

A study of negotiation mechanism based on science of momentum

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Abstract

“Momentum Creation” is one of the core concepts used by intellectuals through the ages to describe the growth process of all things on earth in the Chinese traditional culture. Laozi pointed out in his Scripture of Ethics that “The Way bears all things; Harmony nurtures them; Nature shapes them; Use completes them” and told us the basic principles of momentum creation, those are, “Heaven by it is bright and pure; Earth rendered thereby firm and sure; Spirits with powers by it supplied; Valleys kept full throughout their void; All creatures through it live; Princes and kings from it become leaders”. “Get One” means unity and conformity. “Get One” in momentum creation is to find inherent unity and conformity among hugely different objects, to connect different objects with the same reasoning. In other words, the uniform law should be used to control all things on earth, or the same ideology to govern them. Professor Li Dechang from Xi’an Jiaotong University created the science of momentum, which means the study of generation and operation mechanism of momentum. From the scientific logic perspective, social development is achieved through momentum, which equals difference divided by distance or difference times relations. In order to provide effective theoretical support to negotiation research and practice, the author is to explore negotiation mechanism based on the momentum of science and the law of momentum science in negotiations through the research of four-stage model of successful negotiation.

Key words: negotiation, momentum science, mechanism

JEL Classification: M31

1. Introduction

Negotiation is a dialogue between two or more people or parties intended to reach a mutually beneficial outcome, resolve points of difference, to gain advantage for an individual or collective, or to craft outcomes to satisfy various interests (Buettner, 2006). Negotiation has a long history. Since there were communication activities in human societies, negotiation activities occurred. An increasing number of disputes need to be resolved, such as tribal fight, commodities exchange, ownership and territorial dispute, hostage, labour-capital issues, diplomatic relations, women’s rights, international status, etc. When people do not want to resort to force to resolve conflicting interests so as to acquire harmonious development, the method of solving conflicts through negotiation comes into being. Thus, negotiation, as an effective meaning of resolving conflicts, has been extensively used in every aspect of social life.

In terms of negotiation research in China, theoretical researchers tend to emphasize the integrative comprehensive feature of negotiation involving such disciplines as; law, language, psychology, culture, politics and economy while practical negotiators research the generalization of experiences(Xia, 2005). Although negotiation research has been much favoured by theorists and practitioners, due to a variety of reasons, many negotiation books are about the pileup of strategies and enumeration of skills and negotiation personnel just copy negotiation experiences blindly and apply negotiation experiences mechanically. In view of the current situation of negotiation research and practice in China, negotiation research is still at the perceptual and descriptive stage, lacking scientific mechanism exploration of negotiation.

Since most of the literature on negotiations in an international environment has a common opinion that Chinese culture and Western culture is different on negotiation (such as(Mintu-Wimsatt & Calantone, 1995; Pan; Su, 2014; Torres, 2010)), this study focuses on their connection from a Chinese perspective. In order to provide effective theoretical support to negotiation research and guidelines for practitioners to apply negotiation strategies, the author is to explore negotiation mechanism based on the momentum of science and the law of momentum science in negotiations.

2. Laozi's Momentum and Science of Momentum

2.1 Laozi's Momentum

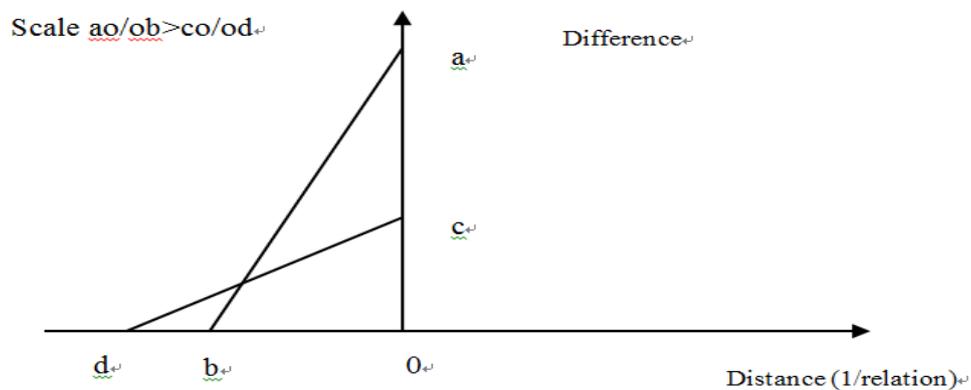
“Momentum Creation” is one of the core concepts used by intellectuals through the ages to describe the growth process of all things on earth in the Chinese traditional culture. Laozi (Shankman, 2006)pointed out in his Scripture of Ethics that “The Way bears all things; Harmony nurtures them; Nature shapes them; Use completes them” . If the assumption of setting up a certain economic organization is based on initiators' in-depth investigation and analysis of the markets according to basic economics principles, it is derived from the “way”, e.g. “The Way bears all things”; if establishment process of economic organization is based on the ethics of fair game and market regulations, which is, “Harmony nurtures them”; the establishment of economic organization needs a certain amount of money and materials, which is called “Nature shapes them.” Finally, organizational success must be accomplished under the force of strong culture and management momentum of the organization, which is called “Use completes them”.

Laozi gave us the basic principles of momentum creation, which are, “Heaven by it is bright and pure; Earth rendered thereby firm and sure; Spirits with powers by it supplied; Valleys kept full throughout their void; All creatures through it do live; Princes and kings from it become leaders”. “Get One” means unity and conformity. “Get One” in momentum creation is to find inherent unity and conformity among hugely different objects, to connect different objects with the same reasoning. In other words, the uniform law should be used to control all things on earth, or the same ideology to govern them. Should such momentum be created, the sky would be fine, earth serene, God effective, valleys full, all things growing, and kings winning the whole world.

2.2 Scientific Momentum

Professor Li Dechang in Xi'an Jiaotong University created momentum science based on the idea of Laozi's momentum (science of study on the creation and operating mechanism of momentum). From the perspective of scientific logic, momentum is a scale where the algebra formula scales equal differences divided by distance. Since distance and relation are reciprocal with each other, its formula can be rewritten as momentum equals differences times relations. Scale's mathematical expression are differences between two elements divided by distance with horizontal axis denoting distance and vertical axis differences.(see Fig.1) Since relation and distance are derivatives, line cd shows loose relations with fewer differences while line ab close relations with more differences(Dechang, 2007). Therefore, scale ao/ob is bigger than scale co/od . Scale is slope in geometry and derivative in calculus.

Figure 1: Momentum=Scale=Difference÷Distance=Difference×Relation



Source: Li Dechang.2007.New Economy and Initiative Quality--Education, Management and Initiation under Perspective of MomentumScience[M].Beijing:China Metrology Press.

Basic principles of momentum creation of systems are: widen differences and strengthen relations among system elements. Its principles can be expressed as followed: the development of the universe is pushed forward by momentum on all levels, which equals differences divided by distance or differences times relations. The operating rule of momentum is that differences promote relations and relations enlarge differences. Therefore, the stable momentum will lead to rapid expansion of the universe and swift development of the society. When the stable growth of momentum reaches a certain point, the system will have a unbalanced phase transformation and non-linear divergence, giving birth to different kinds of qualities, innovation and risks. Growth limit of momentum produces symmetry, forming groups of mathematic structures. Undisturbed material momentum form material groups, which leads to a harmonious universe. Undisturbed information momentum forms quality groups, organization groups and social groups, thus pushing forward the harmony of quality, organization and society.

3. Scientific Mechanism of Negotiation Momentum

Negotiation is a behaviour and process in which people try to reach an agreement through consultation in order to co-ordinate relationships of each other and satisfy each other's

demands. According to the scientific momentum theory, negotiation is a process of communication and consultation. Communication is momentum creation, through which huge different demands are connected and each negotiation party brings forward the company goal important to the other party(maximum differences) and most likely to be realized(maximum probability and relations). The larger amount of communication information, the higher the communication efficiency, thus the larger the momentum creation. Communication is a driving mechanism to develop negotiation organization through which people seek help from negotiation organizations to scale relationship of negotiation organization. Decision-making is to have paths variation to choose a shortcut to reach the goal. The negotiation process is an integral one in the constant momentum creation. The following is a further analysis of momentum mechanism in negotiation process in line with the four stages of successful negotiation.

3.1 Preparation Stage (no contact between two negotiating parties)

Negotiating parties can be simplified as A and B(see fig.2, fig.3). In the preparation stage, the two parties establish respective negotiating goals based on their respective negotiation situation. Negotiation goals are the differences between initial state and negotiation future (ideal state) according to momentum science. The higher the negotiation goal, the bigger differences between negotiation expectation and present state, which is shown by vertical axis. Although there is no formal contact between negotiation parties in the preparation stage, objectively there exist various kinds of differences such as outward appearance, behavior, inner values, personality, social life environment, education, economic status, etc. Generally speaking, the smaller differences in these aspects, the smaller distance, consequently, the closer relations in future formal negotiation, which is shown by horizontal axis.

Parties A and B have formed their respective momentum after preparation. The higher goal set by the party itself, the shorter distance with the other party(close relation with the opposing party will cause their stronger need on our party), thus, greater momentum is created and vice versa. Naturally, as for negotiators, if the negotiation goal is set too high(scale is 1), the negotiation goal is impossible to realize; if there is no distance with the other party (the same relations and scale is 0), there will be no need to negotiate. Negotiation momentum should have a range(scale is between 0 and 1).

Figure2: Negotiation Party Concerned A

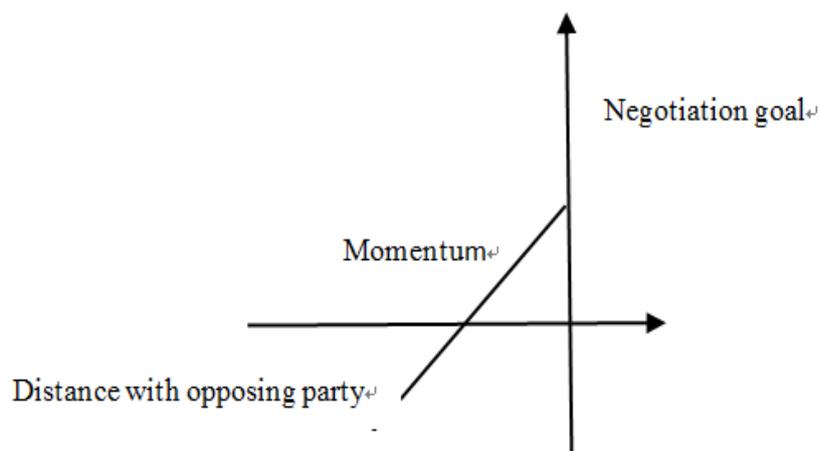
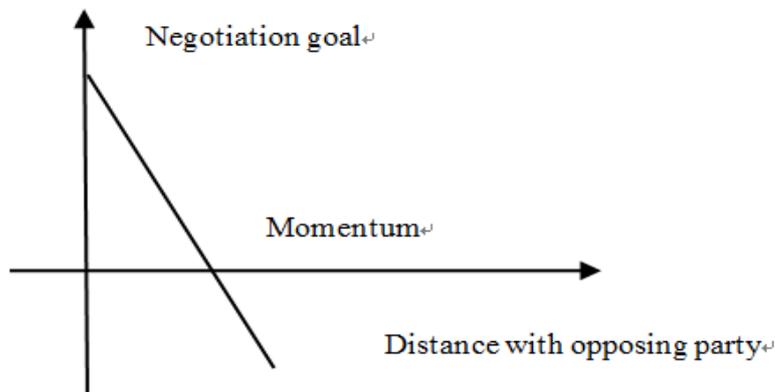


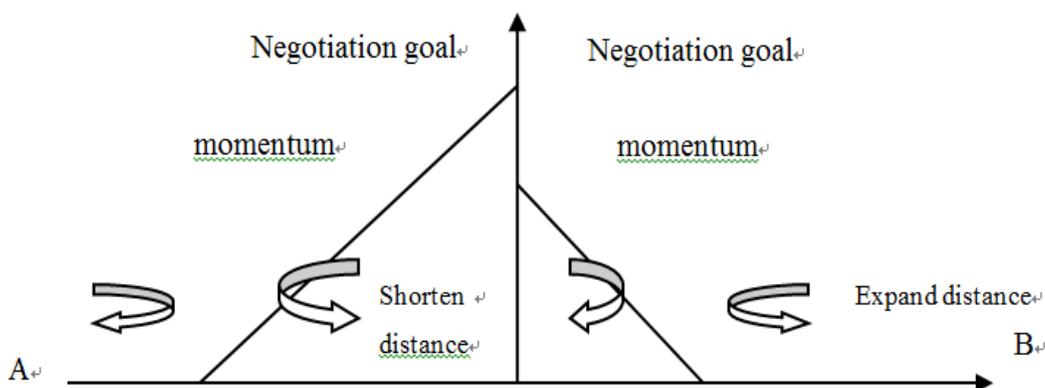
Figure3: Negotiation Party Concerned B



3.2 Opening Stage

Having set their respective goals, the two negotiating parties are going through initial contact. First of all, negotiating parties need to find out the real situation about each other so as to form a kind of negotiating atmosphere when three kinds of momentum changes could occur: momentum increases when parties shorten communication distance; momentum decreases when they expand it; one party increases momentum while the other party decrease it when they have divergence.

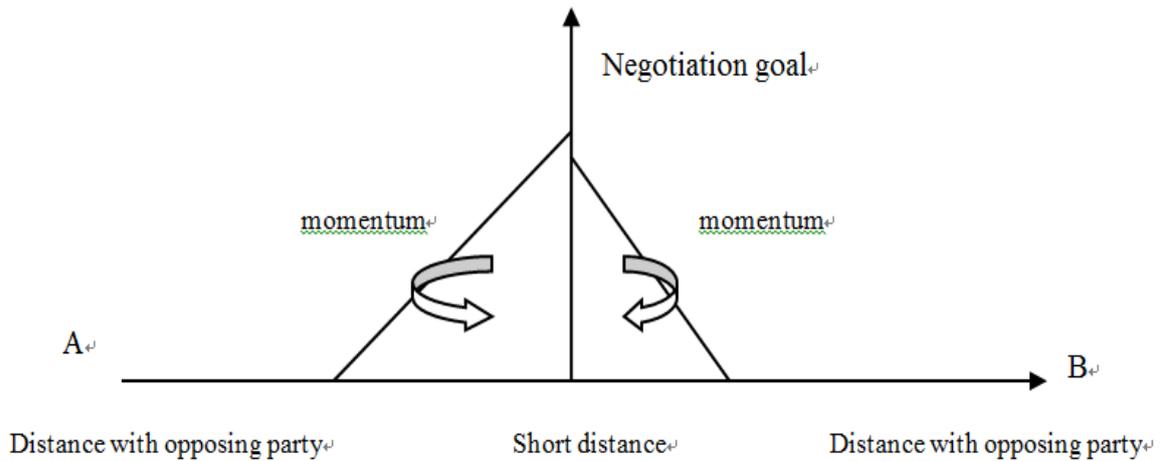
Figure 4: Momentum Change Picture in Opening Stage



3.3 Bargaining Stage

Entering bargaining stage, the two parties adjust their negotiating goals respectively through further communication. Negotiation distance is shortening while the whole negotiating momentum is strengthening. At this moment, negotiating parties are exchanging negotiating projects, making possible decisions, distinguishing paths and choosing a shortcut to the desirable goal.

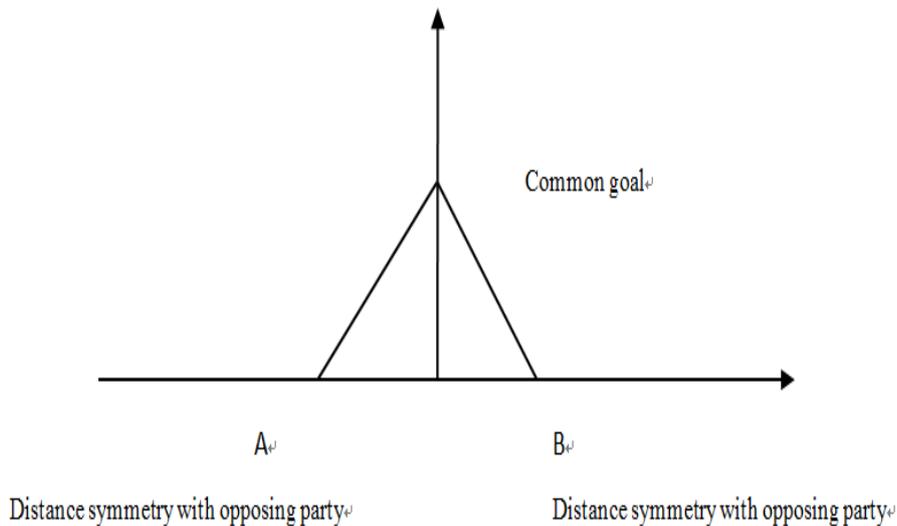
Figure 5: Momentum Change Picture in Bargaining Stage



3.4 Closing Stage to Reach a Win-win Result

After smooth negotiation, negotiating parties reach a mutually satisfactory agreement on a certain negotiating point when they, interconnecting with each other, have reached common goals to form an agreement of mutual benefit. Distance symmetry form stable negotiating symmetry--negotiating triangle. From the perspective of momentum science, growth limit of momentum produce symmetry, which form groups of mathematic structure. Win-win result of negotiations form benefit groups of mutual benefit.

Figure 6: Negotiation Win-Win Result-Negotiation Triangle



4. Scientific Negotiation Strategies Based on Momentum

4.1 Establishment of negotiating goals can be neither without momentum nor with too much momentum in the preparation stage

In the preparation stage, the key is to set respective negotiating goals. According to the ideas of momentum science, momentum is caused by scale, whose nature is “relations in differences” or “differences in relations”. There will be no scale without differences and vice versa. In addition, irrelevant differences will lead to no scale. In the preparation stage, if the negotiating goal is set too low and easy to realize in reality, there will be no need to go into negotiation. No scale (horizontal line, 0 scale) means no negotiating momentum. Conversely, if it is set too high, an extremely ideal goal (vertical line, 1 scale), which has a large gap with actual conditions, will be difficult to realize. Therefore, the establishment of negotiating goals should be set within a reasonable range (somewhere between 0-1), leaving room for manoeuvre for negotiations. Ideal negotiating goals cannot be an exorbitant price unable to realize, causing frustration and scaring away negotiators. At the same time, the bottom-line goal cannot be too low to have any difficulties, failing to inspire their own negotiating desire and at the same time, lessening interest of negotiation opponents. The reasonable negotiation goal should be a little bit above the possible negotiating goal with a little difficulty.

4.2 Negotiation is shortening distance (focusing on relations and commonalities) to accelerate momentum in the opening stage

Having met each other for the first time, the negotiating parties will have initial communication when they are supposed to be aware of the importance of shortening distance (focusing on relations and commonalities) to accelerate momentum. Since there is an increasingly larger personality differences in organizational elements, it will be increasingly difficult to connect people with different personalities. But once communication is done, negotiating momentum created will be greater, which will accelerate in-depth negotiation. If the growing momentum of communication cannot be reached at this stage, negotiation will come to a sudden end or waver without any progress.

The general strategy in the opening stage is to create favourable negotiating atmosphere. Seen from momentum science, the establishment of trust at this stage is to shorten psychological distance. At the beginning of negotiation, people have various kinds of distance reflected in such aspects as status, identification, knowledge, wealth, values, religion, etc. The starting point of negotiation is to acknowledge differences while in the opening stage, people tend to reduce and overcome differences to find common ground. Modern Communications brings forward “host-guest cooperation model”, in which the process of negotiation is viewed as the process of mutual cooperation and negotiating effect is the result of mutual cooperation. Moreover, negotiating parties are regarded as cooperators instead of opponents. The host should aim to fully understand and respect the guest. The condition of host-guest cooperation is to find common ground for both parties and shorten their psychological differences, which serves as a bridge to go beyond differences. Disparities should be removed by the means of searching similarities, relations, common goals and appropriate methods so as to set up good interpersonal relationship and acquire better opportunities to deepen negotiation.

4.3 In the bargaining stage, negotiation is to create momentum through decision-making

With the deepening of negotiation, negotiating parties bargain with each other, which means a constant decision-making process. No matter when and where, only when the chosen object is ranked according to a definite scale (momentum creation) people can have an effective choice, because decision-making needs momentum creation. Seen from the essence of choices, the nature of momentum creation is to let the organization have the function of choice. On the other hand, the basis of decision-making is choice, whose basis is to provide multiple projects. Huge momentum should be created for the system to come up with multiple projects. Decision-makers must make use of their resources and knowledge to connect various kinds of elements in order to create huge momentum. Only in this way the system can form non-balanced change and non-linear divergence, design multiple projects available for selection and finally make decisions. Likewise, once sound policy is made, it is possible to connect closely various kinds of resources and elements on higher levels.

The bargaining and decision-making process is the process of project-creation. A good project is like a catalyst in negotiation, enabling the two parties to reach an agreement quickly. An excellent negotiating project can reflect mutual benefits of the parties. Simply put, it is to let the other side unable to refuse but to accept one's won requirements and meanwhile satisfy one's own benefits. Creative projects do not come from a sudden flash of light, but from negotiation feeling formed by detailed analysis of common benefits as well as experience accumulation. The negotiators' duty is to provide creative solutions in order to create momentum. There is no plain sailing in the area of negotiation in which divergence and bumpy are common occurrences. Whoever puts forward an alternative project creatively---of course, the alternative project has to maintain self-interest effectively and consider the other side's benefits as well, he/she takes the proactive position in negotiation. Do not try to specify the best alternative at the beginning, which will usually hinder production of many other possible alternatives. On the contrary, in the bargaining stage, more beneficial projects need to be produced to push forward negotiation smoothly. Once obstacles are in the way, you need to shift the bow in time in order to reach the destination without fail.

4.4 In the closing stage, negotiation is to pursue momentum growth limit to produce symmetric interest groups

The final result of negotiation is win-win, which in nature is to produce projects and integrate resources through decision-making and find the best balancing point of mutual benefits, interest groups, as to speak. Only when interest groups are constructed can people complement and support each other with an aim of mutual promotion and common development. When people seek the solution to maximum benefits of their own, they also satisfy maximum benefit requirements of the other party. I am in you and you are in me, finally forming a stable interest group.

In each negotiation lays respective common interests, which are not possibly obvious. Negotiators should make efforts to seek opportunities of cooperation and mutual benefit. Common benefit contributes to negotiating parties reaching an agreement in which an idea able to satisfy common benefits will be beneficial to both parties. During the interaction of negotiation communication, each party exchanges information, makes compromises,

coordinates benefits and finally forms a common entity of interest on a certain interest point, realizing an interest equilibrium. Successful negotiation requires negotiators stick to their own interests but at the same time stick not to their own opinions. Therefore, negotiation should be viewed as a mutually-beneficial event, making efforts to realize common goals. However, there exist benefit conflicts among participating parties, in which case, each party must argue strongly on just grounds with the other party, otherwise, their own benefits will be damaged. Consequently, cooperation does not discard conflicts. On the contrary, conflict is a balancing method since many negotiations start with conflicts and cooperate with each other after common interests have been found. There will be an exchange between conflicts and cooperation in the process of negotiation where conflicts can be turned into cooperation and cooperation into conflicts. The extreme end of conflicts leads to end of negotiation and use of non-negotiation methods while the removal of conflicts makes negotiating parties form common ground, opening a passage to reach an agreement. So negotiation is a process of competition and cooperation where there is cooperation in competition and competition in cooperation. Everything develops and is unified in conflicts, so is negotiation that reaches maximum limit of momentum to realize benefit equilibrium.

5. Conclusion

This research proposes an innovative negotiation theory of Science of Momentum based on the Laozi's Scripture of Ethics ,the essence of traditional Chinese culture, and the research of science of momentum by Li Dechang, the professor of Xi'an Jiaotong University to explain the behavior in negotiations .The system of science of momentum provides a clear theoretical support for the four stages of negotiation activities including preparation, start, consultation, and ending ,meanwhile provides effective negotiation strategies of science of momentum for negotiation practitioners. With the pace of economic development in China going ahead and the trend of Chinese enterprises' international operations emerging, negotiation activities are inevitable in the process of internationalization of the enterprises, and guidance of negotiation theory is needed for the negotiation success, and it is easier to understand and apply for Chinese to guide the negotiation activities whit the theory based on Chinese culture. Besides, it is a new theory of negotiation in the perspective of Chinese cultural that can enrich the theoretical system of international business negotiations.

Acknowledgements

The author was supported financially by China scholarship council CSC NO.201500500079).

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* Online full-text paper availability: doi:<http://dx.doi.org/10.15414/isd2016.s13.12>