

NEGOTIATION
(A Telephone Game)

by

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Introduction

This game is designed to be played by seven to ten players where the telephone is their only means of communications. The winnings of any individual player are a reflection of his relative ability to negotiate with or obtain the cooperation of a significant percentage of the other players.

The basic problem confronting a player is to be able to move his pieces through the territories of the other players without losing them. His winnings are ultimately based upon this and his ability to capture the pieces of the other players. His attempts to move may be accomplished by negotiation or by the use of force. His success at using force will be a function of the amount of support he can obtain from at least some of the participants.

A player will know what has transpired in his territory at any time and, of course, what actions he has entered into with other players. His knowledge of what has transpired between the other players will be a function of how well he can extract information in the course of the game. The knowledge of correct information will often mean the difference between a winning and a losing action.

General Nature of the Game

The MAIN BOARD (Figure 1) is divided into ten rows or levels (letters A to K) and ten columns (numbers 1 to 10). Each square is then uniquely represented by a letter and number. A player's territory is the column corresponding to his number. The playing area of the board then corresponds only to those columns for which a player exists. There are three distinct types of markers used in the game:

Start

Figure 1
Main Board

	1	2	3	4	5	6	7	8	9	10	Player
A											
B											
C											
D											
E											
F											
G											
H											
I											
K											Move into K level synomous to move to WIN box
Support lent											
Support borrowed											
IOU's to collect											
IOU's owed											

Total
Wins

Uncommitted
Support

Total
Losses

Negotiation

<u>Name</u>	<u>Initial Number</u>	<u>Initial Position</u>
Movement Pieces	N (where N is the number of players)	START box
Support Pieces	N	UNCOMMITTED SUPPORT box
Information Markers	Unlimited	Used only as needed

The information markers come in denominations of 1, 2, or 4 units and may correspond in use to units of support or movement pieces. These pieces merely provide a means of recording the players' actions and the exchange of pieces among them. Since each player begins with N support and N movement pieces, there are $2N^2$ pieces in the game, a substantial number of which a player may need to keep track of.

A player's first objective is to attempt to move his movement pieces from the START box to the WIN box. Each one reaching the WIN box is counted toward his winnings. Another objective is to capture either the movement pieces of another player or his winnings. Each piece so captured counts toward the captor's winnings. The maximum possible winnings in the game are thereby N^2 .

For a piece to get from the START box to the WIN box it must pass through one square in each level in alphabetical order, i.e., from A to B to C (until K, from which it automatically goes into the WIN box). The player may not move onto a square in his own territory (column) and in moving a piece from one level to the next he must change columns. Therefore, when a piece arrives at a level it must be in a different column than in the preceding level. He may move as many pieces at once as he cares to risk and he may bring a number of different groups of pieces from different squares on the same level into one square on the next level provided the change of column rule allows it. From the START box any number may be moved to any square in the A level other than the player's own.

For a player to be able to move to a given square he will have to enter into telephone conversation with the owner in order to gain his compliance either through negotiation or force.

The player also begins the game with the N support pieces in the UNCOMMITTED SUPPORT box. Those pieces that are in this box at any time are useful to defend the players' winnings against an ATTACK; however, they cannot be used to defend a player's territory from a move by force (THREAT). These N support pieces cannot be lost by the player; they are always considered to be the property of the original owner. However, the owner may lend some or all of them to other players. Also, a player who has come into possession of someone else's support pieces may pass them on or give them away to other players. Support pieces thus borrowed or obtained from other players may be used in offensive actions (ATTACKS or THREATS). They may also be used to defend a player's territory or his winnings against such actions. The owner of the support pieces may call the player who possesses them and request them back at any time in the game. His problem may arise in catching up with the support pieces if they are being passed from hand to hand either by intention or by circumstance.

Lending support and making moves are two of the three negotiable items players may deal with. The third is the IOU. A player may agree to give out an IOU for any amount against his winnings. A player holding an IOU has the advantage that potential winnings of this form are not subject to attack while they exist as an IOU. He may also ask the debtor to pay the debt at any time during the game. However, when an IOU is called the holder must settle for whatever winnings are available to cover the debt even if the winnings are zero at that particular time. The person holding an IOU or IOUs against a player must call for the total debt when he attempts to collect. IOUs that are not taken care of by the end of the game are handled in a prescribed deterministic manner by the scorekeeper. There also exists possible situations where it could be advantageous to give another player a certain number of actual winnings in return for an IOU of a somewhat greater amount.

There is no attempt in the rules to reach any conclusion about the relative worth of moves, support pieces, or IOUs. Each item will assume an individual value to the player which depends on his current situation relative to the other players at that particular time.

It is up to two players conversing over the telephone to negotiate a bargain which is mutually satisfactory to both of them.

Rules

For the game to proceed in a proper manner a certain well-defined procedure of telephone etiquette must be observed by all players. This etiquette governs the order with which certain actions may take place and the information that one player must pass on to another.

To define this etiquette the concept of a 'positive action' must be introduced. There are four positive actions possible and only one of these can be taken by a player against another in the course of a single telephone call. Once a party on the phone has started a positive action the other party is forced to follow the action through and can take no positive action himself until the first one has reached a point of completion. Therefore, two positive actions, one by each player, are possible in any one phone call.

The four positive actions are:

- 1) The issuance of a THREAT to move onto a player's square without his willing permission.
- 2) An ATTACK upon the winnings of a player.
- 3) The COLLECTION of the total IOUs held by a player against another player.
- 4) The RECALL of a player's support pieces in the possession of another.

An analysis of the procedure for each of these positive actions and the behavior required of each player follows.

The THREAT

The player making the threat so states and must provide the following information:

- 1) The square he is threatening
- 2) The number of pieces he wishes to move into the square and the square from whence each piece came.

The player receiving the threat can grant the permission or CALL the threat. He has no other choice and can no longer negotiate. The granting of permission ends the action.

If the THREAT is called the player who made it must provide the following additional information:

The number of SUPPORT pieces he is risking in this THREAT and who owns each piece. He cannot use his own support pieces. This amount of support, plus the number of pieces he wishes to move is his OFFENSE CAPABILITY.

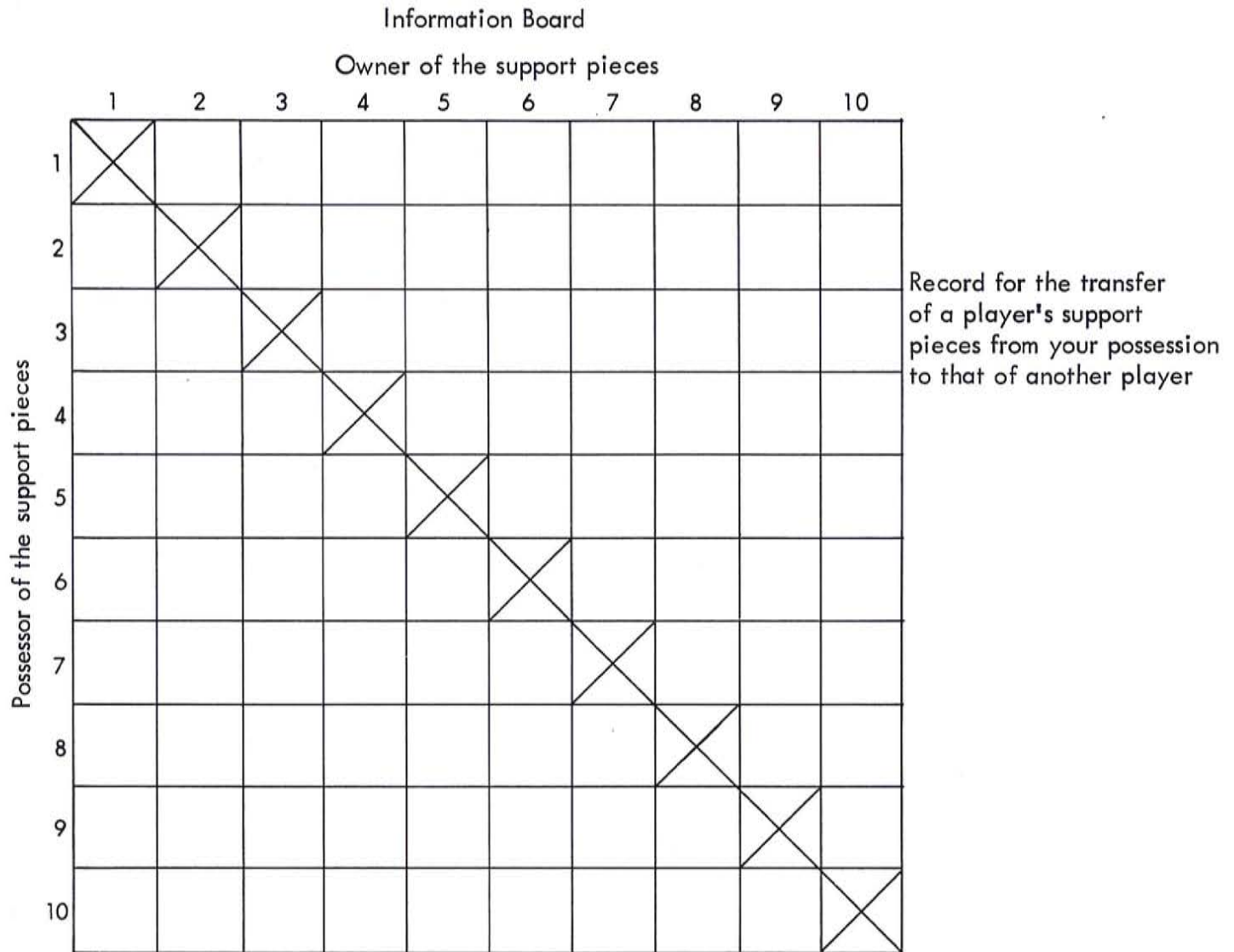
The player who CALLED the THREAT must now provide the following information:

The number of SUPPORT pieces he has obtained and who owns each piece. He need only quote a number up to one greater than the sum of the SUPPORT pieces quoted by the offense and the number of pieces the offense wishes to move. If he has less than this he must quote all of them. He cannot quote his own support pieces. This number is now his amount of defensive SUPPORT or DEFENSE CAPABILITY.

Now, one of three possible actions takes place based on the following (observe boards to follow discussion):

- 1) The amount of OFFENSE CAPABILITY equals the amount of DEFENSE CAPABILITY. In this case the result is a standoff, the move does not take place, no support pieces change hands, and the positive action terminates.
- 2) The amount of OFFENSE CAPABILITY is greater than the DEFENSE CAPABILITY. Now the move takes place and the possession of the DEFENSE support pieces passes to the OFFENSE player. The OFFENSE player would now place information markers on his MAIN BOARD in the appropriate BORROWED SUPPORT boxes in the BORROWED SUPPORT row to indicate who owns the support he has just obtained. The DEFENSE would remove these support pieces on his MAIN BOARD and place them in the appropriate squares on the INFORMATION BOARD (see Figure 2) in order that he can, when requested, inform the original owner of the current holder of the pieces.

Figure 2



Record of your wins from the other players

--	--	--	--	--	--	--	--	--	--

Record of your losses to the other players

--	--	--	--	--	--	--	--	--	--

1 2 3 4 5 6 7 8 9 10

Negotiation

- 3) The amount of DEFENSE CAPABILITY is greater than the OFFENSE CAPABILITY. In this case the move is not made and the OFFENSE loses those movement pieces that were committed. The OFFENSE will remove them from the squares they are in and places them in his LOSS box. He will also place information markers in the appropriate box of the LOSS row on the INFORMATION BOARD so that he retains a record of how many pieces he lost and to whom. The DEFENSE places this many information markers in his WIN box and in the appropriate box in the WIN row of his information board so that he knows from whom he has won pieces. The offense also loses those support pieces he attempted to use offensively to the defense. The information on this change in possession of the support is recorded as in 2) above.

Once 2) or 3) is completed, this positive action is over. Both players must insure that they have properly recorded the results of the action, otherwise disagreements may occur at the end of the game.

The ATTACK

A player may attack another player's winnings up to any amount which he can cover with his own winnings. The offense player states he is making an attack and informs the defense player of the size of the attack. The defense player may either pay off the attack by turning over his winnings up to the quoted amount, or he may defend against the attack. If he is defending he must inform the offense of the amount of borrowed support he has, whence it came, the amount of uncommitted support he has retained, and his winnings. His DEFENSE CAPABILITY, therefore, is the sum of these three items. The offense goes down to defeat if he cannot quote an amount of borrowed support which, when added to the number of pieces attacked, exceeds the DEFENSE CAPABILITY. The sum of these two items is the OFFENSE CAPABILITY. If the OFFENSE CAPABILITY is greater the defense must hand over as many winning pieces to the offense as he has up to the amount of the attack. No support pieces change hands in the

ATTACK and the action is now terminated.

COLLECTION OF IOUs

The player holding the IOU states he wants to collect his IOUs and informs the other player of the total debt held against him. The other player must hand over whatever winnings he may have (including zero) up to the amount of the debt. The debt is now settled and the action terminated. The player paying off removes the record of the debt from his IOUs OWED row on the MAIN BOARD and the player holding the IOU removes the record from the IOUs TO COLLECT row. This information on the exchange of winnings is also recorded in the WIN and LOSS rows of the INFORMATION BOARD but only in terms of the actual amount of winnings handed over.

RECALL OF SUPPORT

The player who wishes to get back support he has lent phones the player he believes currently has it and requests either the return of all support or a specified number. The other player must hand back any amount he actually has up to the specified number. He must also inform the player of any other player who has obtained from him support pieces belonging to the person requesting them back and the amount of support obtained. He does not have to clarify whether he gave the player's support away or if it was taken from him in the course of a THREAT. The ten-by-ten matrix on the INFORMATION BOARD allows each player to keep a record of any support belonging to someone else which has passed from the player's possession to that of a third party. All players are required in a request for the return of support to inform the owner of any of his support that has passed on from him to a third player.

The Telephone Conversation

Two players on the telephone may negotiate all the relative exchanges of moves, support, winnings, or IOUs that they find possible or mutually satisfactory. If a player wishes to terminate the conversation before this is mutually agreeable to both the players, he must inquire if the other player wishes to take a positive action. The other player must now either answer "no",

SUMMARY OF THREAT AND ATTACK

THREAT	OFFENSE	DEFENSE
Objective	Make a move; acquire support	Prevent move; acquire winnings and support
Basis of Success* (Capability)	Amount of movement pieces involved and borrowed support used	Amount of support borrowed
Possible Loss	Movement pieces and borrowed support used in THREAT	Allowance of move and borrowed support

*STAND OFF if each player has same amount.

ATTACK	OFFENSE	DEFENSE
Objective	Gain winnings	Gain winnings
Basis of Success* (Capability)	Amount of borrowed support plus the amount of winnings ATTACKED	Amount of borrowed support plus un-committed (not lent) support retained plus amount of winnings in WIN box
Possible Loss	Amount of winnings ATTACKED	Amount of winnings possessed or amount ATTACKED, whichever is least

*OFFENSE must have greater amount to win.

in which case the first player can hang up, or he must proceed to carry out a positive action. Any player who has been the recipient of a positive action during a phone call is, therefore, permitted to hang up upon the completion of the action. The procedure for a positive action must be carried out with reasonable speed by both players and cannot be used to tie up a player's time.

Promises and agreements between players which do not fall under the rules of the game, such as a promise not to use borrowed support against another player, are left to the discretion of the individual players. There are no rules or regulations which govern whether a player must keep such agreements. A player could very well find his own lent support pieces being used against him if a positive action such as an ATTACK is instigated before he instigates a RECALL OF SUPPORT. Players can negotiate with and pass on any support in their possession, including support actually owned by other players. However, a player giving away another player's support pieces has no legal right to call them back although promises to this effect are possible ploys.

A player may, in principle, give away some part or all of his winnings to another player by transferring the pieces as if he had lost them to the player. However, the likely occurrence is that an IOU will be issued for an equal or somewhat greater amount. This situation occurs when a number of players feel they must pool their winnings in order to build up a DEFENSIVE or OFFENSIVE CAPABILITY in the case of an ATTACK.

Last but not least, LEAVING ONE'S PHONE OFF THE HOOK IS ILLEGAL.

Utilizing the Boards

Making a move: The movement pieces are moved by the player making the move to the square represented by the permission to move, except in the case of a move to a square in the K level where the pieces are entered into the WIN box. No player other than the owner of the movement pieces is required to keep a record of this.

Lending and borrowing support: The player lending a number of UNCOMMITTED SUPPORT pieces to another player removes those pieces

from the UNCOMMITTED SUPPORT box and places them in a box in the SUPPORT LENT row corresponding to the column of the player to whom he is lending the pieces. The party receiving the pieces places the same worth of information markers in a box of the SUPPORT BORROWED row corresponding to the column representing the owner of the pieces.

Granting IOUs: The person giving an IOU places a value of information markers equal to the IOU in a box in the IOU OWED row corresponding to the column of the player to whom he owes the pieces. The person holding the IOU places the same worth of information markers in a box of the IOU TO COLLECT row corresponding to the column of the player who owes him the pieces.

Passing on or losing support: The player giving away or losing someone else's support pieces must remove the corresponding information markers from the SUPPORT BORROWED on the MAIN BOARD and transfer them to the correct box in the SUPPORT MATRIX on the INFORMATION BOARD where the column in which a box is represents the actual owner of the support and the row containing the box represents the player to whom he is passing the support (the current possessor to the best of his knowledge). He must retain this information on the board until he has willingly, or upon request for the return of the support, informed the original owner of the information. The player receiving such support enters it on his MAIN BOARD just as if he had received it from the actual owner.

Collecting IOUs: When a player pays off an IOU or as much of it as he can, the amount paid is removed from his WIN box and placed in the LOSS box. He also places this amount of information markers in a box of the LOSS row on the INFORMATION BOARD corresponding to the player collecting the debt. Furthermore, he removes the total record of the debt to this player from the IOU OWED row on the MAIN BOARD. The player collecting the debt places information markers corresponding to the number of pieces collected in both his WIN box and a box of the WIN row on his INFORMATION BOARD corresponding to the player who paid him the debt. He also removes the original record of the debt from his IOU TO COLLECT row on the MAIN BOARD.

Recalling Support: The player recalling his support would, if he has the pieces, transfer them from the box in the LENT SUPPORT row back to the UNCOMMITTED SUPPORT box from whence they came. If the player no longer has the pieces he would transfer them to a new box on the LENT SUPPORT row corresponding to the player who now has them. He would also do this, of course, if the information is volunteered willingly by the borrower, and the process is repeated each time he obtains the information that the pieces have changed hands.

Winnings: Winnings obtained by moves are recorded by the movement markers entered from the K level into the WIN box. Winnings obtained in defense against a threat or in the process of an attack are recorded twice by information markers -- once in the total WIN box on the MAIN BOARD and once on the WIN row of the INFORMATION BOARD where they are placed in the box corresponding to the player who has lost them.

Losses: Losses, if they occur from a threat, involve removing the proper movement pieces into the LOSS box on the MAIN BOARD and using information markers to record the loss in the LOSS row on the INFORMATION BOARD where the box used corresponds to the player who won them. Losses from an attack result in moving the required pieces (either movement or information pieces or both) from the WIN box to the LOSS box and then recording it on the INFORMATION BOARD in the same manner as above.

Beginning and Ending the Game

The game begins at a set time and no telephone calls may be placed before this time. It is also agreed among the players that the game will end at a certain time. When this time limit is reached no additional phone calls may be placed but two players already in conversation may finish whatever action they are engaged in. The actual best length of time to play the game will be a function of the group of players. Two hours is a suggested time for a first trial. Obviously, it is essential that players keep their conversations as short as possible.

Scoring the Game

A player or a non-player is designated as scorekeeper. At the end of the game all other players must get off the telephone and the score keeper proceeds to collect the following information from each player.

- 1) The value of the pieces in the player's WIN box.
- 2) The contents of the player's IOU rows on the MAIN BOARD.
- 3) The contents of player's WIN and LOSS rows on the INFORMATION BOARD.
- 4) The number of movement pieces that have not reached the WIN box and have not been lost.

The scorekeeper first checks that the total winnings of all players equals N^2 minus the total of the movement pieces that have not reached the WIN box and have not been lost. If this does not agree, he should check the WIN and LOSS rows and any discrepancy between the above totals should show up as disagreements between pairs of players. It may be possible from this to determine who made the error in a number of situations. If not, he must contact the disagreeing parties and give them an opportunity to reach agreement. However, if a player has additional discrepancies the scorekeeper is compelled to decide any dispute against this player if agreement cannot be reached among the disagreeing parties. If all else fails, the scorekeeper can reach a decision arbitrarily or invalidate the game on the basis of too many inconsistencies. These same rules apply to inconsistencies in the IOUs that have not been collected.

Once any inconsistencies in the WINS, LOSSES, or IOUs are settled, the scorekeeper proceeds to collect the IOUs for the players in the following manner:

- 1) If any two players hold IOUs against each other, the lesser IOU cancels out that amount of the larger so as to reduce the two IOUs to one.
- 2) Any IOUs paid off now to the scorekeeper cannot be used to pay an additional IOU held against the collector. The scorekeeper can only use the

winnings that are present at the end of the game to pay off the IOUs; therefore, the scorekeeper will collect the IOUs into separate winnings.

- 3) The scorekeeper begins with player one and pays off each debt held against player one starting with the smallest single debt and working up to the largest until either the debts or the winnings of player one are exhausted. The remaining debts after the winnings are exhausted become worthless. If the scorekeeper comes to two or more equal debts and there are not enough winnings to cover them all, he splits the available total evenly. In this instance, non-integer scores may result.
- 4) After player one, the scorekeeper proceeds to player two and on up to ten.
- 5) The final score for each player is now the sum of whatever original winnings remain to him and whatever was collected in IOUs by the scorekeeper. The scorekeeper now phones each player and informs him of the final scores.

Possible Modifications

There are two possible modifications to the rules which a group of players might utilize if they so desire. The first is to allow the possibility of the game ending before the set time limit by allowing the CALL FOR THE END OF THE GAME action. Any player who has succeeded in moving one-half or more of his own movement pieces to his WIN box and no longer has any movement pieces on the board to move may CALL the game by phoning the other players and informing them of such. Any player who has been notified by the original caller or anyone else cannot place any more phone calls and if he receives a phone call he must inform the party calling that the game is CALLED and no action can take place. The only

exception is the scorekeeper who may at once proceed to collect scores.

An additional way of CALLING the game is the 2/3 rule. If 2/3 or more of the players have informed the scorekeeper that they wish to terminate the game, then the scorekeeper must proceed to CALL the game as described above.

The second variation in the basic game tends to both complicate and lengthen the game. It is not recommended until the players have had some initial practice. If the offensive player loses the threat action, he would still transfer his movement pieces to the LOSS box as before; however, the defense player would not count these pieces as winnings, instead he would place them in the box of his territory the offense wished to move them to and they would become in effect additional movement pieces which he has to move through the succeeding levels in order to count them as winnings. The box in his territory that they are initially put into is equivalent to the START box before the A level. The resulting gain in a successful defense against a THREAT is not then winnings, but in essence, potential winnings with somewhat less of an obstacle course to follow than those pieces that began at the START box. In this version of the game, passage through the last few levels becomes much more significant. The player would utilize information pieces to designate these new movement pieces and they would not count toward the ability to CALL the end of the game.