

**THE INFLUENCE OF CULTURAL ACTIVITY TYPES ON SELLER-BUYER
NEGOTIATIONS– A GAME THEORETIC FRAMEWORK FOR INTERNATIONAL
NEGOTIATIONS**

Ursula F. Ott

School of Business and Economics

Loughborough University

Leicestershire LE11 3TU

Tel: +44 (0) 1509 223648

Fax: +44 (0) 1509 223960

Email: U.F.Ott@lboro.ac.uk

**THE INFLUENCE OF CULTURAL ACTIVITY TYPES ON SELLER-BUYER
NEGOTIATIONS – A GAME THEORETIC FRAMEWORK FOR INTERNATIONAL
NEGOTIATIONS**

Abstract

This article uses an intercultural bargaining framework for sellers and buyers to analyze cooperation and conflict in international negotiations. On the basis of game theoretical reasoning, culturally programmed bargaining behavior is transformed into a buyer-seller interaction of importer-exporter negotiations. The cultural differences of the players can be seen in the initial offer, the strategic approach, the valuation of time, the frequency of rejection and the objectives of the negotiation. In order to provide prescriptions for cross-cultural bargaining, the clash of cultures is dealt with in nine scenarios on an abstract level to show potential conflicts and cooperation between the players.

Key words: International negotiations, cultural implications, game theoretic reasoning, activity based framework, importer-exporter negotiation scenarios.

Introduction

Over the past decades cross-border transactions and globalization have led to a better knowledge of customs and values of other cultures. Communication as the crucial means in negotiations determines the outcome of each endeavor in either bridging or deepening the gap between managers of different business and national cultures. Misunderstandings, originating from differences in cultural backgrounds, show that there are still heterogeneous aspects in international business negotiations to be considered. An anecdotal understanding of the pitfalls is not enough to overcome difficulties. Weiss (1996), in his survey on international business negotiations, came to the conclusion that there is, surprisingly, less literature than expected, though the origins of research in this field go back at least 25 years. Nevertheless, Faure and Shakun (1999) emphasized that visible effects have been made to bridge the gap between theory and practice. The tendency towards conclusions of a more prescriptive nature has been achieved with the help of experiments, simulations and case studies. On the basis of cultural negotiation patterns, a theoretical framework for cross-cultural bargaining should therefore provide generalizable or robust insights about co-operation and conflict. Thus, it is necessary to understand culture and its implications as a starting point for conceptualizing an intercultural negotiation. This paper proposes a theoretical framework for international negotiations by applying a game theoretic perspective to exporter and importer scenarios.

Hofstede (1983) defines 'culture' as collective mental programming. Through experiences people become mentally programmed to interpret new experiences. Traditions and common ways of thinking are part of an invisible set of a cognitive program rooted in the common culture but may vary for different cultures. If cultural differences occurred because of the mental programming and learned behavior, then the bargaining process can belong to one of

the basic patterns people were brought up. Faure and Shakun (1999) stated that culture has a direct impact on negotiation through the actors involved and manifests itself at the levels of cognition, beliefs and behaviors. Similarly, D'Andrade (1987) stated that a cultural model is a cognitive schema that is inter-subjectively shared by a social group. Such models consist of a small number of conceptual objects and their relations to each other. The cognitive schema of a simple bargaining situation involves an initial price, a series of converging bids and counter offers, and possibly a final agreement. Salacuse (1999, p. 218) emphasized that 'while the essence of culture may reside in the mind, it must be pointed out that persons gain their understanding of their and others' cultures primarily, if not exclusively, from observing the behavior and institutions of a particular group. Salacuse (1999, p. 217) stated, furthermore, that 'culture profoundly influences how people think, communicate and behave, and it also affects the kinds of deals they make and the way they make them'. Thus, the importance of cultures and in particular different bargaining behavior has to be considered in the failure and success of international business negotiations.

Weiss (1996) following Graham (1985) stated that Japanese made more extreme initial offers than Americans (Americans made 'fair' offers), used the word 'no' less frequently, were silent longer, and used aggressive tactics only later in negotiations and in the buyer not seller role. The Brazilian bargaining behavior (Graham 1983, 1984, 1985) was even more extreme than the Japanese with respect to the initial offer. Brazilians showed fewer promises and commitments, more commands and longer interactions than Americans did. Brazilians interrupted each other more and uttered an extraordinary amount of 'no's'. Furthermore, Graham and Mintu-Wimsat (1997, p. 499) tested in a simulation the determinants of negotiation outcomes based on Americans, Brazilians, Japanese and additionally Spaniards. The authors found that a problem-solving approach results in a higher negotiation outcome

for Americans when their partners reciprocate, the role (buyer or seller) is the key determinant of profits for Japanese negotiations and interpersonal attractiveness lead to higher partner satisfaction for Brazilians. These studies using various methods showed clearly that different culturally determined patterns have an impact on the outcome of a negotiation. Nevertheless, it is necessary to develop a framework for cross-cultural bargaining to predict the potential in an intercultural negotiation scenario.

Pruitt and Carnevale (1993) developed a useful overview of the traditions in the study of negotiations: the first consists of books providing advice, the second consists of mathematical models of rational behavior by economists and game theorists and the third is the behavioral tradition which develops and tests predictive theory about the impact of environmental conditions on negotiator behavior and the impact of these conditions and behaviors on outcomes.

This paper develops a framework for dealing and negotiating with and within different cultural groups based on a game theoretical bargaining model. Such an approach offers an analytical basis for further research. In the last twenty years game theory has seen a rapid expansion to the fields of economics (microeconomics – the largest single area of application), social psychology (two-person bargaining, social dilemmas, coalition formation), evolutionary biology (application to biological contexts, strategic aspects of evolution), political sciences (voting systems, power, international relations), accounting, marketing, law and computer science (Rapoport, A and Zwick, R.; 2000). An analogous study of Hausken (1987) integrated game-theoretic and behavioral negotiation theory, where behavioral negotiation theory has a foundation in psychology, organization theory, sociology and related fields. This paper can be seen in a similar way to combine ‘cultural’ negotiation

theory with game-theoretic negotiation theory. The translation of cultural issues into bargaining rules is viewed as an important requirement for modeling. The paper specifies the categories of culture first and then focuses on the interdisciplinary theoretical underpinning. Game theoretical reasoning is used to provide insights into the bargaining of different cultural programs. The application of the game theoretic perspective to exporter-importer negotiations based on their cultural program has the following structure: the order of the play, the time horizon, the payoffs, conflict and co-operation. The scenarios are developed to abstract problems between an exporter and an importer of different cultural backgrounds.

International Bargaining and the Importance of Culture

Several frameworks in international business have been developed over time to show the impact of different cultural variables on the dynamics of international business negotiations (Sawyer and Guetzkow 1965; Fayerweather and Kapoor 1976; Graham 1987; Moran and Stripp 1991; Ghauri, 2003). Early guidelines to international business negotiations considered cultural diversity with respect to antecedent goals, concurrent process and consequent outcome as well as background factors and conditions. Recent discussions focusing on negotiations and culture (D'Amico and Rubinstein 1999; Kopelman and Olekalns 1999) emphasize that language, cognition, rapport, trust, power and outcome play an important role in international negotiations. Though, such frameworks and discussions are important for the development of intercultural communication and negotiations, there is no concept of how to find the potential conflicts and co-operative elements.

In terms of cultural similarities and differences, Pruitt and Carnevale (1993) suggest that future research should consider characteristics in negotiation style found in various cultures,

since this field of study is still in its infancy. The authors pointed out that one perspective of cultural differences in negotiations stems from the theory of collectivism and individualism.

In terms of cultural differences, Hofstede (1985, p. 347) stated that among the components of national culture are the prevalent value systems those parents within a culture transfer to their children. This means that cultural values are shaped during one's upbringing through parents and institutions. In a global model of four dimensions of culture, the national value systems are clustered and presented in four value dimensions: power distance, uncertainty avoidance, individualism and masculinity. Hofstede's study is used in international business theory to explain organizational behavior based on cultural differences. Kopelman and Olekalns (1999, p. 375) pointed out that individualist and collectivist cultures may differ with respect to relational and identity goals that shape their negotiation strategy. Steensma et al. (2000) found that entrepreneurs from collective, feminine and uncertainty-avoiding cultures had a greater appreciation for co-operative strategies than entrepreneurs from individualistic, masculine and uncertainty-tolerant societies who might need governmental programs and incentives to make co-operative strategies much more attractive.

The consequences of Hofstede's cultural dimensions for international negotiations (Lewicki, et al, 1999) were discussed in the following way. Power distance has an impact of the length of negotiations, because negotiators from comparatively high power distance cultures may need to seek approval from their supervisors. Individualism/collectivism indicators show the importance of relationship and the emphasis of building up trust, which will influence the time perspective of negotiators. The masculinity/femininity dimension leads to the focus on competitiveness and compromise in international negotiations. Finally, the index of uncertainty avoidance can be linked to the rules of negotiations and the attitude towards risks

in international negotiations. Although some studies (Hofstede, 1985; Schwartz, 1994) showed characteristics in dealing with other cultures by focusing on values, the clash of culture and the potential to avoid certain deadlock scenarios in negotiations could not be delivered. Thus, it is important to focus on the actual decision-making and bargaining process.

Lewis (1999) developed a prescriptive framework for grouping national and regional cultures of the world based on his experience as a chairman of a company with offices in more than 30 countries. The focus of this framework is on activity, time perspectives, process-orientation and confrontational negotiation styles. Three main groups were distinguished: task-oriented, highly organized planners (linear-active culture); people-oriented, loquacious ‘inter-relators’ (multi-active culture); introvert, respect-oriented listeners (reactive culture). The different national and regional cultures can be categorized into the three types linear-active, multi-active and reactive cluster in order to point out the features on an abstract level. Though there are also mixtures of the cultural types, it can be stated that, in general, the negotiation behavior follows the classification. Regional differences can be found within Europe, Asia, Africa and Latin America.

Insert TABLE 1: Characteristics of the Linear-active, Multi-active and Reactive Cultures

Some cultures have features of all the different types, but with different weights. For instance, exporters from the North of Italy could have a high percentage of linear-active features compared to South Italians. Bargaining with an exporter from Milan could create a

different time horizon compared to an exporter from Naples. Thus, the latter would fit more in the category of multi-active cultures, whereas the first-mentioned would be a more even mixture of both types.

Insert Figure 1: Cultural Profiles of Linear-active, Multi-active and Reactive Cultures

The triangle shows the national cultures being combinations of linear-active, multi-active and reactive features. It is a matter of putting weights to these combinations to find out personal cultural profiles. Though a combination of all three types can occur in various cultures, it is important to focus on one type negotiating with another type for the sake of abstraction and analytical grounding. This paper examines the clashes of pure types (US-Americans, Japanese and Brazilians) to emphasize the differences between the bargaining behaviors.

Empirical Evidence for the Classification of Cultural Types

To develop a framework for cross-cultural negotiations, it is important to emphasize on the empirical evidence of differences and similarities between cultures. An interesting feature of empirical studies in international negotiations is the strong focus on US and Japanese negotiations. Other cultures such as Brazilians, Spanish and Israeli are included to show a different perspective and to highlight the differences/antipodes of US and Japanese bargaining. Thus in terms of Lewis' framework we can already distinguish between the linear-active, and reactive cultures as well as the multi-active types. Adair et al. (1998) investigated that cultural compatibility may stimulate high joint gains in inter-cultural

negotiations. The culture data revealed that US, Israeli and Japanese cultures support the notion of culture continuum posited in culture theory and research. US and Israeli are most similar, Israeli and Japanese are somewhat similar and different, and the US and Japanese are most different. Thus, Israeli fell in between the US and Japanese on mean values for individualism and hierarchy as well as self-interest negotiation schema. Dialdin et. al (1999) focus on the distributive aspect of negotiation and concentrate on differences in individual outcomes in the context of cross-cultural negotiations. The results of this study suggest that a negotiator's ability to benefit individually in a negotiation may vary by culture. Furthermore, the findings show that specific situational variables such as the negotiator's role as buyer or seller and dyad composition relate to culture and to different levels of individual gains. The authors found that Israeli and US participants achieved higher individual gains as buyers than as sellers; that the German, Japanese and Hong Kong-participants achieved higher individual gains as sellers than as buyers. Since the study was based only on one dimension of culture (individualism) and two situational variables (role and dyad composition), process data needs to be collected to find out what types of scripts of information exchange lead to higher individual outcomes.

Adair and Brett (2001) empirically tested that high context cultures (Hall, 1976) are skilled in both indirect and direct forms of communication. Thus, the authors found that negotiators from high context cultures used more complementary and structural sequences. The results show that the difference between high and low context communication is not just in the frequency of what is said or what is reciprocated, but in the scope and flexibility of how negotiators communicate. Furthermore, negotiators from high context cultures could supplement information that may not have been sufficiently conveyed through reciprocal offers, by complementing priority information and offers. Likewise, negotiators from high

context cultures could convey the strength of their rejection of the offer, by structuring offers with rational influence. Adair (2002) found that cross-cultural negotiators need to focus not only on a personal connection with the other party, but also on a more behavioral, skill-based connection. Thus, cross-cultural negotiators who are able to use a wide range of information sharing behaviors will have more success in establishing regular patterns of reciprocal information exchange. This study suggests that because cross-cultural negotiators share few interpersonal and behavioral similarities, they are quite aware of interaction patterns that represent a common approach. Therefore, the sequenced patterns of reciprocal explicit information exchange can contribute to motivation and information to generate joint gains and cooperation to generate trust. The results show that reciprocal information was negatively related to joint gains and was not related to trust for any of the samples and the findings have implications for the role of reciprocal offers and counter-offers and information exchange. Adair (2001) found evidence that high context Japanese negotiators use offers to exchange information and generate joint gains. Offers have been shown to act as positional or distributive strategies as well as information generating or integrative strategies. In order to generate joint gains, offers over time must contain enough information for negotiators to identify preferences and priorities. If negotiators exchange primarily single-issue offers, it may be difficult even for high context negotiators to extract information on priorities. As Adair (2002) pointed out that content, timing, and strategic intent of offers are an interesting area of future research, it is an important perspective to develop a framework for empirical analysis in order to capture these issues. Overall, it is necessary to stress that time-based differences in international negotiations is an important topic (Adair and Brett, 2004, 2005; Adair, Weingart and Brett, 2007). Secondly, from a cultural psychology perspective the works of Adair and Brett (2004, 2007 and together with Weingart, 2005) are particularly

relevant as they confirm that time, first offers, sequence of offers and rejection and acceptance are a cultural program for US-American and Japanese negotiators.

Roth et al (1981) found experimental results for differences between bargaining behavior in different countries from looking at proposed prices and acceptances and rejections. A clear pattern showed that higher offers are accepted more frequently than lower offers. In the experiments the buyer had to offer and therefore the differences between cultures can be seen in the offer around the fifty-fifty proposal (in this case 500). The difference among the subject pools is in something like their aggressiveness or toughness. Buyers with more aggressive subject pools would be more inclined to take advantage of their first-mover position to try to obtain more for themselves than might be fair. Therefore the offers of USA and Yugoslavian buyers were around 500 and Israeli and Japanese at 400 (Japanese has a second mode of 450). The overall disagreement rates which is the percentage of all offers that are rejected without conditioning on the offer were for the US 28%, for Yugoslavia 29%, for Japan 22% and for Israel 28%. In terms of initial prices or proposals we can therefore see the fair price approach by linear-active cultures (USA and Yugoslavia) and the multi-active (Israel) and reactive (Japan) approach of the other two cultures.

In terms of cultural bargaining between the three significant cultures USA, Brazil and Japan, the empirical evidence of these behavioral patterns is developed in the following way. Graham's (1985) study on US-American, Brazilian and Japanese business negotiation behavior empirically tests their bargaining strategies. The author found that Brazilian bargainers asked for much more initially and initial concessions also appear to be higher for the Brazilian bargainers than for Americans and Japanese. Additionally, Brazilians used the word 'no' much more frequently than either American or Japanese bargainers. The use of

'no' was not an answer to a question, even so it preceded a statement of disagreement. With regards to silent periods, it occurred more frequently in the Japanese interactions (5.5/30 minutes) than either the American (3.5/30 minutes) or Brazilian (none were discovered). This study furthermore found that culture-specific process variables such as first offer and initial concessions differ between these countries. Japanese asked for consistently higher profit solutions when making initial offers. Americans were more apt to offer a 'fair' price, one that was closer to the eventual solution. Americans also tended to make larger initial concessions. The Brazilian businessmen made fewer commitments and more commands. First offers were more 'greedy' than either the Japanese or the American offers. The Brazilian bargainers disagreed with bargaining partners. In a further study, Graham and Mintu-Wimsat (1992) tested four cultures American, Brazilian, Japanese and Spanish in terms of culture's influence on negotiations. In this study, substantive findings showed that when American negotiators use a problem-solving approach, it will be reciprocated by their partners, which will lead to higher negotiator profits. Furthermore, American buyers achieve higher profits than American sellers. Japanese and Brazilian negotiators regard interpersonal attractiveness in terms of relationship building as a key role in negotiations. For Spaniards, the relationship was not quite so important. Furthermore, for the Japanese negotiators role (buyer-seller) was the most striking determinate of negotiator's profits, since buyers achieved much higher profits than sellers. Bartos (1978) pointed out that Americans make their main concessions early.

Salacuse (1999) investigated culture and negotiating styles and used ten factors in deal making which reach from negotiating goals to time sensitivity. The results of the survey showed that 34% of the Brazilian respondents claimed that their primary goal in a negotiation was a relationship instead of a contract compared to 46% of the Americans and 45% of the

Japanese. For Americans signing a contract is closing a deal whereas for Japanese it might be opening a relationship. This might explain why Asians tend to give more time and effort to prenegotiation, while Americans want to rush through. The time sensitivity results show that 85% of the Americans, 91% of the Japanese and 100% of Brazilians have a high sensitivity for time. Usunier (2003) analyzed and conceptualized the role of time in international business negotiations which is consistent with this paper's assumption that there is a major contrast between Western temporal models (linear, economic time) and Eastern time patterns (cyclical-integrated time). Compared to Usunier's (2003) Western versus Eastern time approach, this paper however combines these time perceptions with a third the Latin (multi-active, emotional) time approach to capture an important otherwise neglected concept of time. Thus, it is now possible to design the framework with regards to the three categories of cultures.

Having shown the cultural characteristics of US and Japanese as well as Brazilian and Spanish behavior in negotiations, it is important to aggregate the empirical results. These three cultural types are consistent with linear-active, multi-active and reactive features and are empirically embedded examples of the activity-based categorization. We can therefore show the features and negotiations styles according to the culturally programmed specifics. These three culturally programmed bargaining patterns can be related to game theoretical factors of negotiation styles.

Insert TABLE 2: Empirical Characteristics of Activity-Based Cultural Types

Theoretical Underpinning

For analyzing an international business negotiation setting, game theoretical reasoning can be used due to its possibility to put oneself into the shoes of the other player and to anticipate cooperation and conflict. Thus, the underlying framework determines the games being played by various cultures and develops an abstract model of inter-cultural negotiations.

Based on the classical axiomatic (Nash 1950,1951,1953; Kalai-Smorodinsky, 1975) and strategic (Rubinstein 1982, 1985) bargaining models, the strategic behavior of buyers and sellers can be analyzed. More complicated games are sequential bargaining games like offer-counter-offer, 'buyer offers', 'seller offers' and alternating offers. Since these bargaining games take more than one period of negotiations into account, the stages of the game pertain to the time structure and the order of the play.

The longer a negotiation process takes, the higher the costs become. Thus, apart from the players' actions, the costs of bargaining indicate the structure of the game. The costs of bargaining can be time dependent or time independent. Time plays a crucial role in bargaining and can be measured as a discount factor related to the costs of bargaining - either proportional to the remaining value of the price or as fixed bargaining costs (e.g. delay costs are equal, delay hurts the exporter or importer more). It matters whether the duration of a negotiation takes place in one day or over the period of two years, since it induces transaction costs and opportunity costs.

Another important property of an intercultural bargaining game is the incomplete information resulting from uncertainties about the other player. Uncertainties about time preferences, utility functions, valuations of the product, strategy profile and cultural background can occur in all kinds of bargaining situations. McMillan (1992) stated that information, in general, is a source of bargaining strength. One player might use his information advantage and the other can take defensive measures to mitigate the informational disadvantage. The Harsanyi doctrine (1967,68) is the basis of games under incomplete information. His type theory was developed under the general assumption that each player appears to his opponent as an unknown type drawn from a known probability distribution of possible types. A bargaining game with incomplete information, therefore, can be transformed to a game of imperfect information by means of the moves of nature (dummy player). This requires a precise description of all possible combinations of types of players as well as the specification of their subjective probabilities (Harsanyi, 1967/68).

Cross (1978) stated that strategy choices are affected by uncertainty. Large amounts of uncertainty may encourage very large initial payoff demands as a kind of insurance against making an unnecessarily generous offer. The bargaining strategy choice is furthermore based on the maximization of utility which is not only dependent on the settlement payoff, since it also reflects the costs of time delay before a settlement is reached and the losses occurring due to the use of force or coercion.

Bartos (1978) stated that each negotiator is interested to make his opening bid as close to having zero payoff for his opponent. Thus, each negotiator must search for an opening bid that will be accepted by the opponent only with the greatest reluctance. Therefore, having an opening bid accepted reluctantly, each negotiator has an idea what agreement to expect.

Opening bids determine what is viewed as a fair agreement and are therefore of crucial importance. Apart from the opening bid, the decision of how large the first concession should be is dependent on psychological and social factors as well as the time horizon. The first concession will be large in case the negotiator is a trusting person. If the negotiator knows that the opponent's reputation is tough, then the concession will be very small. The first concession will be large in case the negotiator is under pressure to reach an agreement.

Since Pruitt and Carnevale (1993) described a strategy a plan of action and distinguished five broad strategies in negotiations, we can distinguish between concession making (reducing one's goals, demands and offers), contending (trying to persuade the other party to concede or to resist similar efforts by the other party), problem solving (trying to locate and adopt options that satisfy both parties' goals), inaction (doing nothing or as little as possible) and withdrawal (dropping of the negotiation). Pruitt (1981) considers working relationships as involving three related norms for dealing with mixed-motive settings: a norm of problem solving, a norm of mutual responsiveness and a norm of truth in signaling.

Muthoo (1999) suggests that in real-life bargaining situations the procedures are ambiguous and not well-specified. With regards to offers, the author points out that the player who makes the offer has the greater bargaining power. In real life, bargaining situations the procedure allows only one of the two players to make offers. Muthoo furthermore states that in alternating-offers the time interval between two consecutive offers is $\Delta > 0$ and it is important to distinguish between the player's time intervals. Incomplete information is considered as the cause for agreements to be delayed. Gul and Sonnenschein (1988) identify delay to agreement with a screening process, where agents with lower valuations distinguish themselves by waiting longer to settle. Thus, we can point out that each player has a different

time interval to make offers. The equilibrium partition is dependent on the ratio of these different time intervals. Muthoo found that a small difference between Δ_i and Δ_j , where the index represent the two players i and j , has a significant impact on the subgame perfect equilibrium partition for instance. Therefore, the author postulates that the bargaining outcome depends critically upon the relative magnitude of the players' cost of haggling.

Raiffa (1982, p.54) emphasized on asymmetries in negotiations such as differences in initial endowment or wealth, differences in time-related costs, differences in perceived determination or aggressiveness, differences in marginal valuations, differences in needs and differences in the number of people comprising each side. Time plays an important role and the bargainer who is willing to wait longer, to probe more patiently, to appear less eager for settlement will be more successful (Raiffa, 1982, p. 78). It was pointed out that when people haggle in a bazaarlike fashion over one-time issues as the price of a used car, each player may have a short-time perspective that might lead to exaggerate the case. Whereas, in other cases, bargainers will have frequent negotiations and the atmosphere at the conclusion of one bargaining session will have an impact on the atmosphere in the next session. Each negotiator will then be concerned about his reputation. Thus, repetitive bargaining will often be more cooperative than single-shot bargaining.

Pruitt and Carnevale (1993) examined the nature of cognitive processes in negotiation and their impact on negotiation behavior and outcome. The focus in this cognitive tradition is on individual cognition in the negotiation setting, on information processes and on the application of cognitive theory and method to negotiate. Cognitive effects are related to schemas, organized knowledge structures that guide and potentially distort the acquisition, storage, recall and use of information. The findings show that a loss frame of negotiator

outcomes had a negative impact on the likelihood of agreement when negotiators had an individualistic motive, but a positive impact on the quality of offers when there was a positive concern for the other party's welfare. Overconfidence in one's negotiation position also appears to be specific to the individualistic motive. Since learning and feedback play an important role in negotiation, it could be observed that as negotiators gained experience, they learned to set their first offers higher and offered fewer concessions in their role as buyers.

The next section considers some scenarios of bargaining between different cultural types in the game theoretic sense.

A Framework for International Business Negotiations

The game can be described as a two-player bargaining model or a multistage game with incomplete information.

The set of players $N = \{Ex, Im\}$ consists of two elements, that is the exporter and the importer. The cultural background of players can be modeled as types or actions indicating the mental program. Both players can be assumed as either a linear-active, multi-active or reactive type $T = \{t_L, t_M, t_R\}$. The importer has to judge whether the exporter's type is one of the above- mentioned or just a mixture of the types with different weightings. The probability of being one pure or a mixture of the three types can be reflected in the probability distribution.

Nature determines which type the players are. Player I can be a linear-active, multi-active or reactive type with a certain probability. Considering this scenario the next step will be to

think about player II's type. Without loss of generality, player I is the exporter and player II is the importer in the game of intercultural bargaining. For this reason, there exists a special order of the players in this model, see the ordered pairs of players in table 3.

Insert TABLE 3: Buyer-Seller Model for Different Cultures in International Negotiations

Since it makes a difference whether one is in a buyer or seller position, culturally determined behavior might lead to different outcomes when being either an exporter or importer. In the table above, the classification of linear-active, multi-active and reactive types is related to Graham's (1985) study on US-American, Brazilian and Japanese business negotiation behavior, which explores their bargaining strategies.

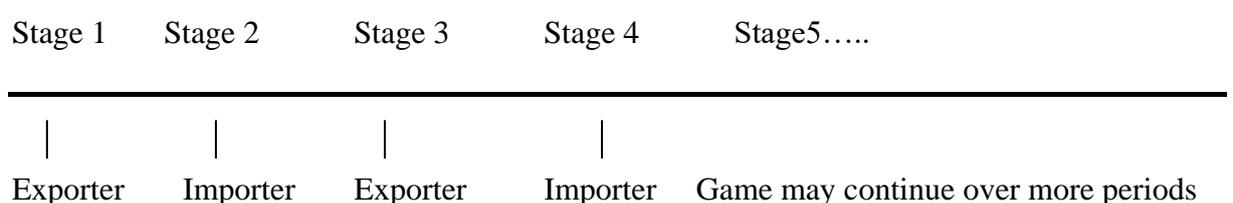
Thus, in this analytical framework, cultural differences in bargaining behavior are connected to the range of the initial offer, the frequency of rejection and the valuation of time. Different bargaining strategies occur because of setting a reasonable high price in order to obtain the desired price due to the duration of the negotiation period and to the resulting discounted value. For instance, a straightforward approach and the anticipation of a short bargaining period may result in a lower initial offer p_0 and lower costs of bargaining dependent on time. These rules include the range of price, as the final export price p_{EX} , and the measure of time, as the discount factor δ , which will be introduced in combination into this model. As far as both players have incomplete information about the counterpart's cultural bargaining behavior, uncertainties concerning the offered price, discounting and acceptance/rejection behavior matter.

Furthermore, the bargaining mechanism is either dependent on the exporter making offers, the importer making offers or on an alternation of offers. For this reason, the moves made by the players have to be considered, too. The following sections deal with the order of play, the time horizon, the sources of co-operation and conflict in relation to the types of players.

General assumption: We have three categories of culture. The linear-active cultures set the initial offer they want to receive and have a short-term perspective, multi-active cultures tend to offer a high price considering a longer bargaining time horizon and reactive cultures are inclined to respond to the counterparts' behavior.

The bargaining power determines who sets the price. The exporter might offer p_0 knowing the value of the product v . Whereas, the importer's private value of obtaining the product must be higher than the price he offers or accepts, which leads to $v - p$. Besides the different valuation of the product of a buyer-seller situation, the international business scenario demands the consideration of various strategic perceptions about the bargaining process. The time horizon plays an important role and in connection with the set of actions determines the bargaining problem under incomplete information due to the different time preferences of the players. Since the diverse cases of interaction are developed in a last section of the paper, the following order of the play shows the timing of the model on an abstract level.

FIGURE 1
Timing of an Intercultural Bargaining Model



offers price	accepts or rejects	offers again or importer makes counteroffer	accepts/ rejects, Exporter accepts/rejects
-----------------	-----------------------	--	---

TIME PERIOD I

TIME PERIOD II.....

General order of the play:

(1) Exporter offers price

(2) Importer accepts or rejects offer

(3) Acceptance leads to the end of the game. Rejection results in either another offer of the first player or a counterproposal of the second player. Depending on the types, there will be a sequence of offers and counteroffers or the break-up of the negotiations.

Payoffs: We denote U_{Ex} and U_{Im} for the exporter's and the importer's payoffs. The payoffs are dependent on the price, the costs and the discount factor involved in the bargaining process. The price p_{Ex} is for all types, the remaining price, which is left after bargaining over a special time period. The initial offer for each type p_0 consists of p_{Ex} plus the margin the players anticipate to be put on top dependent on their type $p_0 = p_{Ex} + z$. The costs of bargaining are a product of the length of bargaining shown as discount factor δ , which is different for the three types such as $0 \leq \delta_L < \delta_M < \delta_R \leq 1$. We have δ_L for the impatient linear-active type, δ_R for the patient reactive type and δ_M for the multi-active type. The initial price offer is dependent on the types $p_0 = \{p_L, p_M, p_R\}$ and can be explained in the following:

1. The linear-active exporter wants p_{Ex} , he offers p_L his initial price which includes a small margin L to cover a short period of bargaining: $p_L = p_{Ex} + L$ or
2. the multi-active exporter offers $p_M = p_{Ex} + M$, in which M is a fixed margin considered to be on top of the price anticipating bargaining costs over the period of time,

3. the reactive exporter makes his initial offer with $p_R = p_{EX} + R$, considering R as a margin on top of the exporter's price to consider the costs of delay o_r

The payoffs are composed of the price p_{EX} minus the costs involved. Since we expect the price to be the result of a bargaining procedure, the final price may be either according to the type of the precise expected final price, or, in case of difficulties during the procedure, the price p_{EX} with a margin based on the time horizon. The latter occurs because of asymmetries in the bargaining behavior. With respect to the disagreement point after several periods of bargaining, this outcome includes negative payoffs due to the high bargaining costs. The interval between the offers Δ plays another important role to distinguish between the three types. Thus, we have $\Delta_L \rightarrow 0$ for a short bargaining linear-active type, $\Delta_R \rightarrow 1$ for a patient reactive-type and $\Delta_M \in \{0,1\}$ for multi-active type. Since the empirical findings showed that the time interval between offers is dependent on the type of player, we can add to the price function the time interval Δ dependent on the type of player. This leads to the following functions $p_L(\Delta_L)$ for the linear-active player, $p_M(\Delta_M)$ for the multi-active and $p_R(\Delta_R)$ for the reactive player. Additionally, we can consider the costs of bargaining dependent on time and type as $c_L(\delta_L)$ for the linear-active, $c_M(\delta_M)$ for the multi-active and $c_R(\delta_R)$ for the reactive player. Similar to these functions, the value of the bargaining process for the importer might be dependent on the duration of the bargaining process. Thus, the value functions for the bargaining process might be $v_L(\delta_L)$, $v_M(\delta_M)$ and $v_R(\delta_R)$, respectively.

The pay-off functions are therefore different for the exporter and importer regarding their types. Let there be the following payoffs for the various types: the payoffs of the three types

of exporters are $U_L^{Ex} = p_L(\Delta_L) - c_L(\delta_L)$, $U_M^{Ex} = p_M(\Delta_M) - c_M(\delta_M)$ and

$U_L^{Ex} = p_R - c_R(\delta_R)$ likewise the importer's payoffs are $U_L^{Im} = v_L(\delta_L) - p_L(\Delta_L)$,
 $U_M^{Im} = v_M(\delta_M) - p_M(\Delta_M)$ and $U_R^{Im} = v_R(\delta_R) - p_R(\Delta_R)$.

Cross-border transactions have to take uncertainty about the business environment and cultural background into account. Since both business partners have private information about their preferences, strategies and time horizon, the bargaining game is a decision-making scenario under uncertainty.

Based on the general framework, the analysis of the nine scenarios of table 2 provides general insights into the order of the play and the time structure of these bargaining games. The scenarios are put together into four sections with respect to the games being played from the exporter's perspective, such as bargaining with importers of similar cultural and culturally distant background. These four sections are structured such that a table of examples of exporter-importer combinations shows the potential co-operation and conflict.

Rules of the Games of Activity-based Cross-Cultural Bargaining

The following tables comprise the time structure, order of the play, payoffs and co-operation/conflict of the exporter-importer scenarios based on their cultural characteristics. It is an application of the above-mentioned framework and can be seen as a starting point for hypothesis building, experimental research and game-theoretic analytical solutions. These nine negotiation scenarios were played in classroom experiments conducted by the author which are described at the end of this section and they build the basis of three bargaining papers with a linear-active, multi-active and reactive focus according to the tables.

TABLE 4: Exporter and Importer have a Similar Cultural Background

Besides the negotiation scenarios of similar cultural types, the interesting cases of ‘culturally distant’ partners are developed in the following sections. The potential negotiation scenarios are summarized in the three tables below and can be seen as the starting point for building hypotheses for empirical research.

TABLE 5: Linear-active Exporter bargains either with a Multi-active or a Reactive Importer

TABLE 6: Multi-active Exporter negotiates either with a Linear-active or a Reactive Importer

TABLE 7: Reactive exporter negotiates with a Linear-active or a Multi-active Importer

The scenarios have the focus on the structure of a negotiation process between exporters and importers. As far as the framework deals with the combination of game theoretical strategies with cultural mental programming of bargaining, many other factors occurring in an importation-exportation scenario could not yet be considered. Nevertheless, this framework

should lead to a strategic understanding of the negotiation process between different cultures to avoid mishaps and to develop insights into the different approaches used in an international setting. Ideas for future research are that the bargaining structure itself gets determined endogenously – in contrast to general game-theoretic assumption of exogenously given bargaining structure. For instance, an alternating offers game is more likely for some scenarios than for others. Furthermore, uncertainty can be one-sided or two-sided and a bargaining mechanism design can be developed with respect to these different uncertainties.

Co-operation and Conflict

The part ‘co-operation and conflict’ in the above-mentioned table can be seen as a verbal approach towards the possible equilibrium concepts. Co-operation stands for an equilibrium and conflict points to break-up, stalemate and disagreement points. In cross-cultural bargaining scenarios, the mishaps due to different cultural profiles are important to anticipate. Mathematical solution concepts are considered in the follow-up papers to this current introductory paper. The equilibrium concepts reach from complete information to incomplete information outcomes, from pooling to separating equilibria and from splitting the pie solutions to indirect bargaining mechanisms. The complex games of incomplete information are not considered in this paper. It would be important to introduce a dummy player into the time horizon and a randomization of the types will be possible. Thus, this is an ideal equilibrium concept for mixed cultural types and a suggestion for further research.

Classroom Experiments

Having used this framework over ten years in classroom experiments, it is important to state that the students of different cultural backgrounds have enjoyed the bargaining process. In all

these experiments the design was a simple bargaining scenario between a buyer and a seller from different cultural backgrounds. The students were undergraduates in International Business, postgraduates of International Management and MBA students of International Management. The description of the three types (linear-active, multi-active and reactive) was given to the students in advance so that they could position themselves as a cultural type. These hundreds of students were from the UK, USA, Italy, France, Germany, Austria, Central and Eastern Europe, Sweden, Finland, India, Pakistan, Nigeria, Japan, China and Brazil. The products were dependent on the countries involved, there was either buyer or seller power.

Over ten years a pattern emerged that the cognitive programming was very strong in the bargaining process. People tend to adapt to new cultural environments but when it comes to bargaining, the procedure of offering, rejection of offers, acceptance of an offer, making counter-offers, the length of the bargaining horizon and the use of price as a signal is determined by cultural roots. The observations and documentation of the bargaining procedures showed consistency with the above-mentioned negotiation scenarios.

The author wants to point out that it is important to use this framework in a cross-cultural experimental context. Since MBA students who had real-life negotiations with various cultures involved found that this bargaining framework was useful for them to anticipate the moves of their counterparts and it benefited a co-operative solution, it is necessary to focus on the empirical/experimental side in the next stage of the theory development.

Conclusion

This dynamic intercultural bargaining framework shows the transformation of culturally programmed bargaining behavior into game-theoretical properties.

Scenarios of international business negotiations were developed to clarify the bargaining rules of the culture clusters such as linear-active, multi-active and/or reactive types of players when bargaining either in a similar or a different cultural environment. On the basis of the ‘time is money’-approach of linear-active cultures, the ‘combining tasks’-approach of multi-active cultures and the ‘building trust’-approach of reactive cultures, the combination of the different types could be developed and refined.

In detail, the logic of argumentation, the order of the play, the time horizon and the frequency of rejection were related to the specific activity types of culture. Furthermore, bargaining and delay costs had to be considered in connection with the time structure of the players. The disagreement point reflected the conflict between the players, which is the stalemate or even the break-up of a negotiation procedure.

Under the assumption that the differences in bargaining behavior are derived from the inherent time perspectives in cross-cultural negotiations, the games being played by the three types were related to co-operation and conflict. It could be proposed that *further research* should focus on the two player decision-making processes either in pure or mixed cases. Implications are either to develop formal models or to test connected hypotheses in empirical studies or experiments. This would lead to accurate outcomes of where and when stalemates, deadlocks, break-ups and agreements occur. Another option to tackle culture in bargaining models could be by evolutionary models of game theory. With respect to new approaches of

rationality in game theory, intercultural bargaining models could deal with bounded rationality assumptions in addition to the general assumption.

Though this paper can be considered as an introduction to the linear-active, multi-active and reactive ways of bargaining, the scenarios of the seller-buyer combinations based on their cultural activity types show why some international negotiations might lead to a break-up and stalemate based on cultural mishaps of bargaining. This approach should help to anticipate and avoid conflicts and disagreements which are based on a different cultural mental program. Conceptualizing strategic reasoning can provide theoretical support for decision-making processes and the revelation of different time perceptions and preferences inherent in various cultures. Relating cost and pricing aspects to the timing of the model helps to anticipate future problems and opportunities in cross-cultural negotiations.

Overall, this paper shows that culturally-programmed bargaining behavior in seller-buyer negotiations on an international stage explains why some pairings are easier reaching agreements than others. Cultural activity types such as linear-actives (time is money), multi-actives (haggling is an art of negotiations) and reactives (building trust) categories play an important role when determining outcomes of international negotiations. International negotiations whether political or business will need to draw on the knowledge of cultural activity types as cultural cognitive bargaining patterns which show how to think forwards and to reason backwards in order to anticipate co-operation and conflict on an international stage. The success of understanding culturally embedded bargaining behavior should benefit international business and political negotiations.

REFERENCES

Adair, W.L. (2002). 'Reciprocal Information Sharing and Negotiation Outcome in East/West Negotiations', *DRRC Working Paper #276A*, Kellogg Graduate School of Management.

Adair, W.L., J.M. Brett. (2001). Time, Culture and Behavioral Sequences in Negotiations, *DRRC Working Paper #268*, Kellogg Graduate School of Management.

Adair, W.L, J.M. Brett. (2004). Culture and negotiation Process. In Gelfand, M.J. & J.M. Brett (Eds), *The Handbook of Negotiation and Culture* (pp.158-176), Stanford: Stanford University Press.

Adair, W.L, J.M. Brett. (2005). The negotiation dance: Time, culture and behavioral sequences, *Organization Science*, 16(1), 33-51.

Adair, W.L, L.R. Weingart, J.M. Brett. (2007). The timing of offers and information exchange in US and Japanese negotiations, *Journal of Applied Psychology*, 92(4), 1056-68.

Adair, W.L., Kopelman, S., Gillespie, J., Brett, J. M. and T. Okumura. (1998). Cultural Compatibility in US/Israeli Negotiations: Implications for Joint Gains, *DRRC Working Paper #270*, Kellogg Graduate School of Management.

Bartos, O. J. (1978). "Simple Model of Negotiation", in I. W. Zartman, *The Negotiation Process: Theories and Applications*. London: Sage Publications, p. 13-28.

Brett, J.M., T. Okumura. 1998. Inter- and Intracultural Negotiations: US and Japanese Negotiators, *Academy of Management Journal*, 41(5) 495-510.

Cross, John G. (1978). "Negotiation as a Learning Process", in I. W. Zartman, *The Negotiation Process: Theories and Applications*. London: Sage Publications, p. 29-54.

Dialdin, D. A., Kopelman, S., Adair, W., Brett, J. M., Okumura, T. and A. Lytle. (1999). 'The Distributive Outcomes of Cross-Cultural Negotiations', *DRRC Working Paper #269*, Kellogg Graduate School of Management.

D'Amico, L. C. and R. A. Rubinstein. (1999). Cultural considerations when "setting" the negotiation table, *Negotiation Journal* 15, 389-395.

D'Andrade, R. (1987). A folk model of the mind, in Dorothy Holland and Naomi Quinn (eds), *Cultural Models in Language and Thought*. Cambridge: Cambridge University Press.

Fayerweather, J. and A. Kapoor. (1976). *Strategy and Negotiation for the International Corporation*. Cambridge, MA: Ballinger.

Faure, G. O. and M. F. Shakun. (1999). Introduction to the Special Issue on Intercultural Negotiation. *Group Decision and Negotiation*, 8, 183-185.

Ghauri, P. N. (2003). "A Framework for International Business Negotiations", in Pervez N. Ghauri and Jean-Claude Usunier, *International Business Negotiations*. Oxford: Elsevier Ltd. (2nd edition).

Graham, J. L. (1983). Brazilian, Japanese and American business negotiations. *Journal of International Business Studies* 14, 47-61.

Graham, J. L. (1984). A comparison of Japanese and American business negotiations. *International Journal of Research in Marketing*, 1, 51-68.

Graham, J. L. (1985). The influence of culture on the process of business negotiations: An exploratory study. *Journal of International Business Studies* 16, 81-96.

Graham, J. L. (1987). A theory of interorganizational negotiations, *Research in Marketing* 9. Greenwich, CT: JAI Press

Graham, J. L. and A. Mintu-Wimsat. (1997). Culture's Influence on Business Negotiations in Four Countries. *Group Decision and Negotiation*, 6, 483-502.

Gul, F. and H. Sonnenschein. (1988). On Delay in Bargaining with One-Sided Uncertainty. *Econometrica* 56, 601-611.

Hall, E. T. (1976). *Beyond culture*. Garden City, NY, Anchor.

Harsanyi, J. C. (1967-68). Games with incomplete information played by 'Bayesian' players. *Management Science* 14, 159-182, 320-334, 486-502.

Hausken, K. (1997). Gametheoretic and Behavioral Negotiation Theory. *Group Decision and Negotiation* 6, 509-527.

Hofstede, G. (1983). The cultural relativity of organizational practices and theories. *Journal of International Business Studies*, 75-90.

Hofstede, G. (1985). The Interaction between national and organizational value systems. *Journal of Management Studies*, 22, 347-357.

Kalai, E. and M. Smorodinsky. (1975). Other solutions to Nash's bargaining problem. *Econometrica*, 45, 513-518.

Kopelman, S. and M. Olekalns. (1999). Process in cross-cultural negotiations. *Negotiation Journal*, 15, 373 – 380.

Lewis, R. (1999). *When cultures collide*. London: Nicholas Brealey Publishing.

Lewicki, R. J., Saunders, D. M. and J. W. Minton. (1999). *Negotiation*. Boston: McGraw-Hill.

McMillan, J. (1992). *Games, strategies and managers*. New York: Oxford University Press.

Moran, R. T. and W. G. Stripp. (1991). *Successful international business negotiations*. Houston: Gulf Publishing Company.

Muthoo, A. (1999). *Bargaining theory with application*. Cambridge: Cambridge University Press.

Nash, J. (1950). The bargaining problem. *Econometrica* 18, 155-62.

Nash, J. (1951). Noncooperative games. *Annals of Mathematics*, 54, 289-295.

Nash, J. (1953). Co-operative games. *Econometrica*, 21, 128-140.

Pruitt, D. G. and P. J. Carnevale. (1993). *Negotiation in Social Conflict*. Buckingham: Open University Press.

Pruitt, D. G. (1981). *Negotiation behavior*. New York: Academic Press.

Raiffa, H. (1982). *The art and science of negotiation*. Cambridge, MA: Harvard University Press.

Rapoport, A. and R. Zwick. (2000). Game theory. In Kazdin (Ed.) *Encyclopedia of Psychology*. New York: Oxford University Press, 424-426.

Rubinstein, A. (1982). Perfect equilibrium in a bargaining game. *Econometrica*, 50, 97-109.

Rubinstein, A. (1985). A bargaining model with incomplete information about time preferences. *Econometrica*, 53, 1151-1172.

Roth, A. E., Prasnikar, V., Okuno-Fujiwara, M. and S. Zamir. (1991). Bargaining and market behavior in Jerusalem, Ljubljana, Pittsburgh and Tokyo: An experimental study. *The American Economic Review*, 81, 1068-1093.

Salacuse, J. W. (1999). Intercultural Negotiation in International Business. *Group Decision and Negotiation*, 8, 217-236.

Sawyer, J. and H. Guetzkow. (1965). "Bargaining and negotiation in international relations", *International behavior: A social-psychological analysis*, New York: Holt, Rinehart and Winston.

Schwartz, S. H. (1994). Beyond individualism/collectivism: New cultural dimensions of values. In H.C. Triandis, U.Kim and G.Yoon (Eds.), *Individualism and collectivism*. London: Sage Publications, Inc.

Steensma, H. K, Marino, L. and K. M. Weaver. (2000). Attitudes towards Cooperative Strategies: A Cross-Cultural Analysis of Entrepreneurs, *Journal of International Business Studies*, 31, 591-609.

Usunier, J.-C. (2003), The Role of Time in International Business Negotiations, in Pervez N. Ghauri and Jean-Claude Usunier, *International Business Negotiations*. Oxford: Elsevier Ltd. (2nd edition).

Weiss, Stephen. (1996). "International negotiations: bricks, mortar, and prospects" in Betty J. Punnett, and Oded, Shenkar. (eds.), *Handbook of International Management Research*, Cambridge MA: Blackwell.

TABLES:

TABLE 1
 Characteristics of the Linear-active, Multi-active and Reactive Cultures

LINEAR-ACTIVE	MULTI-ACTIVE	REACTIVE	FOCUS
<ul style="list-style-type: none"> • works in strict time limit • is dominated by time schedule • divides projects • sticks to the plan • believes in facts • obtains information from a statistics, handbooks and databases • pursues correct procedure • finishes actions • confronts with logic • interrupts rarely 	<ul style="list-style-type: none"> • works at any time • time schedule is not predictable • projects influence other projects • changes plans • changes facts • obtains information first hand (orally) • considers relationships as important • finishes human transactions • confronts emotional • interrupts often 	<ul style="list-style-type: none"> • works flexible time • reacts to time schedule • regards the whole picture • makes small changes • statements are promises • Uses both • reacts in a quiet way • reacts on partner • avoids confrontation • Does not interrupt 	<p>Importance of Time</p> <p>Strategic configuration (Process orientation)</p> <p>Information</p> <p>Action profile (Activity)</p> <p>Negotiation style</p>
<i>Culture Examples</i>			
US (WASPs), British, Australians, Germanics, Swedish	Mediterranean, Eastern European, Latin American; Arab African, Indian, Pakistan,	Japanese, Chinese, Taiwanese, Singaporean, Korean; Finnish	

TABLE 2
Empirical Characteristics of Activity-Based Cultural Types

	Linear-active	Multi-active	Reactive
Time preferences (discount factor)	Short	Long	Long
Time interval between offers	Short	Relatively short, many offers	Long
Height of offers (initial price) for buyers	Low	High	High
Frequency of Rejection (Number and Meaning of 'Nos')	Low (no means rejection of offer)	High ('no' implies art of bargaining and continuation of offer/counter-offer)	Low (no means losing face or insult; rejection only after a long period of bargaining or after signing contract)
Leader-follower	Leader	Leader	Follower

TABLE 3
Buyer-Seller Model for Different Cultures in International Negotiations

Importer		Importer (Player II - Buyer)		
Exporter		Linear-activeCulture	Multi-activeCulture	Re-activeCulture
Exporter (Player I - Seller)	Linear-active culture	Similar cultural background with refinements <i>Scenario 1</i> <i>Example:</i> American exporter – German importer 'Time is Money' – Approach $(p_L - c_L; v_L - p_L)$	Exporter linear-active and importer multi-active <i>Scenario 4</i> <i>Example:</i> American exporter – Brazilian importer $(p_L - c_L; v_M - p_M)$	Exporter linear-active and Importer reactive <i>Scenario 5</i> <i>Example:</i> American exporter – Japanese importer $(p_L - c_L; v_R - p_R)$
	Multi-active culture	Exporter multi-active and importer linear-active <i>Scenario 6</i> <i>Example:</i> Brazilian exporter – American importer $(p_M - c_M; v_L - p_L)$	Similar cultural background with refinements <i>Scenario 2</i> <i>Example:</i> Brazilian exporter – Italian importer 'Haggling'- Approach $(p_M - c_M; v_M - p_M)$	Exporter multi-active and importer reactive <i>Scenario 7</i> <i>Example:</i> Brazilian exporter – Japanese importer $(p_M - c_M; v_R - p_R)$
	Reactive Culture	Exporter reactive and importer Linear-active <i>Scenario 8</i> <i>Example:</i> Japanese exporter – American importer $(p_R - c_R; v_L - p_L)$	Exporter reactive And importer Multi-active <i>Scenario 9</i> <i>Example:</i> Japanese exporter – Brazilian importer $(p_R - c_R; v_M - p_M)$	Similar cultural background with refinement <i>Scenario 3</i> <i>Example:</i> Japanese exporter – Finnish importer 'Building trust'- Approach $(p_R - c_R; v_R - p_R)$

TABLE 4
 Exporter and Importer have a Similar Cultural Background

	Linear-active Exporter and Importer American -German Scenario 1	Multi-active Exporter and Importer Brazilian - Italian Scenario 2	Reactive Exporter and Importer Japanese - Finnish Scenario 3
Time structure	Both players - a short term perspective	Both players – long time horizon.	Both players - very long time horizon
Order of the Play	(1) The linear-active exporter might offer a price p_L to the linear-active importer. (2) The linear-active importer might either reject or accept it. (3) The acceptance of the offer might terminate the negotiation. The rejection of the offer might lead to another offer by the exporter, a counter-offer or the end of the negotiation	(1) The multi-active exporter might offer price p_M . (2) The multi-active importer would either reject or accept. The probability of acceptance is lower than in the case of linear-active/linear-active combinations, since the perception of the players is based on a long time horizon. (3) Rejecting the offer will lead to another offer or a counter-proposal of the importer.	(1) The reactive exporter might make the initial offer p_R . (2) The reactive importer might accept or reject it. (3) As far as both players are reactive cultures, there might be a deadlock point right after the beginning of the bargaining. The bargaining horizon is very long in both cases.
Payoffs	The exporter's payoff is $U_L^{Ex} = p_L(\Delta_L) - c_L(\delta_L)$ and the importer's payoff is $U_L^{Im} = v_L(\delta_L) - p_L(\Delta_L)$.	The exporter's payoff is $U_M^{Ex} = p_M(\Delta_M) - c_M(\delta_M)$ and the importer's payoff is $U_M^{Im} = v_M(\delta_M) - p_M(\Delta_M)$.	The exporter's payoff is $U_R^{Ex} = p_R(\Delta_R) - c_R(\delta_R)$ and the importer's payoff is $U_R^{Im} = v_R(\delta_R) - p_R(\Delta_R)$.
Co-operation and Conflict	<i>Co-operation</i> might occur because of a mutual understanding of signals and the similar time horizon <i>Conflict</i> might only arise on the basis of the rejection of the offered price and inappropriate counter-offers.	<i>Co-operation</i> should occur in the duration of time and in the similar bargaining behavior. <i>Conflict</i> might arise in the case of different perceptions about the offer and combination of tasks.	<i>Co-operation</i> should be found in the mutual understanding of the bargaining process and the same standards concerning trust. <i>Conflict</i> might occur in the development of the leader and follower position.

TABLE 5
Linear-active Exporter bargains either with a Multi-active or a Reactive Importer

	Linear-active Exporter bargains with multi-active Importer American Exp – Brazilian Imp. Scenario 4	Linear-active Exporter bargains with reactive Importer American Exp- Japanese Imp Scenario 5
Time structure	Exporter – short-term perspective Importer – long-term perspective Clash: Different negotiation styles (logic versus emotional approach) and range of offers as well as discount factors	Exporter – short-term perspective Importer – very long-term perspective Reactive importers tend to have the target of developing long-term relationships, whereas a linear-active exporter is only interested in settling the contract.
Order of the Play	(1) The linear-active exporter might make an initial offer p_L . (2) The multi-active importer might reject or accept it. (3) The probability of rejection is very high, since this is the starting point of negotiations for the multi-active player. The linear-active might consider rejection as the end of the game.	(1) The linear-active exporter might start to make an offer p_L . (2) The reactive importer should reject or accept it. (3) The rejection of the offer might result in another offer or a counter-offer. If the reactive importer is interested in responding to the behavior of his counterpart, the importer might continue to bargain over a short period of time connected to the exporter's situation, yet the trust-building approach would favor a long bargaining horizon with less rejections.
Payoffs	The exporter's payoff is $U_L^{Ex} = p_L(\Delta_L) - c_L(\delta_L)$ and the importer's payoff is $U_M^{Im} = v_M(\delta_M) - p_M(\Delta_M)$.	The exporter's payoff is $U_L^{Ex} = p_L(\Delta_L) - c_L(\delta_L)$ and the importer's payoff is $U_R^{Im} = v_R(\delta_R) - p_R(\Delta_R)$.
Cooperation and Conflict	<i>Co-operation:</i> Co-operation might only occur in a situation where the linear-active type intends to set a high margin and to bargain over it during a longer time period. <i>Conflict:</i> The basic bargaining behavior of these two types will lead to conflict. Besides the different time horizon, the incompatibility of the two negotiation styles should trigger a conflict.	<i>Co-operation:</i> Although difficulties concerning the time schedule might arise, the reactive type ought to be interested in a positive outcome and not losing face. <i>Conflict:</i> Because of the different approach in the time horizon and in the objectives of the negotiation, there might be a deadlock situation straight at the beginning. Even acceptance over a long time period could lead to a conflict since the reactive type might still reject an offer in a late stage of bargaining (or even after signing the agreement).

TABLE 6
Multi-active Exporter negotiates either with a Linear-active or a Reactive Importer

	Multi-active Exporter bargains with linear-active Importer Brazilian Exp – American Imp. Scenario 6	Multi-active Exporter bargains with reactive Importer Brazilian Exp. – Japanese Imp. Scenario 7
Time structure	Exporter – long-term perspective Importer – short-term perspective	Exporter – long-term perspective Importer – very long-term perspective
Order of the Play	(1) The multi-active exporter might make an initial offer p_M . (2) The linear-active importer might accept or reject it. (3) The rejection of the offer should lead to another offer by the exporter or the counter proposal of the importer. The exporter targets further bargaining periods, whereas the linear-active importer's approach towards bargaining is different. Rejection of an offer reflects a strategic move from the exporter's perspective, although the importer would want to show that this price is not acceptable and might terminate the negotiation.	(1) The multi-active exporter might make an initial offer p_M . (2) The reactive importer might reject or accept it. (3) The rejection of the proposal will lead in the second stage to either another offer or a counter-offer. Assuming that the multi-active exporter connects various projects and the reactive importer responds to the given behavior, a long bargaining process might be the result. The negotiation procedure might show a sequence of rejections, offers and counteroffers with the aim to develop a long lasting business relationship on both sides.
Payoffs	The exporter's payoff is $U_M^{Ex} = p_M(\Delta_M) - c_M(\delta_M)$ and the importer's payoff is $U_L^{Im} = v_L(\delta_L) - p_L(\Delta_L)$.	The exporter's payoff is $U_M^{Ex} = p_M(\Delta_M) - c_M(\delta_M)$ and the importer's payoff is $U_R^{Im} = v_R(\delta_R) - p_R(\Delta_R)$.
Cooperation and Conflict	<i>Co-operation</i> could occur in the first two periods when the good and its price meet the needs of the importer, and the exporter will be satisfied with the price and additional services being negotiated. <i>Conflict</i> might arise within the first periods when the exporter expects the importer to make another offer, or in the case that no other deals can be made out of the underlying business.	<i>Co-operation</i> can be found over the time period. Both will know each other better during the bargaining process, which is an important target of the reactive type. <i>Conflict</i> might occur when the different planning horizons, the methods of confrontation and ways of dealing with the agenda might not be compatible.

TABLE 7
Reactive exporter negotiates with a Linear-active or a Multi-active Importer

	Reactive Exporter bargains with Linear-active Importer Japanese exporter – American importer Scenario 8	Reactive Exporter bargains with multi-active Importer Japanese exporter – Brazilian importer Scenario 9
Time structure	Exporter – very long-term perspective Importer – short-term perspective	Exporter – very-long term perspective Importer – long-term perspective Different goals are the source for long-term perspectives (reacting to counterpart and trust-building on one hand and emotional negotiation style on the other hand)
Order of the Play	(1) The reactive exporter might make an offer p_R and (2) might expect the linear-active importer either to (accept or) reject it. Since the linear-active importer is interested in a short negotiation process, (3) there is a high probability that the next stage of the game might conclude the bargaining. Both, either acceptance or rejection in the first period will lead to the termination of the game.	(1) The reactive exporter might make an offer p_R , (2) the multi-active importer might accept or reject it. (3) The rejection of the offer should lead to the termination, to another offer or to a counter-offer. Both parties are interested in a long negotiation process, although their objectives are different.
Payoffs	The exporter's payoff is $U_R^{Ex} = p_R(\Delta_R) - c_R(\delta_R)$ and the importer's payoff is $U_L^{Im} = v_L(\delta_L) - p_L(\Delta_L)$.	The exporter's payoff is $U_R^{Ex} = p_R(\Delta_R) - c_R(\delta_R)$ and the importer's payoff is $U_M^{Im} = v_M(\delta_M) - p_M(\Delta_M)$.
Cooperation and Conflict	<i>Co-operation</i> should occur in the case of a reactive exporter accepting an offer made by a linear-active importer in the first two stages of a negotiation process. <i>Conflict</i> might arise in a setting being characterized by an importer waiting for an offer of a reactive exporter who might be looking for the counterpart's trustworthiness and other qualitative factors. Since the time horizon of the reactive exporter is longer than the one of the importer, conflict might occur in the first negotiation periods.	<i>Co-operation:</i> Although this combination seems to be very difficult to manage, co-operation ought to occur in terms of longer bargaining and the connection of private with professional life. <i>Conflict</i> might arise because of the different bargaining behavior and the time horizon varying in the circumstance of a reactive exporter negotiating with a multi-active importer. Some deadlock points will probably occur as well.

FIGURES:

FIGURE 1: Cultural Profiles of Linear-active, Multi-active and Reactive Cultures

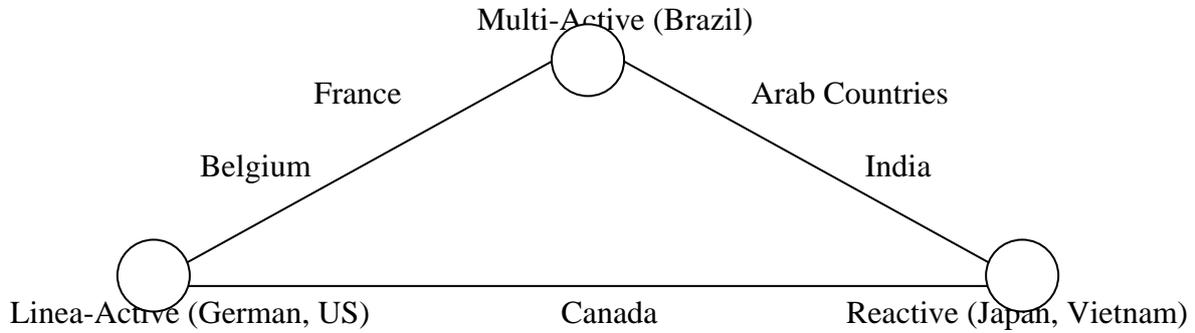


Figure 2: Timing of an Intercultural Bargaining Model

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5.....
Exporter offers price	Importer accepts or rejects	Exporter offers again or importer makes counteroffer	Importer accepts/rejects, Exporter accepts/rejects	Game may continue over more periods
TIME PERIOD I		TIME PERIOD II.....		