument in the form of a questionnaire, targeting the respondents of both Countries. The sample of population in both Countries was drawn from various strata of the population - students, working professionals and Businessmen. 85 Respondents participated in the survey. The questionnaire was tested for construct validity and reliability. From the analysis of the data that were obtained from both the Countries, the results are truly revealing and affirms the Researchers alternate hypothesis.

Encouraged by the Pilot Survey Results, a full blown final survey, targeting 400 Samples of the Population from both China and India was conducted. The Survey instrument was modified to equally balance the variables for the three factors under study. After validating for construct and content validity and reliability, it was administered in both the Countries. 116 Chinese Responses out of 400 targeted population, and 138 out of 400 targeted Indian Population were received. The sample data were analyzed using SPSS, descriptive statistics and Levine’s test for equality for Variance for both populations, as well as the t-test on the samples were carried out, apart from Correlation tests for the three parameters under investigation.
The Results are shown in the following 5 tables.

### Table 1: Independent Samples Test for Personal Connection (Guanxi)

<table>
<thead>
<tr>
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<th>Levine’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
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<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
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<tr>
<td>Personal Connection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>13.683</td>
<td>.000</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>8.636</td>
<td></td>
</tr>
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</table>

Inference from Table 1: The results show that for the Personal Connection (Guanxi), the population variance for both China and India are not equal (Since, Levine’s test is not significant for equal variances assumption). Further the t-test shows that there is a significant difference China and India for this factor, thus negating our null hypothesis, H01.

### Table 2: Independent Samples Test for Face (Mianzhi / lian)

<table>
<thead>
<tr>
<th></th>
<th>Levine’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Face</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>2.287</td>
<td>.133</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>12.610</td>
<td></td>
</tr>
</tbody>
</table>

Inference from Table 2: The results show that for the Face (Mianzhi/lian), the population variance for both China and India are equal (Since Levin’s test is significant for equal variance). Further the t-test shows that there is a significant difference China and India for this factor, thus negating our null hypothesis, H02.

### Table 3: Independent Samples Test for Ethnographic Bonding (Minzhu de jing mi jie he)

<table>
<thead>
<tr>
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<th>Levine’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Ethnographic bonding</td>
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<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>3.015</td>
<td>0.084</td>
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<tr>
<td>Equal variances not assumed</td>
<td>12.691</td>
<td></td>
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</tbody>
</table>

Inference from Table 3: The results show that for the Ethnographic Bonding (Minzhu de jing mi jie he), the population variance for both China and India are equal (Since Levin’s test is significant for equal variances). Further the t-test shows that there is a significant difference China and India for this factor, thus negating our null hypothesis, H03.

### Table 4: Correlations between Personal Connection, Face & Ethnographic Bonding.

<table>
<thead>
<tr>
<th></th>
<th>P C</th>
<th>Face</th>
<th>E B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Connection</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face</td>
<td>0.519073875</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ethnographic bonding</td>
<td>0.342451883</td>
<td>0.479046461</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Personal Connection (PC), Ethnographic bonding (EB)

Inference from Table 4: Though the Correlations for the three factors are positive, it is seen weaker than of Indians. Also, interestingly Chinese have a much weaker correlation between Face and Ethnographic Bonding.

### Table 5: Correlations between Personal Connection, Face and Ethnographic Bonding.

<table>
<thead>
<tr>
<th></th>
<th>P C</th>
<th>Face</th>
<th>E B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Connection</td>
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<td></td>
</tr>
<tr>
<td>Face</td>
<td>0.72585135</td>
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<td></td>
</tr>
<tr>
<td>Ethnographic bonding</td>
<td>0.651049322</td>
<td>0.488748002</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Personal Connection (PC), Ethnographic bonding (EB)

Inference from Table 5: There is high positive correlation between-
- a) Personal connection & Face and,
- b) Between Face and Ethnographic Bonding.

Even though there is a positive correlation between Personal connection and Ethnographic bonding, yet it is not to the same extent as above.

### VII. Conclusion

The findings by the researcher’s opens new vistas into the unique management style followed by the Chinese that attributes for the spectacular project successes, both in terms of time and cost under run with a great finesse for the mega projects undertaken by that Country. The significant difference in the mean value for these three factors under study for Chinese when compared to those of Indians show and conclusively establishes, that that these three factors are predominant in Chinese management Paradigm and appear less in Indian Management style. May be it is time, that other developing economies of the World, emulate the Chinese model of management, by incorporating these three identified factors into their management education. Over a period of time when these three factors deeply get entrenched into those Countries Management systems, there could be improved results for their projects. Also the researchers feel that there could be more exploratory research in this area to reveal other factors that have not been brought out in Chinese Management Style with the current available literature in this area.
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Prof. Kappagomtula CL has received his Bachelors Degree in Electronics and Telecomm. from the Indian Army, and his Masters Degree in Management and Systems, from IIT/Delhi, and Post Graduate degree of Law from Delhi University. Throughout his Academic Career, Kappagomtula has been a TOPPER. He has to his credit 16 Years of Undergraduate / Graduate teaching experience in the Army, at Manipal Institute of Technology, Manipal, and at VIT University, Vellore. Since 2009, he has been teaching the MBA Programme at the Business School of VIT University, Vellore, India. Having served the Indian Army for 26 years, Kappagomtula has a wide experience of 18 Years in the Industry, both in India and abroad. He has been Senior Manager (Marketing, Educational Services) at Tata Elxsi India Ltd., and has been General Manager / Director for leading Multinational Firms in Hong Kong / China for 17 Years. His fields of specializations are – Project Management, Operational Management and Manufacturing Management. Currently he is pursuing active research in Project Management under the guidance of the Co-author, Dr. D.P Kothari. Prof. Kappagomtula is affiliated to several Professional bodies, both in India and abroad and is a Charted Engineer in India.

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