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Nicolae Sfetcu


# The Bridge Game 

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# Games Classification 

Game Theory | Card Games | Trick-Taking Games | Gambling

Games may be classified and sub-classified according to many different criteria. Each scheme has its own advantages and disadvantages. The categories on the main game page is rather a hodge-podge, and might benefit from some rationalization. However, before undertaking to refactor the game pages, please give thought to all of the following distinctions.

- What sort of challenge / skill is involved (e.g. abstract calculation, anagramming, luck, bluffing, verbalizing, coordination, speed, etc.)?
- Leads to the ("Folk Model") theory of 4 categories: games of skill, games of chance, games of strategy, games of status propagated by Anderson/Moore and Brian Sutton-Smith.

This scheme is probably most natural, and quite neatly separates billiards from chess from Tomb Raider. The main disadvantage is that too many games fall under more than one head. For example Scrabble relies a great deal on word knowledge and anagramming, but also has significant strategic aspects.

- What equipment is used to play the game (e.g. a computer, a board, cards, tiles, dice, etc.)?

This categorization is also very natural and common, but sometimes problematic. For example, Balderdash is a commercial board game, whereas Fictionary is almost identical but uses no board.

Something is odd with any scheme which forces such similar games to be listed under completely different headings.

Other distinctions are less important, and apply more or less well to different major headings. For example, example, the difference between team and individual sports is fundamental, whereas team board games are so rare as to hardly merit a category. The remaining distinctions apply mostly to non-physical games.

- How many players does the game accommodate? The most important division is between two-player and multiplayer games, because nearly all multiplayer games involve negotiation or coalition-building to some degree. Among multiplayer games it is also important (particularly to whomever is organizing the party) what range in the number of players can be accommodated. One disadvantage of this distinction is that a few games such as Titan are equally good two-player or multiplayer.
- To what extent to which chance is a factor? Games run the gamut from having no chance whatsoever (checkers, Pente) to being entirely determined by chance (roulette, Chutes and Ladders).
- How deep is the strategy? Some games (bridge, Go) can be studied for years without exhausting what there is to learn, whereas others (Three Men's Morris) can be mastered relatively easily.
- How easy is it to learn the rules of the game? Chess and Go are often compared for their depth and abstraction, but chess has considerably more difficult rules. This consideration is particularly important for family games, where ideally children should be able to play along easily, without making the game so simple it holds no interest for adults.
- Is the game relatively abstract or does it attempt to simulate some aspect of reality (e.g. stock market, war scenarios)? For some simulation games, the realism is more important than all other factors, whereas some games (Set) are so abstract that the names and shapes of all the pieces could change without affecting playability. However, most games lie somewhere in between, with a balance between abstraction and simulation.
- Are players eliminated as the game progresses, or can everyone play along until the end? This is most important socially, as a host may wonder how to entertain guests who have been knocked out of the main event.
- What is the objective of the game? This is most useful as a sub-subheading, because different types of games tend to have different types of objectives. For example card games have natural categories of trick-taking and shedding games, which don't apply to board games, whereas board games have categories of capture, racing, and immobilization which don't apply to card games.


## Game Theory

There are two types of game theory: 1) working out how to win, lose or draw a game played for entertainment; or 2) applying the theory of a game to real life.

The latter meaning is covered by game theory as a branch of mathematics, operations research and economics, analyzing interactions with formalized incentive structures ("games") - whether purposeful games, or battles, or accidental games. The predicted and actual behavior of individuals in these games are studied, as well as optimal strategies . Seemingly different types of interactions can be characterized as having similar incentive structures, thus all being examples of one particular game.

Some theories seeks to find rational strategies in situations where the outcome depends not only on one's own strategy and "market conditions", but upon the strategies chosen by other
players with possibly different or overlapping goals. It also finds wider application in fields such as political science and military strategy.

An example of the application of game theory to real life is the prisoner's dilemma as popularized by mathematician Albert W. Tucker; it has many implications for the nature of human cooperation. Biologists have used game theory to understand and predict certain outcomes of evolution, such as the concept of evolutionarily stable strategy introduced by John Maynard Smith in his essay Game Theory and the Evolution of Fighting. See also Maynard Smith's book Evolution and the Theory of Games.

Note it is difficult to apply game theory to life because everybody wants different things out of life-someone may go all out for a little piece of money, others may want huge amounts with little effect, and yet others wish for things as well as money.

Other branches of mathematics, in particular probability, statistics and linear programming, are commonly used in conjunction with game theory to analyse games.

The mechanisms of some games such as snakes and ladders, or ludo, depend very heavily on random inputs, to the extent that game theory cannot usefully analyse them. It can only theorise on strategies as strategic choices.

## The difference between a rule (or law) and a theory

Technically speaking, there is no difference, but a rule tends to be more fundamental to playing the game. For instance in chess saying that you need to take as many pieces as possible is a rule, that you should start with say the Bishop's Gambit is a theory. Note too that rules tend to be more useful in playing the game. Theories (and this includes scientific theories like $\mathrm{e}=\mathrm{mc}^{2}$ ) may be debunked later on. However in life rules too may sometimes be debunked.

## Types of games and examples

Game theory classifies games into many categories that determine which particular methods can be applied to solving them (and indeed how one defines "solved" for a particular category). Some common categories are:

Zero-sum games are those in which the total benefit to all players in the game adds to zero (or more informally put, that each player benefits only at the expense of others). Chess and Poker are zero-sum games, because one wins exactly the amount one's opponents lose. Business, politics and the prisoner's dilemma, for example, may be condisered are non-zerosum games because some outcomes are good for all players or bad for all players. It is easier, however, to analyze a zero-sum game, and it turns out to be possible to transform any game into a zero-sum game by adding an additional dummy player often called "the board," whose losses compensate the players' net winnings.

A convenient way to represent a game is given by its payoff matrix. Consider for example the two-player zero-sum game with the following matrix:

## Player 2

## Action A Action B Action C

$\begin{array}{llll}\text { Action } 1 & 30 & -10 & 20\end{array}$

## Player 1

$\begin{array}{llll}\text { Action } 2 & 10 & 20 & -20\end{array}$

This game is played as follows: the first player chooses one of the two actions 1 or 2 , and the second player, unaware of the first player's choice, chooses one of the three actions A, B or C. Once these choices have been made, the payoff is allocated according to the table; for instance, if the first player chose action 2 and the second player chose action $B$, then the first player gains 20 points and the second player loses 20 points. Both players know the payoff matrix and attempt to maximize the number of their points. What should they do?

Player 1 could reason as follows: "with action 2, I could lose up to 20 points and can win only 20 , while with action 1 I can lose only 10 but can win up to 30 , so action 1 looks a lot better." With similar reasoning, player 2 would choose action C (negative numbers in the table are good for him). If both players take these actions, the first player will win 20 points. But how about if player 2 anticipates the first player's reasoning and choice of action 1 , and deviously goes for action B, so as to win 10 points? Or if the first player in turn anticipates this devious trick and goes for action 2 , so as to win 20 points after all?

The fundamental and surprising insight by John von Neumann was that probability provides a way out of this conundrum. Instead of deciding on a definite action to take, the two players assign probabilities to their respective actions, and then use a random device which, according to these probabilities, chooses an action for them. The probabilities are computed so as to maximize the expected point gain independent of the opponent's strategy; this leads to a linear programming problem with a unique solution for each player. This method can compute provably optimal strategies for all two-player zero-sum games.

For the example given above, it turns out that the first player should chose action 1 with probability $57 \%$ and action 2 with $43 \%$, while the second player should assign the probabilities $0 \%, 57 \%$ and $43 \%$ to the three actions A, B and C. Player one will then win 2.85 points on average per game.

Non Zero-Sum game The most famous example of a non-zero-sum game is the Prisoner's dilemma, as mentioned above. Any gain by one player does not necessarily correspond with a loss by another player. The 'kill or be killed' business ideal are non zero-sum games. For example, a business contract ideally is a positive-sum game, where each side is better off than if they didn't have the contract. Most games that people play for recreation are zerosum.

Cooperative games are those in which the players may freely communicate among themselves before making game decisions and may make bargains to influence those decisions. Monopoly can be a cooperative game, while the Prisoner's dilemma is not. However, Monopoly is a zero-sum game as there can be only one winner, whereas the Prisoner's dilemma is a non-zero-sum game. Most of life can be described as a cooperative game, because we normally cooperate against our opponents.

Complete information games are those in which each player has the same game-relevant information as every other player. Chess and the Prisoner's dilemma are completeinformation games, while Poker is not. Not much of life can be described as complete information game.

## Risk aversion

For the above example to work, the participants in the game have to be assumed to be risk neutral. This means that, for example, they would value a bet with a $50 \%$ chance of receiving 20 'points' and a $50 \%$ chance of paying nothing as being worth 10 points. However, in reality people are often risk averse and prefer a more certain outcome - they will only take a risk if they expect to make money on average. Subjective expected utility theory explains how a measure of utility can be derived which will always satisfy the criterion of risk neutrality, and hence is suitable as a measure for the payoff in game theory.

One example of risk aversion can be seen on Game Shows. For example, if a person has a 1 in 3 chance of winning $\$ 50,000$, or can take a sure $\$ 10,000$, many people will take the sure $\$ 10,000$.

## Games and numbers

John Conway developed a notation for certain games and defined several operations on those games, originally in order to study Go endgames. In a surprising connection, he found that a certain subclass of these games can be used as numbers, leading to the very general class of surreal numbers.

## History

Though touched on by earlier mathematical results, modern game theory became a prominent branch of mathematics in the 1940s, especially after the 1944 publication of The Theory of Games and Economic Behavior by John von Neumann and Oskar Morgenstern. This profound work contained the method for finding optimal solutions for two-person zero-sum games alluded to above.

Around 1950, John Nash developed a definition of an "optimum" strategy for multi player games where no such optimum was previously defined, known as Nash equilibrium. This concept was further refined by Reinhard Selten. These men were awarded The Bank of Sweden Prize in Economic Sciences in Memory of Alfred Nobel in 1994 for their work on game theory, along with John Harsanyi who developed the analysis of games of incomplete information.

Conway's number-game connection was found in the early 1970s.

## Card Games

A card game is any game using playing cards, either traditional or specialized. A participant in such a game is a card player.

Other games using cards include trading card games and combination games which use cards in addition to other playing equipment.

## Trick-taking games

- 500
- 9-5-2
- All-Fours
- Bezique
- Black Lady
- Bridge
- Cinch
- Ecarte
- Euchre
- Forty-five (card game)
- Hearts (see also Black Lady to which it is related).
- Hokm
- Loo
- Napoleon
- Ninety-nine
- Oh Hell
- Pinochle
- Piquet
- Quinto
- Sergeant Major
- Sheepshead
- Skat
- Skitgubbe (phase 1)
- Solo
- Spades
- Tarocchi
- Tarock (played with a Tarot deck)
- Whist
- Wizard


## Matching games

These are also referred to as the Rummy family.

- 500 Rum
- Canasta
- Concentration (game)
- Durak
- Gin (Gin Rummy)
- Go Fish
- Happy Families
- Kemps (Scenics)
- Robbers' rummy
- Skitgubbe (phase 2)
- Snap
- Spoons


## Gambling games

- 3 card brag
- Baccarat
- Bingo (card game)
- Blackjack
- Blind Hookey
- Boure
- Cribbage
- Panguingue
- Poker
- Primero
- Red Dog


## Solitaire or Patience games

- Armistice Day Patience
- Concentration/game
- Clock patience
- FreeCell
- Klondike
- Solitaire Showdown


## Shedding games

These are also referred to as the Stops family.

- Crazy Eights
- Eat Ch
- Fan Tan
- Macau
- Mao
- Michigan Rummy
- Nain Jaune
- Old Maid
- President
- Slapjack
- Shichi Narabe
- Shithead
- UNO


## Accumulating games

- Beggar-My-Neighbour
- Casino
- Egyptian Rat Screw (ERS)
- Spit
- War
- Seven Spades


## Games with special decks

- Flinch
- Grass
- Hanafuda
- Karuta
- Magic The Gathering
- Mille Bournes
- Netrunner
- Nuclear War
- Pit
- Rook
- Set game
- Twitch
- UNO
- Wizard Wizard Card Game


## Cooperative games

- Tri


## Inductive games

- Eleusis


## Multi-genre games

- Poke - a non-betting derivative of Poker with elements of trick-taking games
- Most solitaire games are multi-genre.


## Trading card games

- Lord of the Rings Trading Card Game
- Magic: The Gathering
- Star Trek Customizable Card Game
- Star Wars Customizable Card Game


## Trick-Taking Games

Trick-taking games are card games in which play is divided into multiple rounds called tricks, during which each player plays one card from his hand, and the rules of the game determine which player wins that trick based on the cards played. Play ends when all players have played their cards. The object of such games varies; it is often to win the most tricks, but it may instead be to avoid winning tricks, to win exactly a certain number of tricks, or to acquire (or not acquire) certain cards. One might also include in this category other games such as the Chinese Tien Gow, played with dominoes.

A common feature of trick-taking games is the concept of following suit, in which each player is constrained in which card he may play by the obligation to match the suit of the first card played in that trick, called the lead, if he can. Another feature common to many games is the concept of trump (from the French triomphe, although the idea probably originated in Italy), in which special cards (sometimes all the cards of a certain suit) are designated to outrank all other cards played. In general, the player who wins the trick is the player who played the highest trump, or, if no trump is played, the player who played the highest card in the suit that was led. In some games players are obligated to play a higher card (and/or trump the suit to win, if they do not have the suit led) if possible. In most games the player who won the previous trick has to lead on the next one.

Popular trick-taking games include Ambition, Whist, Bridge, Euchre, Pinochle, Skat, Tarocchi, Hearts, Spades, Pitch (card game), Napoleon, Sheepshead, 500, Ninety-nine, Tarocchini, and Forty-five.

## Gambling

Gambling most often refers specifically to the wagering (or betting) of money on games of chance, or more broadly to engaging in any high-risk behavior. Though for many it is a form of recreation, it can become a psychologically addictive and harmful behavior in some people. Because of the negative connotations of the word, casinos often use the euphemism "gaming" to describe the recreational gambling activities they offer.

Gambling is opposed by many religions (notably Islam and most interpretations of Christianity), and is either banned or heavily controlled in many jurisdictions (notably most of the United States). Consequently, gambling has long been linked to organised crime. Conversely, the close involvement in governments (through regulation and gambling taxation) has led to a close connection between many governments and gambling organisations, where legal gambling provides much government revenue.

Gambling games are believed to predate recorded history, with gambling games recorded in virtually all of the ancient civilizations.

## Types of casino gambling:

Slot machines
Poker
Blackjack
Baccarat
Craps
Roulette
Keno
Faro
Pai Gow
Pachinko
Sic Bo
Wheel of Fortune
Fixed-odds gambling and Parimutuel gambling are frequently offered at or on the following kinds of events:

Horse racing
Greyhound racing
Jai alai
Football matches
Golf
Tennis
Cricket
In addition many bookmakers offer odds on a number of non-sports related outcomes, e.g. the direction of various financial indices, whether snow will fall on Christmas Day, the winner of television competitions such as Big Brother, etc.

Non-casino gambling games:

- Lottery
- Dice-based
- Backgammon
- Liar's dice
- Passe-dix
- Hazard
- Card games
- Liar's poker
- Bridge
- Basset
- Lansquenet
- Piquet
- Put
- Coin-tossing
- Head and Tail
- Two-up
- Street Swindles
- Three Card Monte
- The Shell Game
- Carnival Games
- The Razzle
- Hanky Pank
- Penny Falls
- Six-Cat
- The Swinger
- The Push-up Bottle
- The Nail Joint
- Bar Games
- Put and Take
- The Smack
- The Drunken Mitt

One can also bet with another person that a statement is true or that a specified event will happen within a specified time. This is done in particular when two people have opposing views of what is true or will happen and are each rather certain. Not only do the parties hope to gain from the bet, they place the bet also to demonstrate how certain they are about the issue. A requirement is that it is possible to determine who was right. Sometimes the amount of money is a symbolic low value. Logically insurance ia a kind of bet, but the purpose is different.

See also related topics:
casino games
casino nights
bet exchange
three card monte
spread betting
casino tokens

# Contract Bridge 

Auction Bridge | Psychic bid | Bridge scoring | Bermuda Bowl | Venice Cup | Masterpoints | World Bridge Federation

## Introduction

At its core, bridge is a game of skill played with randomly dealt cards, which makes each deal a game of chance. This is conducive to play as a "friendly game" among four players.

Despite this, the chance can be eliminated by comparing pairs' results in identical situations. This is achievable when there are eight or more players and the deals from each table are preserved and passed to the next table, thereby duplicating them for another 4 participants to play. At the end of a competition, the scores for each deal are compared against each other, and most points are awarded to the players doing the best with each particular deal. This measures skill despite the initial chance of the deal.

This form of the game is referred to as duplicate bridge and is played in tournaments, which can gather as many as several hundred players. Duplicate bridge is a mind sport, and its popularity gradually became comparable to that of chess.

## Game play

Two partnerships of two players each are needed to play bridge. The four players sit around a table with partners opposite one another. The compass directions are often used to refer to the four players, aligned with their seating pattern. Thus, South and North form one partnership and East and West form the other.

A session of bridge consists of many deals (also called hands or boards); the game play of each deal consists of four phases: the deal, the bidding (or auction), the play of the cards, and scoring.

The goal is to achieve as high a numerical score as possible with the given cards. The score is affected by two principal factors: the number of tricks bid in the auction, and the number of tricks taken during play, where the latter must be higher than or equal to the former. Broadly said, the highest score is achieved when the number of tricks won is equal to (or close to) the number that was bid, so there is incentive to the players to accurately bid the number of tricks that their hands are capable of delivering. Thus, in the bidding stage, the pairs compete to see who proposes the highest number of tricks (and associated trump suit), and the side who wins the bidding must then fulfill that bargain by taking at least the specified number of tricks in play. The number of tricks bid and the trump suit (or lack thereof) are referred to as a contract. If the side who wins the auction then takes the contracted number of tricks (or more), it is said to have fulfilled the contract and is awarded
points; otherwise, the contract is said to be defeated and points are awarded to their opponents.

## Dealing

The game is played with one complete deck of 52 cards. One of the players is the dealer. In rubber bridge (or other "friendly" games), the cards are shuffled and the dealer distributes all the cards clockwise one at a time, starting with his left-hand opponent and ending with himself, so each player receives a hand of thirteen cards. At the same time, for convenience, the dealer's partner usually shuffles a second deck, to be ready for use on the following deal. The deal rotates clockwise, so the dealer's left-hand opponent will deal next.

In duplicate bridge, the hands are shuffled only once, at the beginning of the tournament, and dealt clockwise one at a time (there are also special machines for pre-dealing on large tournaments), and placed into bridge boards. At each subsequent table, each player pulls his cards from the board and counts them to ensure that the deal has not been corrupted. Unlike in other trick-taking games, the players do not throw their cards to the middle of the table in each trick; instead, each player keeps his played cards before him, to allow the completed deal to be returned to the board unaltered.

## The auction

To prepare for the play of the cards, the auction phase determines several things: the contract, which consists of the trump suit and the intended number of tricks; which partnership will play for the contract; and which of the players in that partnership will play the hand. In addition, doubling and redoubling may occur, which represents a "raising of the stakes" when the played hand is scored.

During the auction, each player makes a call at his turn, which consists of any one of the following:

- Pass
- Make a new bid
- Double or Redouble

The auction consists of each player making a call, starting with the dealer and continuing clockwise until three players in a row have passed after any bid. (The word "bid" is also often used informally in place of "call".)

A player may always pass when it is his or her turn.
A bid specifies how many tricks the bidder believes that he can take using his hand and his partner's hand, and with which suit as trump. Any bid starts with the assumption that the
bidder can make at least six tricks, called book, plus the stated number of additional tricks. So the bid includes a level (from one to seven, representing how many tricks beyond six the bidder proposes to make) and a denomination (also called strain), which is either a suit or "no trump." For instance, "3 hearts" suggests that his partnership can take nine tricks (book plus three) with hearts as the trump suit.

A player may bid at his turn as long as the bid is higher than the most recent bid. A bid is considered higher if it specifies either a higher level or the same level but with a higherranking suit. The denominations are ordered, from lowest to highest, as clubs (C), diamonds (D), hearts (H), spades (S), and no trump (NT). Thus, after a bid of 3H, bids of 2S or 3C are illegal, but 3S or 4D are legal.

If the most recent bid was made by the opponents, a player may "double" that bid if his partner has not already done so. This essentially states that the player is so confident that the opponents cannot make their bid during play that the player is willing to double their score if they do (and the penalty if they do not). If the most recent bid was made by the player or the player's partner, and it has been doubled by an opponent but not yet redoubled by the player's partner, the player may "redouble," further increasing the potential score or penalty.

The auction ends either if all four players pass initially (in which case the hand is not played or scored) or when three players pass in a row after any bid(s) have been made. The last bid becomes the contract, and its denomination determines whether there will be a trump suit, and if so, what it is. The pair that did not win the contract is called the defense. The pair that made the last bid is divided further: the player who first made a bid in the strain of the final contract becomes the declarer and his or her partner becomes the dummy. For example, suppose West is the dealer and the bidding goes:

## South West North East



## Pass pass

Then East and West would be the defenders, South would be the declarer (since South was the first to bid spades), North would be the dummy, and spades would be the trump suit.

## The play of the hand

The play of the hand is similar to other trick-taking games. To summarize, the play consists of thirteen tricks, each trick consisting of one card played from each of the four hands. The first card played in a trick is called the lead, and each player plays a card sequentially around the table clockwise. Any card may be selected as the lead, but the remaining hands must follow suit (meaning, they must play a card in the same suit as the lead), unless they have no more cards of that suit, in which case any card may be played. The hand that plays the highest card in the suit of the lead wins the trick, unless any of the cards are in the trump suit, in which case the hand that plays the highest trump card wins the trick. (Aces are high in bridge, followed by Kings, then Queens, and so on, with 2s the lowest card in each suit.) The hand that wins each trick plays the lead card of the next trick, until all the cards are played.

The first lead, called the opening lead, is made by the defender to the left of the declarer. After the opening lead is played, the dummy lays his entire hand face up on the table. The declarer is thereafter responsible for selecting cards to play from the dummy's hand at the dummy's turn, and from his own hand at his turn. The defenders each choose the cards to play from their own hands. The player who is dummy has practically no rights and must not interfere with the play; (s)he may only play cards from the dummy hand at declarer's order (so that the declarer does not have to lean over the table).

In the end, the goal for each pair is to take as many tricks as possible together (it doesn't matter which player takes them). However, the level of the contract makes a more relevant specific target: the number (level) of the contract is the number of odd tricks the declarer must take, that is, the number of tricks beyond 6 . Thus, the declarer is always attempting to take at least a majority of the tricks. In the example above, the declarer must manage to take 10 tricks-6 (assumed) +4 (bid)—with spades as trump, to make the contract. Success in this goal is rewarded by points in the scoring phase for the declarer's side. If the declarer fails to make the contract, the defenders are said to have set or defeated the contract, and are rewarded points for doing so.

## Scoring

## Main article: Bridge scoring

When the declarer makes the contract, the declarer's side receives points for:

- The contract bid and made
- Overtricks (tricks taken over the contract level)
- Other bonuses

When the declarer fails to make the contract, the defending pair receives points for undertricks - the number of tricks by which declarer fell short of the goal.

Most bidding revolves around efforts to bid and make a game. Because of the structure of bonuses, certain bid levels are given special significance. The most important level is game, which is any contract whose bid trick value is 100 or more points. Game level varies by the suit, since different suits are worth different amounts in scoring. The game level for no trump is 3 ( 9 tricks), the game level for hearts or spades (major suits) is 4 ( 10 tricks), and the game level for clubs or diamonds (minor suits) is 5 ( 11 tricks). Slam is any contract on level 6 or 7, and it is given very large bonuses.

There are two important variations in bridge scoring: rubber scoring and duplicate scoring. They share most features, but differ how the total score is accumulated. In rubber bridge, points for each pair are tallied either "above the line" or "below the line". In duplicate bridge, all the points are accumulated and present a single score, expressed as a positive number (sum of trick points and bonus points) to the winning pair, and by implication, as a negative number to the opponents. "Chicago" bridge is a form of friendly game which uses duplicate scoring, that is, a set consists of four deals with different vulnerabilities (whether a team has already made game), and every deal is scored as a single number.

In duplicate bridge, the same hand is played unchanged across two or more tables and the results are compared using various methods. The differences are expressed in matchpoints or IMPs. They are summed for every pair for every board they play, and the pair with highest total score becomes the winner of the tournament. Thus, even with bad cards, a pair can win the tournament if it has bid better and played better than the other players who played the same set of cards.

## History

A number of card games similar to whist can be traced all the way back to the early 16 th century. They were all trick-taking games with a variety of variations. Whist became the dominant form, and enjoyed a loyal following for centuries.

According to the Oxford English Dictionary, the word bridge is the English pronunciation of biritch, an older name of the game of unknown Middle Eastern origin; the oldest known rule book, from 1886, calls it "Biritch, or Russian Whist". The OED reports speculation that the word may come from a Turkish term bir-üç, or "one-three", supposedly referring to the one exposed and three concealed hands.) This game, known today by the retronyms bridge-whist and straight bridge, became popular in the United States and the UK in the 1890s.

Biritch featured several significant developments from Whist: the trump suit was either chosen by the dealer, or he could pass the choice to his partner; there was a call of no trumps; and the dealer's partner laid his cards on the table as dummy to be played by the dealer. It also featured other characteristics found in modern bridge: points scored above and below the line; game was 3NT, 4H and 5D (although 8 club tricks and 15 spade tricks were needed!); the score could be doubled and redoubled; there were slam bonuses.

In 1904 auction bridge arose where the players bid in a competitive auction to decide the contract and declarer. The object became to make at least as many tricks as were contracted for and penalties were introduced for failing to do so.

The modern game of contract bridge was the result of innovations to the scoring of auction bridge made by Harold Stirling Vanderbilt and others. The most significant change was that only tricks contracted for were counted below the line towards game and for slam bonuses, which resulted in bidding becoming much more challenging and interesting. Also new was the concept of vulnerability to make it more expensive to sacrifice to protect the lead in a rubber, and the various scores were adjusted to produce a more balanced game. Vanderbilt wrote down his rules in 1925, and within a few years contract bridge had so supplanted other forms of the game that "bridge" became synonymous with "contract bridge."

These days most bridge played is tournament bridge.

## Tournaments

Tournaments were possible because of duplicate bridge, a variation of the game where many sets of players play with the same hands. Duplicate had occasionally been used for whist matches, as early as 1857. For some reason, duplicate was not thought to be suitable for bridge, and so it wasn't until the 1920s that (auction) bridge tournaments became popular.

In 1925 when contract bridge first evolved, bridge tournaments were becoming popular, but the rules were somewhat in flux, and several different organizing bodies were involved in tournament sponsorship: the American Bridge League (formerly the American Auction Bridge League, which changed its name in 1929), the American Whist League, and the United States Bridge Federation. In 1935, the first officially recognized world championship was held. By 1937, however, the American Contract Bridge League had come to power (a union of the ABL and the USBF), and it remains the principal organizing body for bridge tournaments in North America. In 1958, the World Bridge Federation was founded, as bridge had become an international activity.

Today, the ACBL has over 160,000 members and runs 1100 tournaments per year with 3200 officially-associated bridge clubs.

## Bidding boxes and bidding screens

Credit: American Contract Bridge League, https://en.wikipedia.org/wiki/File:Bidding_box.png, CC BY-SA 4.0 license

In tournaments, "bidding boxes" are frequently used. A bidding box is a box of cards, each bearing the name of one of the legal calls in bridge. A player wishing to make a call displays the appropriate card from the box, rather than making a verbal declaration. This prevents unauthorized information from being conveyed via voice inflection. In top national and international events, "bidding screens" are used. These are diagonal screens which are placed across the table, preventing a player from seeing his partner during the game.

## Important Bridge Players

Terence Reese
Charles Goren
Samuel Stayman
Ely Culbertson
Oswald Jacoby
Helen Sobel Smith
Easley Blackwood Sr.
Giorgio Belladonna
Benito Garozzo
Bob Hamman
Omar Sharif
Jeff Meckstroth
Eric Rodwell

## Game Strategy

Bidding systems and conventions

Main articles: Bidding system, Convention (bridge)

Much complexity in bridge arises from the difficulty of successfully arriving at a good final contract in the auction. This is a fundamentally difficult problem: the two players in a partnership must try to communicate enough information about their hands to ultimately arrive at a makeable contract, but the information they can exchange is restricted in two ways:


- Information may only be passed by the calls made and later by the cards played, and not by any other means.
- The agreed-upon meaning of all information passed must be available to the opponents.

A bidding system is the typical solution to this problem: each player evaluates his or her own hand and makes bids to give or request information from their partner, with the goal of eventually arriving at an ideal contract. Bids, doubles, redoubles, and even passes can be either natural or conventional. A natural bid is a proposal to reach a contract in the named suit. A conventional bid is an attempt to communicate, offering and/or asking for information about the partnerships' hands, that is not intended to be a proposal for the final contract. A wide variety of bidding systems have been developed over the course of the 20th century. However, most modern systems have well-established common ground.

First of all, a fairly universal system of high card points is used to give a basic evaluation of the strength of a hand. Aces are counted as 4 points, kings as 3 , queens as 2 , and jacks as 1 point; therefore, the deck contains 40 points. 26 points shared between partners is considered sufficient for a partnership to bid, and make, game in a major or in no trump. In addition, the distribution of the cards in a hand into suits may also contribute to the strength of a hand and be counted as distribution points. Because 26 points is usually considered sufficient to make game, 13 points in one hand is considered sufficient to open the bidding (that is, make the first bid in the auction), by bidding 1 of a suit.

A one no trump opening bid reflects a hand that has relatively balanced suits and high cards, and usually refers to a hand with 15-17 high card points. In some systems the number of points expected from a 1 NT opening bid changes, but it always refers to a relatively narrow range of points.

Opening bids of 2 or higher are reserved for two types of bids: unusually strong bids and preemptive bids. Unusually strong bids communicate an especially high number of points; the availability of unusually strong bids allows a player with a weak hand to safely pass when their partner opens the bidding at one of a suit. Preemptive bids are often made with weak hands that especially favor a particular suit. For instance, with a hand of S AK98742 H 73 D 42 C 76, an opening bid of 3 S is a very reasonable sacrificial bid, designed to make it difficult for the opposing team to determine a contract for themselves (which is good here, since they are likely to have the bulk of the points).

Most systems include the weak two bid convention, in which opening bids of $2 \mathrm{H}, 2 \mathrm{D}$, or 2 S are reserved for preemptive bids, while 2C is used for very strong hands. This is a first example of a conventional bid: an opening bid of 2 C in no way suggests 2 C as a final contract: indeed, in these systems 2C may be bid without any clubs.

Another common convention is the 5-card major convention, in which an opening bid of 1 H or 1 S promises at least 5 cards in that suit. This leads to some awkward bids, for instance,
when a player has four cards in each major, and is forced to open the bidding with 1 of a 3card minor suit.

Doubles are sometimes used in bidding conventions. A natural, or penalty double, is one used to try to gain extra points when the defenders are confident of setting (defeating) the contract. The most common example of a conventional double is the takeout double of a lowlevel bid, implying support for the unbid suits and asking partner to choose one of them.

There are many other conventions. Some of the most famous are Stayman, Jacoby transfers and Blackwood.

Bidding systems depart from these basic ideas in varying degrees. Standard American, for instance, is a collection of conventions designed to bolster the accuracy and power of these basic ideas, while Precision Club is a highly conventional system that uses the 1C opening bid for strong hands (but sets the threshold rather lower than most other systems) and requires many other changes in order to handle other situations. Many experts today use a system called $2 / 1$ game forcing. In the UK, Acol is the standard system. There are even a variety of techniques used for hand evaluation. The most basic is the Milton Work point count, but this is sometimes augmented by other guidelines such as losing trick count, law of total tricks or Zar Points.

## Play techniques

Terence Reese, a prolific author of bridge books, points out that there are only four ways of taking a trick by force, and two of these are very easy:

- playing a high card that no one else can beat
- trumping an opponent's high card
- establishing long cards (the last cards in a suit will take tricks if the opponents don't have the suit and are unable to trump)
- playing for the opponents' high cards to be in a particular position (if their ace is in front of your king, your king may take a trick)

Nearly all trick-taking techniques in bridge can be reduced to one of these four methods.
The optimum play of the cards can require much thought and experience, and is too complicated to describe in a short article. However, some basic ideas of probability may be considered:

Some of the most important probabilities have to do with the position of high cards.

- The probability that a given opponent holds one particular card, e.g. the king: 50\%
- The probability that a given opponent holds two particular cards, e.g. the king and the queen: approximately $25 \%$
- The probability that a given opponent holds at least one of two particular cards, e.g. the king or the queen: approximately $75 \%$

When developing long cards, it is important to know the likelihood that the opponents' cards in the suit are evenly divided between them. Generally speaking, if they hold an even number of cards, they are unlikely to be exactly divided; if the opponents have an odd number in the suit, the cards will probably be divided as evenly as possible. For example, if declarer and dummy have eight trumps between them, the opponents' trumps are probably ( $68 \%$ chance) divided 3-2 (one opponent with three trumps, the other with two) and trumps can be drawn in three rounds. If declarer is trying to play with a seven card trump suit, it is more likely that the outstanding trumps are divided 4-2 (48\%) than that the cards are evenly divided 3-3 between the opponents (36\%).

## Basic techniques by declarer

When new to the game, a player should be familiar with these strategies for playing the hand:

- trumping
- crossruff
- establishing long suits
- finesse
- holdup (mostly at NT contracts)
- managing entries
- drawing trumps


## Advanced techniques by declarer

Someone who plays regularly in tournaments should be familiar with these concepts:

- counting the hand (tracking the distribution of suits and high cards in the opponents' hands using inferences from the bidding and play)
- coup
- duck
- dummy reversal
- endplay
- principle of restricted choice
- safety play
- squeeze


## Basic techniques by defenders

- opening lead
- when to lead trump


## Advanced techniques by defenders

- avoiding an endplay or squeeze
- counting the hand (tracking the distribution of suits and high cards in the unseen hands using inferences from the bidding and play)
- false carding
- opening lead-using information from auction
- signaling
- uppercut


## Example

For definition of terms used in the example, see Contract bridge glossary.
The cards are dealt as in the diagram, and South is the dealer. As neither South nor West have sufficient high card strength to open the bidding, North opens with the bid of 1 H , which denotes a long suit and at least 12 high card points. East overcalls with 1 S , South supports partner's suit with 2 H , and West also supports spades with 2 S . North inserts a game try of 3 C , inviting the partner to bid the game of 4 H with good club support and overall values, and South complies, having extra values in form of DA, fourth trump, and doubleton Queen of clubs. The bidding was:


## West North East South



In bidding, North-South were trying to investigate if their cards are worthy for making a game, which yields bonus points if bid and made. East-West were competing with spades, hoping to play a contract in spades at a low level. 4 H is the final contract, 10 tricks being required for $\mathrm{N}-\mathrm{S}$ to make with hearts as trumps.

West (left of North, who is the declarer, having been first to bid hearts) has to make the opening lead and chooses the King of spades, playing it face down. After that, South lies his cards on the table and becomes dummy; West turns his leading card face up, and the declarer makes a plan of playing: the bottom line is, since he has to concede trump ace, a spade, and a diamond, he must not lose a trick in clubs.

After a while, the declarer dictates South to play a small spade. West plays low (small card) and North takes the SA, gaining the lead. He proceeds by drawing trumps, leading the HK. West takes his Ace and cashes the SQ. Since he may not continue spades for fear of a ruff and discard, he plays a diamond. Declarer ducks from the table, and East scores the DQ. Not having anything better to do, he returns the remaining trump, taken in North's hand. North enters the dummy using DA, and leads CQ in an attempt to finesse West's King. West covers with the King, North takes the Ace, and proceeds by caching now high CJ, then ruffs a small club with a dummy's trump. He ruffs a diamond in hand for an entry back, and ruffs the last club in dummy. Finally, he claims the remaining tricks by showing his hand, as it now contains only high trumps and there's no need to continue the play.
(The trick-by-trick notation can be also expressed using a table, but textual explanation is usually preferred, for reader's convenience. Plays of small cards or discards are not explicated, unless they were important for the outcome).

North-South have scored the required 10 tricks, and their opponents took the remaining 3. The contract is fulfilled, and North enters +620 for his side (North-South are in charge for bookkeeping in duplicate tournaments) in the traveling sheet. Every player returns his own cards into the board, and the next deal is played.

## Bridge on the Internet

There are several free and some subscription-based servers available for playing bridge on the Internet. OKBridge ${ }^{1}$ is the oldest of the still-running Internet Bridge services; players of all standards, from beginners to world champions may be found playing there. SWAN Games ${ }^{2}$ is a more recent competitor. Bridge Base Online ${ }^{3}$ is mostly free, and now has a much larger membership base than either of the above. Some National Contract Bridge Organizations now offer online bridge play to their members including the English Bridge Union, the Dutch Bridge Union and the Australian Bridge Federation. MSN and Yahoo! Games have several online Rubber Bridge rooms.

There are many advantages to playing Bridge online:

- The ability to choose when you play.
- The ability to choose your opponents. In a club game, you may be forced to play against pairs that are much weaker, rude, or much stronger. Playing online, you can play against opponents of nearly equal ability.
- Most servers offer an accurate player rating system. The ACBL and EBU masterpoints systems give credit for how much one has played rather than how well; most online systems have a rating system which attempts to measure one's ability without regard to the number of games played.
- There are fewer restrictions on which conventions one is allowed to use.
- You can not make inferences from partner's tone of voice or other cues available in real life. However, intentional cheating, such as instant messaging your partner, is easier.
- A detailed record of every hand may be kept, to help resolve complaints.
- It is impossible to make an illegal play by accident, as the software won't accept a play or call which does not conform to the rules.

The main disadvantage to playing online is that bridge is a social game, and many people play because they enjoy the social atmosphere of the bridge club.

## Definitions of common terms

## Main article: Contract bridge glossary

## Auction Bridge

The card game auction bridge was developed from straight bridge and was a predecessor to contract bridge. Around the same time five hundred was created by the United States Playing Card Company in 1904.

The main difference between auction bridge and contract bridge is that in auction bridge a game is scored whenever the required number of tricks (9 in No Trump, 10 in Hearts or Spades, 11 in Clubs or Diamonds) is scored. In contract bridge the number of points from tricks taken past the bid do not count towards making a game. Because of this, accurate bidding becomes much more important in contract bridge: partners have to use the bidding to tell each other what their suits and strengths are, so a judgement can be made as to what the chances are of making a game.

## Play

The bidding, play and laws were the same as contract bridge.

## Scoring

A scoring table for Auction Bridge, from the Official Rules of Card Games, 1973 is as follows:

Odd-tricks: no trumps are worth 10; spades 9; hearts 8 ; diamonds 7 ; clubs 6.
Game was 30 points, and only odd-tricks counted towards game. The first side to win two games won the rubber and scored a 250 point bonus.

Each under-trick was worth 50 points to the opponents.
Small slam was worth 50 points; grand slam was worth 100 points.
Honours were scored as follows: 4 trump honours in one hand 80; 5 trump honours or 4 aces in no trumps in one hand 100. For an addition honour in partner's hand, or for 3 or more honours divided between both hands 10 each.

Contracts could be doubled and redoubled, which doubled or quadrupled the odd-trick and under-trick amounts. In addition there was a bonus of 50 points for making a doubled contract and for each over-trick, this was doubled if the contract was redoubled.

## Psychic bid

Psychic bid (also psych) is a bid in contract bridge, grossly misstating the power and/or suit lengths of one's hand, used deliberately to confuse the opponents.

A psychic bid should mislead not only the opponents, but also the partner. So, a partnership utilising occasional psychic bids has to be cautious in ensuring full disclosure - not only of their formally agreed bidding system - but also of their habits. If within a certain partnership and under certain circumstances a misleading bid has been made more often, it is no longer considered a true psychic bid, but rather a partnership's habit. The partnership needs to disclose this information to the opponents.

Sponsoring organizations often impose a number of restrictions on psychic bids. For example, strong opening bids (such as game forcing 2 C ) are not allowed to be psyched. In addition, if the partner is perceived to have bid abnormally due to taking account of a psyche, then the score may be adjusted.

Some psychic bids are so common in tournament bridge, that they are often referred to as "mini-psychs". A typical example is the following 1 S bid on a hand with a fit for partner and spade shortness. For example, many consider the hand with S53 HQ642 DQJ85 C1084 to be an "automatic" 1 S bid after partner opens 1H and RHO doubles.

## Bridge scoring

## Duplicate bridge | Rubber bridge

In contract bridge, there are two basic types of scoring for a single deal: "duplicate" and "rubber" scoring, which share most features, but differ in how the components of the score
are accumulated. In duplicate scoring, the outcome of a deal presents a single number assigned to the pair who won the deal (the other pair receiving the same negative score by implication); in rubber bridge, that number is divided into two components: "above the line" and "below the line", both assigned to the winning pair.

## General

In general, if the contract was made, the score consists of the following components:

- Contract points, assigned to each odd trick bid
- Bonuses, assigned for:
- level of the contract,
- making a doubled or redoubled contract,
- Overtrick points, assigned for each trick which was taken over the contracted number of odd tricks.

If the contract was not made, the side that defeated the contract receives

- Penalty points, assigned for every undertrick


## Contract points

Contract points are awarded for the level of the contract, and depend on the denomination and double/redouble (but not on vulnerability):

| Denomination | Points per trick |  |  |
| :---: | :---: | :---: | :---: |
|  | Undoubled | Doubled | Redoubled |
| No trumps | $30+10$ for 1 st t | 20 for 1st | $120+40$ for 1st trick |
|  |  |  | 120 |
| minors ( $*$ and *) |  |  | 80 |

## Level bonus

There are four types of level bonus, awarded for partial contract, game, small slam and grand slam respectively. A game is any contract which is worth 100 or more contract points; for example, $4 \mathrm{H}, 5 \mathrm{C} 2 \mathrm{~S}$ doubled and 1 NT redoubled are games. A partial contract (or partscore) is a contract worth less than a game. The bonuses for games and slams depend
on vulnerability. The part-score bonus applies in duplicate and Chicago bridge, but not in classic rubber bridge scoring:

# Level Vulnerable Non-vulnerable <br> Partscore 50 <br> Game 500 <br> Small slam 750 <br> Grand slam 1500 <br> 500 <br> 1000 

Slams are also games, so when scoring a slam, both game bonus and appropriate slam bonus are added. Other level bonuses are not cumulative.

## Double and redouble bonus

When a (re)doubled contract was made, an additional bonus is added to the level bonus. It is colloquially referred to as an "insult", meaning that the opponents have "insulted" the pair by stating their opinion that the declarer is incapable of making the contract. 50 points are awarded for doubled, and 100 for redoubled contract made.

## Overtrick points

When the declarer scores overtricks, they're normally counted as contract points ( 30 for NT and major suits, 20 for minor suits), except when the contract was (re)doubled, when they are awarded substantially more ("adding salt to the insult"). In that case, the value also depends on vulnerability:

## Vulnerable Non-vulnerable <br> Doubled 200100 <br> Redoubled 400200

## Penalties

When the contract is defeated, regardless of its level and denomination, only the penalty points are assigned to the pair who defeated the contract. The penalties are summed up for every undertrick, and depend on number of undertricks, (re)double and vulnerability:

| No. of undertricks | Vulnerable |  | Non-vulnerable <br> Undoubled Doubled Redoubled Undoubled <br> Doubled Redoubled |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1st undertrick |  | 200 | 400 |  | 100 | 200 |
| 2nd and 3rd | 100 | 300 | 600 | 50 | 200 | 400 |
| 4th and futher |  | 300 | 600 |  | 300 | 600 |

Without double and redouble, every undertrick has fixed cost of 100 or 50 points. The figures for (re)doubled undertricks are set up so that $n$ vulnerable undertricks cost as much as $n+1$ non-vulnerable ones; for example, 4 doubled undertricks non-vulnerable cost $(100+200+300+300)=800$, the same as 3 undertricks vulnerable $(200+300+300)$.

## Duplicate bridge

In duplicate bridge (and the kind of "home parties" known as Chicago), all the categories are summed up, resulting in a single figure. The following table shows some examples (X denotes a double and XX a redouble):

| Contract | Ticks Vulneramade bility | Contract points | Level bonus | (Re)double bonus | Overtrick points | Penalties | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 8 any | $2 \times 30=60$ | 50 | - | - | - | 110 |
| 2 X | 8 Nvul. | $2 \times(2 \times 30)=120$ | 300 | 50 | - | - | 470 |
| 3 NT | 11 Vul. | $10+(3 \times 30)=100$ | 500 | - | $2 \times 30$ | - | 660 |
| $1+\mathrm{X}$ | 8 Nuul. | $2 \times(1 \times 20)=40$ | 50 | 50 | $1 \times 100$ | - | 240 |
| 54 XX | 12 Vul. | $4 \times(5 \times 30)=600$ | 500 | 100 | $1 \times 400$ | - | 1600 |
| 6 NT | 13 Nvul. | $10+(6 \times 30)=190$ | $300+500$ | - | 30 | - | 1020 |
| $4 *$ | 7 Nrul. | - | - | - | - | $3 \times 50$ | -150 |
| $4+\mathrm{X}$ | 7 Nvul . | - | - | - | - | $100+(2 \times 200)$ | $-500$ |
| $4+X$ | 7 Vul . | - | - | - | - | $200+(2 \times 300)$ | $-800$ |

## Rubber bridge

Rubber bridge uses the same values for tricks, bonuses and penalties, but they are divided into two categories:

1. Below the line are entered only the contract points
2. Above the line are entered slam bonuses, "insults", overtrick points and penalties wrung from the opponents. Partscore and game bonuses are not assigned; however, a form of game bonus is added at the end of the rubber, worth 700 points if the opponents did not score a game and 500 if they did. For details, see rubber bridge.

In addition, special (rummy-like) bonuses (referred to as "honors") are awarded in rubber bridge for particular holdings in one hand, regardless of the outcome of the deal:

- Four out of five top trump honors (A,K,Q,J,10) in one hand are awarded 100 points;
- All five top trump honors (A,K,Q,J,10) in one hand are awarded 150 points;
- All four aces in one hand in notrump contracts are awarded 150 points.


## Recent scoring changes

If you read old Bridge books, you may notice some differences in the scoring rules.
As of 1987, World Bridge Federation imposed the following scoring changes for duplicate bridge, and as of 1993 also for rubber bridge (however, since there are no official competitions, rubber bridge players accept them as they see fit):

- The undertrick penalty when doubled, not vulnerable, used to be 100 for the first undertrick and 200 for each subsequent. This was changed because it was too easy to sacrifice against a grand slam. A vulnerable grand slam is worth 1500 (slam bonus) +500 (game bonus) +210 (major suit trick score) $=2210$. Down 11 , doubled not vulnerable, used to be 2100, a profitable sacrifice.
- Also, the "insult bonus" for making a redoubled contract used to be only 50. This was changed to 100 , so that playing 5 of a minor, redoubled, making an overtrick, is always worth more than an undoubled small slam.


## Duplicate bridge

## Board | Traveling sheet

Duplicate bridge is the most widely used form of bridge used in tournament settings, and is also played in many bridge clubs. It is called "duplicate" because the same bridge hand is played multiple times, using boards to keep and pass each player's hand intact. Final scores are calculated by comparing your results with others who played the same hand.

The major organizations are:

- World Bridge Federation
- American Bridge Association
- American Contract Bridge League
- United States Bridge Federation
- European Bridge federation

In duplicate bridge, a player normally plays with the same partner throughout an event. The two are known as a "pair". There are two exceptions: on team events with five or six members swapping partners for portions of the event, and in individual tournaments, in which players change partners for each round.

## Game types

## Pairs game

In a pairs game, each deal is played a number of times, after which all the scores are compared. Every score is written into traveling sheet, which travels with the board, containing at least numbers of N-S and E-W pair and the score. The more common form of overall scoring is matchpoint scoring, with IMP scoring second. Every pair plays against many opponents, depending on the size of the field. With common small tournaments with up to about dozen tables, every pair plays against cca. $50 \%$ of other pairs (Mitchell movement); with smaller number of tables, they may play with a higher percentage of pairs (Howell movement), and with larger fields the tournament can be split into separate sections (every section being a "sub-field", but the results being reckoned across entire field).

Each round consists of a number of boards, usually two or three, sometimes four or five. After a round, some or all of the players reseat themselves according to a prescribed movement, so that each partnership pair opposes a different pair for each round; the boards are also moved. A session normally consists of 24 to 28 total boards, but this can vary in special circumstances. Most games are a single session, but tournament events are sometimes two, four or more sessions.

The Mitchell movement is the most common. The North-South pairs remain stationary. After each round, the East-West pairs move to the next higher table and the boards move to the next lower table. In case of an even number of tables, the East-West pairs are told to skip a table after about half the rounds so that they do not encounter boards that they have already played; alternatively ("Relay Mitchell"), a "relay" (playerless table) is introduced at half of the field, while first and last table share the boards from the same round. The "perfect" Mitchell is seven or nine tables, with 4 or 3 boards per round respectively: all players play all boards, and all pairs of each direction play all pairs of the other direction.

The Howell movement is sometimes used instead, usually when there is a relatively small number of tables. The actual movement is more complicated and varies by the total number of pairs. All pairs and boards move after every round according to guide cards placed on the tables (but in some cases one or two pairs remain stationary). The Howell is sometimes considered a fairer test than the Mitchell, because each pair faces all or nearly all of the other pairs, not just the pairs sitting the opposite direction.

Less common is the Chalfant movement. In this movement, the boards remain stationary while the players move according to guide cards. This requires significantly more physical tables, because several tables are not in play on any given round. (Like the Howell movement, this movement is typicaly used when there is a relatively small number of players, typically no more than 12 pairs. Also like the Howell movement, this movement produces a single winner and pairs face all or almost all of the other pairs in play.) This movement has the advantage that pairs are often moving to a table that was not in use on a previous round, so a slow pair does not delay as many other pairs as in a Howell. Also, for several sizes, this movement is technically superior in that more pairs face all other pairs than in the corresponding Howell movement. This movement has the disadvantage of requiring a larger number of physical tables, and thus more space. It also requires the players to carry guide cards with them and consult them, while the guide cards remain on the tables for Howell movements.

## Team game

In a team game, two pairs normally constitute a team. (Teams of five or six members are often permitted, but only four members play at any given time.) Two teams compete using two tables and having one pair from each team seated at each table, at opposite directions. (For example, team A may sit North-South at table 1 and East-West at table 2; then team B would sit East-West at table 1 and North-South at table 2.) A relatively larger number of boards are played (usually six to eight for "Swiss teams", usually 12, 24, or more for knockout events). The boards are moved (usually by a caddy) so that they are all eventually played at both tables.

Suppose Team A plays Team B. The first time a hand is played, one partnership from Team A takes the North-South cards and one partnership from Team B takes the East-West cards; when the hand is played again, it is played by the other two partnerships, but this time with Team A holding the East-West cards and Team B holding the North-South cards. Of course the teams may not discuss the deals between the two plays. After each deal has been played twice, the scores per deal are compared, and a score is given depending on the net total score from the two times the deal was played. For example, if one pair scores +1000 on a deal, and their teammates score -980, then the team's net score on that deal is +20 .

Several forms of scoring are then used to calculate the winner of the match. IMP scoring is most frequently used in team games, with Board-a-match (resembling matchpoint scoring) second.

- At IMP scoring, the difference is converted using the IMPs table that "compresses" big differences in score. Often, the total difference in IMPs of a single match is converted into so-called Victory points, which are summed up to determine the overall team ranking.
- At Board-a-match (BAM), each hand has equal weight; each hand is won, lost, or tied.

Those are the two commonly used methods; sometimes are also used:

- Total point score uses no conversion whatsoever; total-point scoring was more popular in the past, and is applied mostly for events where only two teams play an extremely long match.
- Patton scoring combines the methods of Board-a-match and Total point scoring.


## Individual events

An individual event in duplicate bridge is one where each round a player is paired with a different partner. Scoring is usually using matchpoint pairs scoring, but IMP pairs scoring can be used. There are various methods for assigning partners. In some methods, a given set of players always sit North, another set sit South, another set sit East, and a final set always sit West. This can be used to ensure that each pair consists of a relatively experienced or skilled player, and a relatively inexperienced player.

Individual events are more complex to run, and require that the players get accustomed to new partners on a frequent basis. Also, the outcome depends more on luck than in other types of events, as a good player often cannot do much when paired with a bad player, especially if the deal is complex. For those reasons they are less popular and less common than pair or team events, but some players are very fond of them.

## Scoring

## Matchpoint scoring

The most common form of pairs game is the matchpoint pairs game. (See Bridge scoring for the scoring method of individual deals.) In the final calculation, each partnership scores 2 matchpoints for each other partnership that scored fewer points with the same cards, and 1 point for each partnership that scored the same number of points. Thus, every board is treated equally, with the best result earning $100 \%$ of matchpoints available for given board, and the worst with $0 \%$ matchpoints; the opponents receive the complement score, i.e. $80 \%$ result for N -S pair implies $20 \%$ for their E-W opponents. Colloquially, scoring the maximum number of matchpoints on a certain board is known as a "top board", and scoring zero matchpoints is a "bottom board". The terms "high board" and "low board" are also used.

Note 1: in the United States, scoring is 1 point for each pair beaten, and one half-point for each pair tied.

Note 2: The above rule of 2 -versus-1 matchpoint is actually easy to apply in practical calculation. If the board is played $n$ times, the top result achieves $2^{*} n-2$ matchpoints, the next $2 * n-4$, down to zero. When there are several identical results, they receive the average. However, complications occur when not every board is played equal number of
times, or when an "adjusted" (director-awarded) score occurs. These cases can result in non-integer numbers of matchpoints - see Neuberg formula.

These matchpoints are added to determine the winner. Scores are usually given as percentages of a theoretical maximum: $100 \%$ would mean that the partnership achieved the best score on every single hand. In practice, the results in 60-65\% range are likely to win the tournament.

In Board-a-match team game, the matchpoints are calculated using a similar principle. Since there are only two teams involved, the only possible results are 2 (won), 1 (tied) and 0 (lost) points per board.

## IMP scoring

In IMP (International Match Points) scoring, every individual score is subtracted from another score, and the difference is converted to IMPs, using standard IMP table below. The purpose of the IMP table, which has sublinear dependency on differences, is to reduce results occurring from huge score differences ("swings").

The score that is being compared against can be obtained in the following ways:

- In team events, it is the score from the other table;
- In pair events, it can be:
- The datum score, most often calculated as the average score on board, excluding a number of top and bottom results. Sometimes, the median score is used instead.
- In "cross-imps" or "Calcutta" scoring, every score on board is compared against every other score (sometimes excluding top and bottom results) and IMPs summed up (and possibly averaged, to reduce "inflation").

IMP Table

| Point difference |  |  | Point difference |  |  | Point difference |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| from | to | IMPs | from | to | IMPs | from | to | IMPs |
| 0 | 10 | 0 | 370 | 420 | 9 | 1750 | 1990 | 18 |
| 20 | 40 | 1 | 430 | 490 | 10 | 2000 | 2240 | 19 |
| 50 | 80 | 2 | 500 | 590 | 11 | 2250 | 2490 | 20 |
| 90 | 120 | 3 | 600 | 740 | 12 | 2500 | 2990 | 21 |
| 130 | 160 | 4 | 750 | 890 | 13 | 3000 | 3490 | 22 |
| 170 | 210 | 5 | 900 | 1090 | 14 | 3500 | 3990 | 23 |
| 220 | 260 | 6 | 1100 | 1290 | 15 | 4000 or | more | 24 |
| 270 | 310 | 7 | 1300 | 1490 | 16 |  |  |  |
| 320 | 360 | 8 | 1500 | 1740 | 17 |  |  |  |

## Scoring and tactics

The type of scoring significantly affects pair's (team's) tactics. For example, at matchpoints, making one more overtrick than everybody else on a board gives the same result (the top) as making a slam that nobody else bid, whereas at IMP scoring, the difference comes down to 1 IMP ( 30 points) in the first case, but 11 or 13 IMPs ( 500 or 750 points) in the second case. In general, matchpoint scoring requires more "vivid" and risk-taking approach, while IMP scoring requires more careful and delicate handling (sometimes referred to as "cowardly" by ones who dislike it). The main features of the tactics are:

## - Matchpoints

- Overtricks are important
- Safety play is often neglected in the hunt for overtricks
- Thin games and slams are avoided
- Sacrifices are more frequent; e.g. going down 500 points doubled is worthy against opponents 620 points for a game.
- Doubles are more frequent, as they increase the score for the penalty.
- Playing in higher-scoring denominations (notrump or major suits) is important, as it may lead to an extra 10 or 20 points.


## - IMPs

- Overtricks are not important, as it's not worth the risk of losing e.g. game bonus (300-500 points $=8-11$ IMPs) for potential 1-IMP gain for an overtrick
- Safety play is very important, for the same reason
- Thin games and slams are often bid. Bidding a game with $40 \%$ probability of success vulnerable and $45 \%$ nonvulnerable, with a small slam with $50 \%$ probability, constitutes an equal deal, and anything over that increases the possibility of positive IMP score in the long run.
- Sacrifices are less frequent, as they may be risky.
- Doubles are less frequent, as they may be risky. Often, when an opponents' contract is doubled, it turns declarer's attention to the bad lie of cards, and may induce him to take a successful line of play that he wouldn't take otherwise.


## Contrast with rubber bridge

Duplicate bridge, especially matchpoint games, differs from rubber bridge: whereas the goal in rubber bridge is to win more points than the pair of people you are playing against, in duplicate bridge the goal is to do better than other pairs playing the exact same cards. Because of this, strategies are different. In rubber (like in IMP scoring), 30 points above the line for an overtrick is unimportant and hardly worth risking a set. In match-points duplicate, it is common for those 30 points to mean you get a top score instead of average - and may be worth risking going down. In rubber, an occasional 800-point penalty is disastrous, but on matchpoints it is no worse than any other bottom score. International match points is in the middle of these extremes. Huge penalties are worse than small penalties, but then 30 point differences are only moderately important.

A more subtle difference is in the bidding of partscore hands. In duplicate bridge, once a pair recognizes that they are playing for part score (less than a game), their objective is to win with the minimum bid. In rubber bridge, it may often be desirable to bid above this minimum as points below the line may be needed to complete a game.

Duplicate bridge also has the advantage of compensating for a run of bad luck. A pair which has gotten bad cards all night may still have the high score for the evening - so long as they play those cards better than the other pairs with the same cards.

## Board

Credit: Radius / Ray Spalding,

https://en.wikipedia.org/wiki/File:Board,_duplicate_bridge.png, CC BY-SA 3.0 license
In duplicate bridge, a board is a device used to pass a pre-dealt bridge hand from table to table, keeping the cards belonging to each of the four players separate. More generally, the term board refers to one "deal" or "hand" of play. In online bridge, there are no physical boards, of course, but the software emulates all the features.

## Markings

Each board contains distinctive markings:

- Board number - Used to ensure the correct board is played at the correct time.
- Compass - Used to orient the board properly with respect to the four players at a table.
- Dealer - Designates which player is the "dealer"; in duplicate bridge, this is used only to designate the player whose turn it is to make the first call of the auction.
- Vulnerable (red lettering plus red pocket inserts) - Shows which of the partnerships (if any) are vulnerable. (See main article for how vulnerability affects scoring.)

Set

A set of boards for duplicate bridge normally contains 36 boards. (The actual number of boards used in a particular session will vary depending on the number of players and other factors.) The dealer and vulnerability markings are standardized for each board number, utilizing all the permutations.

## Pockets

A board contains four pockets, each designed to hold thirteen playing cards. At the beginning of a session, the cards are distributed to the pockets in one of several ways:

1. Shuffle and play - a player at the first table to receive the board removes the cards from all four pockets, shuffles, cuts, deals them into four piles, and puts one pile into each pocket. It does not matter which player prepares which board. Usually, each table receives a number of boards and the players will prepare the different boards simultaneously.
2. Predealt - the sponsoring agency has prearranged the cards in the boards, and the boards are given to the players "ready to play".
3. Computer dealt - a number of boards are delivered to each table with the instruction to "sort into suits". A player takes each board and sorts the cards into suits and (usually) by rank, and places one suit face up in each pocket. Hand records are distributed to each table showing which cards are to be dealt to each hand. (Such hand records are usually prepared in advance by a computer program using a pseudorandom number generator.) The players cooperate in dealing the cards according to the hand record and placing the correct cards in each pocket. Of course, these boards will be passed to another table and never be played by the players preparing them.

No matter how the boards are prepared, they are not shuffled again during the session, and the cards in all pockets are kept face-down. Sometimes, at the end of a session or the beginning of a new session, a card or cards will be placed in the board face-up. This indicates that the board has not yet been prepared for the new session.

Apart from the cards, on pairs tournaments the board also carries a traveling sheet -a paper form where competitors at each table enter their scores. The board may contain a dedicated pocket for the traveling sheet, or it can be placed atop of one card pocket (usually, North's, since North-South pairs are responsible for filling it in).

## Play

Play of each board proceeds as follows:

1. The north player positions the board in the center of the table (perhaps at the top of a stack of boards).
2. Each player removes the cards from the pocket in front of her.
3. Each player counts her cards before looking at any card face. The director is summoned if any player does not have exactly thirteen cards.
4. The players look at their cards (without showing any card face to any other player at the table) and optionally arrange them according to personal preference.
5. The player designated as the dealer on the board makes the first call.
6. The bidding is completed and play proceeds.
7. To play to a trick, each player shows a card face or places a card face up on the table in front of her. The cards belonging to two different players are never mixed together like they are in rubber bridge.
8. After four cards are played to a trick, each player turns her card face down and places it in a row in front of her, overlapping left to right. If her side won the trick, it is placed straight up; otherwise, it is laid sideways. This is used to determine how many tricks each side has won at any time.
9. After the play, the scoring is agreed, and then each player gathers her own cards, shuffles them (with themselves only), and replaces them in the board pocket from which they came. The shuffle ensures that the next player can make no inference from the ordering of the cards in her pocket.

## Traveling sheet

Traveling sheet is a form used for recording individual results on duplicate bridge tournaments. In pairs tournaments, every deal is placed into boards and played several times by different competitors, unchanged. The results are entered into traveling sheets, which are placed in board pockets. At the end of the tournament, traveling sheets are gathered and the tournament is calculated (results compared) in order to determine the winners.

A traveling sheet usually has the following entries, that should be filled in by competitors:

- Board number
- Card diagram, which should be filled in only by the first pair who played the deal. Presence of diagram is not mandatory, but it can help reconstruct the deal if the cards are corrupted by careless players.
- A number of rows (typically 8-16, depending on the tournament size), where data about every score are entered, each having the following columns:

[^0]- Contract
- Declarer (optional)
- Number of tricks made
- Opening lead (optional)
- The score
- In addition, 2-4 more columns can be present, where the calculation staff can put the total scores for the board (especially if the calculation is performed manually rather than by computer):
- Number of matchpoints awarded at each table (for matchpoint scoring), or number of IMPs awarded (for IMP scoring)
- Sum of matchpoints or IMPs per match.


## Example

A traveling sheet on a 5-table matchpoint tournament, on board no. 1. Entries filled by competitors are colored blue, and entries filled by the calculating staff in red:

| NS EW Contract By Made Lead |  |  |  |  |  | Score MP/IMP |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 'NS EV | N | + |
| 1 | 1 | 4* | N |  | $\psi_{\mathrm{X}}$ | 420 | 5 | 3 |
| 5 | 4 | 4 | N | -1 | * X | 50 | 0 | 8 |
| 4 | 2 | 34 |  | +1 | - K | 170 | 2 |  |
| 3 | 5 | $4 \%$ | W |  | 4 A | 500 | 8 |  |
| 2 | 3 | 4 | N |  | * ${ }^{\text {J }}$ | 420 | 5 | 3 |

## Rubber bridge

Rubber bridge is a form of contract bridge played among four players, usually in "friendly play" (although playing for money is also frequent). As in other card games, the outcome of rubber bridge depends heavily on luck, but skills of the players are important nevertheless.

## Aim of the game

A rubber set (usually referred to simply as rubber) consists of several deals, where competing pairs try to make two consecutive games by scoring points "below the line". A game is achievement of 100 or more points for making one or several consecutive contracts whose scores are written "below the line" and added up. Penalties for failure to fulfill the contract are written "above the line" for the opponents and ultimatively summed up, but don't affect conditions for ending of the rubber.

In theory, a rubber can last indefinitely, as the pair with less cards can always sacrifice so that their opponents score high figures "above the line", but can not score below the line, ultimatively ending the rubber.

## Scoring

## Main article: Bridge scoring

Like in most other card games, the scoresheet is divided vertically into "our" and "their" column. However, it is also divided horizontally by "the" line, to distinguish points scored for fulfilling the contract and points achieved by other means. If the declarer makes his contract, the number bid, multiplied by a suit-dependent multiplier, is scored below the line. Any overtricks, again multiplied by the suit-dependent multiplier, are scored above the line.

The multiplier is 20 for clubs and diamond (the minor suits), and 30 for hearts and spades (the major suits). For No Trump, the multiplier is also 30, but with an added 10 points below the line.

Examples:
bid: 2 C, made 9 tricks: $40(2 \times 20)$ points below, $20(1 \times 20)$ above the line.
bid: 4 H , made 10 tricks: $120(4 \times 30)$ points below, $0(0 \times 30)$ above the line.
bid: 4 NT, made 11 tricks: $130(4 \times 30+10)$ points below, $30(1 \times 30)$ above the line.

## Game and rubber

If the score of a partnership below the line equals or exceeds 100 points (either at once or taken together with what already was below the line), the partnership is said to have scored a game, and all scores below the line are turned into scores above the line (by drawing
another line below). Thus, as in duplicate bridge, making a game requires five tricks in a minor suit, four in a major suit, or three in No Trump (or some combination of partial scores).

The first partnership that wins two games wins the rubber. They score a 700 point bonus if they won in two games, or 500 points if their opponents also made a game. If the rubber ends prematurely for whatever reason, the pair (if any) who scored one game while the opponents did not are awarded 300 points.

## Vulnerability and slam bonus

A partnership that has already made a game is called vulnerable, which is of importance for the slam bonus and for the downtricks.

If a pair bids and makes a contract of 6 in something (i.e. wins all but one trick), they are said to have made a small slam. This gives a bonus (above the line) of 500 points when not vulnerable, and 750 points when vulnerable. If a player bids and makes a contract of 7 in something (thus scoring all the tricks), he is said to have made a grand slam. This gives a bonus of 1000 points when not vulnerable, and 1500 points when vulnerable.

## Undertricks

If a pair goes down, their opponents score points above the line. If the pair is not vulnerable, their opponents get 50 points per undertrick, if it is vulnerable 100 points per undertrick.

## Doubling

If a pair is doubled, and makes their contract, they get double points for all tricks bid, while overtricks score extra-100 points per overtrick if not vulnerable, 200 points if vulnerable. Furthermore, the pair gets 50 points bonus 'for the insult'. All these values are doubled again if the contract was redoubled. The slam bonuses are not influenced by a double, nor are the rubber bonuses-although the latter are of course influenced by the fact that there are more scores below the line, and thus games are reached faster.

If a pair is doubled and goes down, the penalty (points to the other pair) are as follows:

- If the pair is not vulnerable, 100 for the first downtrick, 200 for the second and third, and 300 for each subsequent downtrick.
- If the pair is vulnerable, 200 for the first downtrick, and 300 for each following one.

These scores are also doubled again if the contract was redoubled.

## Honors

Unlike the duplicate, special (rummy-like) bonuses (referred to as "honors") are awarded in rubber bridge for particular holdings in one hand, regardless of the outcome of the deal. These bonuses are written above the line:

- Four out of five top trump honors (A,K,Q,J,10) in one hand are awarded 100 points;
- All five top trump honors (A,K,Q,J,10) in one hand are awarded 150 points;
- All four aces in one hand in notrump contracts are awarded 150 points.

However, a player must claim the honors bonus, at last before the next deal starts. If he forgets to do it, the bonus is not awarded.

## Tactics

Since the most important points are collected below the line, players focus on fulfilling the game as soon as possible. Thus, in bidding, if a pair has no points previously scored below the line, they seek to find the highest makeable contract, as it earns the maximum points below the line. This is in contrast to duplicate bridge, where making a partial contract has the same value whether played at level 1, making 9 tricks, or at level 3 , making the same 9 tricks; thus, duplicate players seek to buy a contract as low as possible if the prospects for a game are bleak.

On the other hand, when a pair has already scored below the line, they generally bid only the contract sufficient for making the game by accumulation. For example, if a pair already has 70 below, they will usually stop at level one or two (30-60 points below) even if their cards warrant more. Only if the cards offer a possibility of a slam (providing bonus of 500-1500) can drive a pair higher.

Of course, opponents may interfere with those attempts, seeking for a sacrifice contract if they estimate that the potential penalty is worth depriving opponents of the game or full rubber. While sacrifice in duplicate bridge is clearly a one-deal affair (the penalty is either smaller than the value of opponents' contract, or not), in rubber bridge its worth also depends on the luck in future deals. For example, a -500 sacrifice against opponents' rubber can turn profitable if the next deal provides a slam for the sacrificing side, but worthless if the cards would stay with the opponents.

In rubber bridge, speculative doubles are rare, as they also double potential opponents' score below the line if the contract is made.

Once the bidding is complete, in card play, the declarer seeks to fulfill the contract as safely as possible, dismissing the opportunity of overtricks if it can endanger the contract (safety play). This is similar to IMP duplicate game, but in contrast with matchpoints, where overtricks are important.

Slams (contracts at level 6 or 7) are attractive because of large bonuses, but also dangerous, as a failed slam also means a failure to achieve a game. A good pair will try to investigate the slam on as low level as possible, so as to remain in the "safe" zone if it turns out that the slam was not worth the risk.

## Example

The following example illustrates flow of a rubber game (the order of entering results is typically upwards above the line and downwards below the line):

| $\quad$ N-S | E-W |
| :--- | :--- |
| $300^{3}$ | $100^{5}$ |
| $30^{1}$ | $500^{5}$ |
| $40^{1}$ | $90^{2}$ |
| $70^{4}$ | $180^{5}$ |
|  |  |
| $120^{6}$ |  |
| $+500^{6}$ |  |
| $1060^{6}$ | $860^{6}$ |

1. North-South bid 1NT ( 40 below) and made an overtrick ( 30 above)
2. East-West bid and made 3 H ( 90 below)
3. East-West bid 3D, got doubled, and ended up down two (300 above for opponents)
4. North-South bid and made 2NT ( 70 below), which makes a game with previous 40. A new line is drawn below, and E-W's previous 90 is nullified (moved above the line). N -S are now vulnerable.
5. East-West bid and made 6 S ( 180 below), making their game. The slam bonus is (500 above). Also, declarer claimed honor points (100 above). E-W are now also vulnerable. A new line is drawn below.
6. North-South bid and made 4 S. This is their second game, ending the rubber. They are awarded 500 points for 1-game lead, and the total sums are 1060 for N-S and 860 for E-W.

## History

The most famous rubber match in history, referred to as "Bridge battle of the century" was held December 1931 - January 1932 between teams led by Ely Culbertson and Sydney Lenz. The match drew huge media and public attention, and significantly influenced the popularity of contract bridge. A total of 150 rubbers were played, and was ultimately won by the Culbertson team by a margin of 8,980 points. The match was a total success both for the game itself and the concepts of bidding as promoted by Culbertson.

## See also

- Goulash


## Bermuda Bowl

Bermuda Bowl is the term for World team championships in contract bridge named after the first edition was held in Bermuda, in 1950.

The event started out as a competition between USA, Europe and Britain. The first edition in 1950 was won by USA. After this, the Bermuda Bowl became a yearly challenge match between the USA and the European Champions. Over time, the format has changed several times, including more and more teams.

Currently the Bermuda Bowl is held every two years with 22 teams participating: 7 from Europe, 3 from North America, 2 from South America, 5 from Asia, 2 from Africa, 1 from Central America and 2 from Oceania. The Venice Cup and Seniors Bowl are held at the same venue in a similar format.

The 2005 event was held in Estoril in Portugal and was won by Italy with USA 1 second and USA 2 third. The winning Italian team was: Norberto Bocchi, Giorgio Duboin, Fulvio Fantoni, Lorenzo Lauria, Claudio Nunes, Alfredo Versace. Non-playing Captain: Maria Teresa Lavazza. Coach: Massimo Ortensi.

## Venice Cup

The World Team Championships in contract bridge for women players only is also known as Venice Cup, because the first edition was held in Venice, in 1974.

It is held every two years, in parallel to the Open World Team Championships, the Bermuda Bowl. The most recent Venice Cup was held in Estoril, Portugal, the winners were France (Daniele Gaviard, Benedicte Cronier, Nathalie Frey, Catherine d'Ovidio, Vanessa Reess, Sylvie Willard, NPC: Gerard Tissot).

## Masterpoints

Masterpoints are the rating system used by the American Contract Bridge League (ACBL) for its members' contract bridge card games.

Players placing high in an ACBL-sanctioned event (a club game, sectional tournament, regional tournament, etc.) receive masterpoints according to their place. The lowest place to receive masterpoints varies depending on how many pairs, individuals or teams played in the event.

Some events have an upper masterpoint limit, meaning that only players with a masterpoint holding under the limit may participate. This allows less experienced players more of a chance to place high, since they will not be playing against players who are significantly more experienced. Additionally, some events are stratified. This means that players with various masterpoint holdings play together, but in the final standings, players receive masterpoints based on their position within their stratum. For example, if you are first in stratum C, second in B and fourth in A, and the upper masterpoint limits are 300 for $C, 500$ for $B$ and 1000 for A, that means that among players with fewer than 300 masterpoints, you did the best. Among players with 500 points or fewer, you did second best, and among players with fewer than 1000 , you did fourth best. With those divisions, a player with 700 points would be able to place in stratum A, but not in B or C.

There are several colors of masterpoints, awarded depending on the event. Below is a list of colors, along with the events they are likely to be awarded in.

- Unpigmented - awarded in online play.
- Black - awarded in club games.
- Silver - awarded in sectionals, as well as STaCs (Sectional Tournaments at Clubs).
- Red - awarded in regionals (for places other than overall and section tops), as well as North American Open Pairs and Grand National Teams games at clubs.
- Gold - awarded for overall and section tops in regionals, as well as in NABCs (North American Bridge Championships) with an upper masterpoint limit of 750 or more.
- Platinum - awarded in national-rated events with no upper masterpoint limit.

ACBL members are assigned ranks according to their masterpoint holding. The most coveted rank is Life Master, which requires 300 masterpoints, of which 50 must be black, 50 silver, 25 gold, and 25 red or gold.

Masterpoints are used as a measure of skill. The system has been criticized by players who regard it more as a measure of experience than skill. Experience is often related to skill, but not necessarily. As an example of how the system can fail, consider two players with 5 black masterpoints each. Player A has earned them in 3 club games, and Player B has earned them in 20 club games. Obviously Player A has performed better, but according to their masterpoint holdings, their skill is equal. This is an extreme case, because in most cases, experience is directly related to skill. However, a player's masterpoint holding does not directly indicate the time it has taken the player to earn them, or the caliber of the events the player has earned them in.

## World Bridge Federation

World Bridge Federation (WBF) is the governing body of world contract bridge. Under WBF jurisdiction are organizations of world championships, most important being Bermuda Bowl - open teams championships, Venice Cup - women team championships, and World bridge olympiads. Current president of WBF is José Damiani.

The World Bridge Federation (WBF) was formed in August 1958 by delegates from Europe, USA and South America. It is incorporated under the laws of Switzerland as a 'non-profit' organization.

WBF membership now comprises 103 National Contract Bridge Organizations (NBOs) with about 700,000 affiliated members who participate actively in competitive bridge events locally, nationally and internationally. Most of the NBOs belong to one of the eight geographical zones, each of which has its own Zonal organization.

Each National Contract Bridge Organization agrees to fulfil certain requirements, such as opening its ranks to all its citizens and residents and upholding a standard of ethics acceptable to the WBF.

The World Bridge Federation has a Congress to which each NBO is entitled to send one delegate. The Congress meets every second year, at Team Olympiads and at World Championships.

The WBF is administered by an Executive Council which is assisted by the various Committees and Consultants it appoints.

## Playing cards

## Aces | Anglo-American | Burn Cards | Cut | Entry | Goulash | Holdout | Jokers | Shuffling | Suits | Trumps



Some typical modern playing cards
A playing card is a typically hand-sized rectangular piece of heavy paper or thin plastic used for playing card games. Playing cards are often used as props in magic tricks, as well as occult practices such as cartomancy, and a number of card games involve (or can be used to support) gambling. As a result, their use sometimes meets with disapproval from some orthodox religious groups. They are also a popular collectible (as distinct from the cards made specifically for trading card games). Specialty and novelty decks are commonly produced for collectors, often with political, cultural, or educational themes.


Shuffling a pack of cards

One side of each card (the "front" or "face") carries markings that distinguish it from the others and determine its use under the rules of the particular game being played, while the other side (the "back") is identical for all cards, usually a plain color or abstract design. In most games, the cards are assembled into a "deck" (or "pack"), and their order is randomized by a procedure called "shuffling" to provide an element of chance in the game.

## Early History

The origin of playing cards is obscure, but it is almost certain that they began in China after the invention of paper. Ancient Chinese "money cards" have four "suits": coins (or cash), strings of coins (which may have been misinterpreted as sticks from crude drawings), myriads of strings, and tens of myriads. These were represented by ideograms, with numerals of 2-9 in the first three suits and numerals 1-9 in the "tens of myriads". Wilkinson suggests in The Chinese origin of playing cards that the first cards may have been actual paper currency which were both the tools of gaming and the stakes being played for. The designs on modern Mah Jong tiles and dominoes likely evolved from those earliest playing cards. The Chinese word p'ai is used to describe both paper cards and gaming tiles.

The time and manner of the introduction of cards into Europe are matters of dispute. The 38th canon of the council of Worcester (1240) is often quoted as evidence of cards having been known in England in the middle of the 13th century; but the games de rege et regina there mentioned are now thought to more likely have been chess. If cards were generally known in Europe as early as 1278, it is very remarkable that Petrarch, in his dialogue that treats gaming, never once mentions them. Boccaccio, Chaucer and other writers of that time specifically refer to various games, but there is not a single passage in their works that can be fairly construed to refer to cards. Passages have been quoted from various works, of or relative to this period, but modern research leads to the supposition that the word rendered cards has often been mistranslated or interpolated.

It is likely that the ancestors of modern cards arrived in Europe from the Mamelukes of Egypt in the late 1300 s, by which time they had already assumed a form very close to those in use today. In particular, the Mameluke deck contained 52 cards comprising four "suits": polo sticks, coins, swords, and cups. Each suit contained ten "spot" cards (cards identified by the number of suit symbols or "pips" they show) and three "court" cards named malik (King), $n \bar{a} ' i b$ malik (Viceroy or Deputy King), and thānī nā'ib (Second or Under-Deputy). The Mameluke court cards showed abstract designs not depicting persons (at least not in any surviving specimens) though they did bear the names of miltary officers. A complete pack of Mameluke playing cards was discovered by L.A. Mayer in the Topkapi Sarayi Museum, Istanbul, in 1939; this particular complete pack was not made before 1400, but the complete deck allowed matching to a private fragment dated to the twelfth or thirteenth century. There is some evidence to suggest that this deck may have evolved from an earlier 48-card deck that had only two court cards per suit, and some further evidence to suggest that earlier Chinese cards brought to Europe may have travelled to Persia, which then influenced the Mameluke and other Egyptian cards of the time before their reappearance in Europe. It is not known whether these cards influenced the design of the Indian cards used for the game
of Ganjifa, or whether the Indian cards may have influenced these, but the Indian cards have many distinctive elements, such being round, being generally had painted with intricate designs, and comprising more than four suits (often as many as twelve).

## European Spread and Early Design Changes

In the late 1300 s, the use of playing cards spread rapidly across Europe. The first widelyaccepted references to cards are in 1371 in Spain, in 1377 in Switzerland, and in 1380 they are referenced in many locations including Florence, Paris, and Barcelona. A Paris ordinance dated 1369 does not mention cards; its 1377 update includes cards. In the account-books of Johanna, duchess of Brabant, and her husband, Wenceslaus of Luxemburg, there is an entry under date of the May 14, 1379 as follows: "Given to Monsieur and Madame four peters, two forms, value eight and a half moutons, wherewith to buy a pack of cards". An early mention of a distinct series of playing cards is the entry of Charles or Charbot Poupart, treasurer of the household of Charles VI of France, in his book of accounts for 1392 or 1393, which records payment for the painting of three sets or packs of cards, which were evidently already well known.

It is clear that the earliest cards were executed by hand, like those designed for Charles VI. However, this was quite expensive, so other means were needed to mass-produce them. It may be that the art of wood engraving, which led to that of printing, may have been developed through the demand for the multiplication of implements of play. The belief that the early card makers or cardpainters of Ulm, Nuremberg and Augsburg, from about 1418 to 1450, were also wood engravers, is founded on the assumption that the cards of that period were printed from wood blocks. Many of the earliest woodcuts were colored by means of a stencil, so it would seem that at the time wood engraving was first introduced, the art of depicting and coloring figures by means of stencil plates was well known. There are no playing cards engraved on wood to which so early a date as 1423 (that of the earliest dated wood engraving generally accepted) can be fairly assigned; and as at this period there were professional card makers established in Germany, it is probable that wood engraving was employed to produce cuts for sacred subjects before it was applied to cards, and that there were hand-painted and stencilled cards before there were wood engravings of saints. The German Brief maler or card-painter probably progressed into the wood engraver; but there is no proof that the earliest wood engravers were the card-makers.

The Europeans experimented with the structure of playing cards, particularly in the 1400s. Europeans changed the court cards to represent European royalty and attendants, originally "king", "chevalier", and "knave" (or "servant"). Queens were introduced in a number of different ways. In an early surviving German pack (dated in the 1440s), Queens replace Kings in two of the suits as the highest card. Throughout the 1400s, 56 -card decks were common containing a King, Queen, Knight, and Valet. Suits also varied; many makers saw no need to have a standard set of names for the suits, so early decks often had different suit names (though typically 4 suits).

The cards manufactured by German printers used the suits of hearts, bells, leaves, and acorns still present in German decks today used for Skat and other games. Later Italian and Spanish cards of the 15th century used swords, batons, cups, and coins. It is likely that the Tarot deck was invented in Italy at that time, though it is often mistakenly believed to have been imported into Europe by Gypsies. While originally (and still in some places) used for the game of Tarocchi, the Tarot deck today is more often used for cartomancy and other occult practices. This probably came about in the 1780 s, when occult philosophers mistakenly associated the symbols on Tarot cards with Egyptian hieroglyphs.

The four suits (hearts, diamonds, spades, clubs) now used in most of the world originated in France, approximately in 1480 . The trèfle, so named for its resemblance to the trefoil leaf, was probably copied from the acorn; the pique similarly from the leaf of the German suits, while its name derived from the sword of the Italian suits. It is not derived from its resemblance to a pike head, as commonly supposed. In England the French suits were used, and are named hearts, clubs (corresponding to trèfle, the French symbol being joined to the Italian name, bastoni), spades (corresponding to the French pique, but having the Italian name, spade=sword) and diamonds. This confusion of names and symbols is accounted for by Chatto thus:
"If cards were actually known in Italy and Spain in the latter part of the 14th century, it is not unlikely that the game was introduced into this country by some of the English soldiers who had served under Hawkwood and other free captains in the wars of Italy and Spain. However this may be, it seems certain that the earliest cards commonly used in this country were of the same kind, with respect to the marks of the suits, as those used in Italy and Spain."

Court cards have likewise undergone some changes in design and name. Early court cards were elaborate full-length figures; the French in particular often gave them the names of particular heroes and heroines from history and fable. A prolific manufacturing center in the 1500 s was Rouen, which originated many of the basic design elements of court cards still present in modern decks. It is likely that the Rouennais cards were popular imports in England, establishing their design as standard there, though other designs became more popular in Europe (particularly in France, where the Parisian design became standard).

Rouen courts are traditionally named as follows: the kings of spades, hearts, diamonds, and clubs are David, Alexander, (Julius) Caesar, and Charles (Charlemagne), respectively. The knaves (or "jacks"; French "valet") are Hector (prince of Troy), La Hire (comrade-in-arms to Joan of Arc), Ogier (a knight of Charlemagne), and Judas Maccabee (who led the Jewish rebellion against the Syrians). The queens are Pallas (warrior goddess; equivalent to the Greek Athena or Roman minerva), Rachel (biblical mother of Joseph), Argine (the origin of which is obscure), and Judith (of the Apocrypha). Parisian tradition uses the same names, but assigns them to different suits: the kings of spades, hearts, diamonds, and clubs are are David, Charles, Caesar, and Alexander; the queens are Pallas, Judith, Rachel, and Argine; the knaves are Ogier, Le Hire, Hector, and Judas Maccabee. Oddly, the Parisian names have become more common in modern use, even with cards of Rouennais design.

## Later Changes

In early games the kings were always the highest card in their suit. However, as early as the late 1400s special significance began to be placed on the nominally lowest card, now called the Ace, so that it sometimes became the highest card. This concept may have been hastened in the late 1700s by the French Revolution, where games began being played "ace high" as a symbol of lower classes raising in power above the royalty. The term "Ace" itself comes from a dicing term in Anglo-Normal French, which is itself derived from the Latin as (the smallest unit of coinage). Another dicing term, trey (3), sometimes shows up in playing card games.

Corner and edge indices appeared in the mid-1800s, which enabled people to hold their cards close together in a fan with one hand (instead of the two hands previously used). Before this time, the lowest court card in English cards was officially termed the Knave, but its abbreviation ("Kn") was too similar to the King ("K"). However, from the 1600s on the Knave had often been termed the Jack, a term borrowed from the game All Fours where the Knave of trumps is termed the Jack. All Fours was considered a low-class game, so the use of the term Jack at one time was considered vulgar. The use of indices changed the formal name of the lowest court card to Jack.

This was followed by the innovation of reversible court cards. Reversible court cards meant that players would not be tempted to make upside-down court cards right side up. Before this, other players could often get a hint of what other player's hands contained by watching them reverse their cards. This innovation required abandoning some of the design elements of the earlier full-length courts.

The Joker was an American innovation. Created for the Alsatian game of Euchre, it then spread to Europe from America along with the spread of Poker. Although the Joker card often bears the image of a fool, which is one of the images of the Tarot deck, it is not believed that there is any relation.

## Card Game Rules and Hoyle

Most card games simply do not have universally accepted official rules (Contract bridge being one of a few notable exceptions). Instead, there are many rule books that attempt to capture rules (and common variations) as practiced by at least some people they have interviewed. When moving from one group to another, the rules will often change, so it is wise for any group to be sure they understand the rules they'll use before beginning.

In the 1740 s Edmond Hoyle determined that, since so many people were interested in learning to play the card game Whist well, he would become a professional Whist tutor. Along with personal instruction, he also wrote down his basic approaches to playing Whist well in a small book which his clients could buy. The book was popular but unaffordable to many, so many illegal or questionable copies were made. In November 1742 Hoyle copyrighted the work, and made the work more widely available; copies of the book were extremely popular. Hoyle never actually wrote down the rules of Whist; he presumed that
his reader already knew the basic rules, and his work was focused on teaching how to play it well. Observing his own success, Hoyle immediately wrote books on other subjects (Backgammon, Piquet, Chess, and Brag). Hoyle died on August 29, 1769.

Hoyle's works began the idea of selling popular game books. Many of these books contain the word "Hoyle" (just as many dictionaries contain the word "Webster"), but Hoyle would not recognize most of the games described in today's books. In particular, having the world "Hoyle" in a title does not give a book any greater authority, since anyone can write a book with Hoyle's name in the title.

## Playing Cards Today

The primary playing cards in use today, called Anglo-American playing cards, includes the English suits, reversible Rouennais court cards, and usually two Jokers (often distinguishable, with one being more colorful than the other). The fanciful design and manufacturer's logo often displayed on the ace of spades began under the reign of James I of England, who passed a law requiring an insignia on that card as proof of payment of a tax on local manufacture of cards.

Though specific design elements of the court cards are rarely used in game play, a few are notable: the jack of spades and jack of hearts are drawn in profile, while the rest of the courts are shown in full face, leading to the former being called the "one-eyed" jacks. The king of hearts is shown with a broadsword behind his head, leading to the name "suicide king".

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## Aces

An ace is a playing card. In the standard deck, an ace has one suit symbol (a heart, a diamond, a spade, a club) in the center of the card, sometimes large and decorated, especially in the case of the ace of spades. In most card games, aces have the highest value of all cards in a suit; in some, the lowest.

## Anglo-American

A standard Anglo-American deck of playing cards is composed of 13 ranks in each of 4 suits, plus 2 jokers, for a total of 54 cards. The suits used are the French suits of spades ( S ) and clubs (C), which are black, and diamonds (D) and hearts (H), which are red (four-color decks can occasionally be found, but they are rare). In each suit there are 10 spot cards, each of which is identified by the number of suit symbols (pips) it shows, and three court cards (also called "face cards") of the Rouen design that carry highly stylized depictions of persons.

Modern playing cards carry index labels on opposite corners (sometimes all four corners) to facilitate identifying the cards when they overlap. The 1 -spot card of each suit is called an ace, and in many games is given the highest rank. It carries the index label "A". The next highest rank in most games is the court card called the king, followed by the other court cards, the queen and jack (also called "knave"). They carry index labels of "K", "Q", and "J", respectively. Finally, the remaining spot cards ranking numerically from 10 (highest) to 2 (lowest). Their index labels are simple numerals. The 2 -spot card is often called a deuce, and the 3-spot a trey.

When giving the full written name of a specific card, the rank is given first followed by the suit, e.g., "Ace of Spades". However, standard shorthand notation lists the suit first, e.g., "SA".

There is no standard ranking among the four suits, though many games do specify such a ranking. For example, the game of bridge ranks the spade suit highest, followed by hearts, diamonds, and clubs.

One of the two jokers is often more colorful or more intricately detailed than the other, but this feature is not used in most common card games. The design of jokers is not standard, and many manufacturers use them to carry trademark designs. In many card games the jokers are not used.

It is also common practice now for the Ace of spades to bear special markings that include the manufacturer's name and date of production. This practice began under the reign of James I, who passed a law requiring an insignia on that card as proof of payment of a tax on local manufacture of cards.

Until August 4, 1960, decks of playing cards printed and sold in the United Kingdom were liable for taxable duty and the Ace of Spades carried an indication of the name of the printer and the fact that taxation had been paid on the cards. The packs were also sealed with a government duty wrapper.

500 , and some other games, require extended standard decks with extra spot cards (in the case of 500,11 's, 12 's, and red 13 's).

See also:

- Playing card
- Card game


## Burn Cards

A burn card is a playing card dealt from the top of a deck, and placed aside unused by those playing a card game. This is often done in casinos to deter cheating, to provide extra cards for use when an irregularity of play occurs, or for other reasons. In blackjack for example, several cards are burned after the shuffle to make card counting more difficult. In poker, the top card of the deck stub is burned at the beginning of each betting round, so that players who might have been able to read markings on that card during the previous round cannot take advantage of that information.

## Cut

After a deck of playing cards is shuffled, it is often given to a player other than the one who performed the shuffle for a procedure called a cut. To cut the deck, the player removes as a unit roughly half of the cards from the top of the deck, placing that portion on the table next to the remaining cards, toward the dealer (by convention). Either he or the dealer then picks up the remaining bottom portion of the deck, places it upon the former top portion, then squares the deck.

The term is also used for a random selection procedure in which a player perform the first part of a cut (removing a group of cards from the top of a deck), then look at the value of the card on the bottom of that portion, then replaces it. Another player then does the same, and the values of the cards thus exposed are used for such things as selecting who deals the game. This is often used as a pure gamble as well, much like fliping coins.

## Entry

An entry, in trick-taking card games such as bridge, is a card that allows a player to win the trick, thus getting the right to lead the next trick. Gaining the lead when some other player (including one's partner) led to the previous trick is referred to as entering one's hand; a card that wins a trick to which another player made the lead (except the last trick) is therefore known as an entry.

## Example

This bridge example demonstrates the concept of and importance of entries:
North is unable to win a trick in any suit except spades. South has no spades, and so cannot lead spades. If South declares this hand at no trump and the opening lead is a club, he will probably take just 9 tricks with the top cards in his hand. Although the dummy holds the top six spades, they are useless unless somebody leads spades, which South cannot do. If South did have a spade, he could use it as an entry to the dummy, allowing the dummy to win the six spades tricks.


If South declares with hearts as trump, he has a good chance of making all 13 tricks: one of the dummy's small trumps now becomes an entry when used to ruff the declarer's small club. Unless the defense can ruff, South's small diamonds can be discarded on North's high spades.

## Goulash

Goulash (also Ghoulie) is a style of playing the card game of bridge, normally in friendly play such as rubber bridge, in which the cards are not thoroughly shuffled between consecutive deals. The aim is to create deals where the suits are more unevenly distributed between the players, thus creating "wild" deals in order to make the game more vivid.

Goulash dealing has variations; basically, each player sorts the cards from the previous deal by suits, and all four hands are stacked back in the deck. The deck is then cut once or twice, and cards are then dealt in groups of 4-5-4 or 5-5-3, instead of one at a time as usual.

Some players play a goulash in rubber bridge only when the previous deal was passed out; others play full goulash rubbers. In both cases, at least a game must be bid in the goulash deal, otherwise, the partial (part score) contract is discarded and the goulash redealt.

When goulash dealing is in effect, many players adjust their bidding principles in some or all of the following ways in order to accommodate the anticipated wildness of the deal:

- Only five-card suits may be bid
- Weak balanced hands (in 12-15 high card points range) are passed rather than opened
- Preemptive openings are forbidden; instead, a high-level opening bid denotes the exact number of tricks the hand possesses.
- Conventions are highly reduced, as opponents will often interfere and break up the subtle information exchange.


## Holdout

In gambling jargon, a holdout is any of numerous accessories used by cheats to help them "hold-out" a card (or cards) during a game. Some holdout devices are extremely simple and require moderate or advanced manipulative skill to be used properly. On the other hand, there is a group of holdout devices which are mechanical in nature, therefore they fall under a separate category of holdout machines. Even if those machines are complex mechanical apparatuses, they still require a good level of skill from the cheat's part, to be used well.

Most of the holdout devices used today have been invented in the 19th century.
The main purpose of any holdout device is to temporarily hold a card out of the game, so that the cheat may retrieve it at some later convenient time. Only one card out of play can tremendeously increase the odds of wining. Not only that the cheat knows the identity of this card (an advantage that no other player has) and knows that it couldn't possibly be dealt to any other player, but this card also serves as if an extra card was dealt to the cheat on every round. In effecft, this is as if the cheat was dealt a bonus card, so that he may decide which combination of cards he likes best and finally discard the unwanted one, only to possibly use it on the next round (or at least switch it for a better one).

Some of the most popular holdouts are:

- the arm pressure sleeve holdout
- the ring holdout
- the vest holdout
- the Kepplinger holdout
- the cuff holdout


## Jokers

The Joker is a special card found in decks of playing cards.
There are usually two Jokers per deck, and the artwork on the card varies depending on the deck's publisher. Often, one Joker card will be in black and white, while the other will be in full color.

The Joker's use is greatly varied, as well. Many card games omit the card from use entirely; others, such as Euchre make the card one of the most important in the game. Often, the card is merely a wild card and can be used as anything. The term "The Joker's wild" originates from this practice.

Shuffling


A deck of playing cards is randomized by a procedure called shuffling to provide an element of chance in card games. There are several techniques for this; the most common is called a "riffle", in which half of the deck is held in each hand with the thumbs inward, then cards are released by the thumbs so that they fall to the table intertwined.

This can also be done by placing the halves flat on the table with their rear corner touching, then lifting the back edges with the thumbs while pushing the halves together. While this method is a bit more difficult, it is often used in casinos because it minimizes the risk of exposing cards during the shuffle.

Another procedure is called "stripping", where small groups of cards are removed from the top or bottom of a deck and replaced on the opposite side (or just assembled on the table in
reverse order). This is a much less effective randomizing procedure, and is not recommended unless used in conjuction with riffling.
"Pushing" is the procedure of pushing the ends of two halves of a deck against each other in such a way that they naturally intertwine. This requires skill and practice, as does "fanning", which involves spreading the halves into fan shapes and intertwining them.

Shuffling is often followed by a cut.
The mathematician and magician Persi Diaconis is an expert on the theory and practice of card shuffling, and an author of a famous paper on the number of shuffles needed to randomize a deck, concluding that it did not start to become random until 5 good riffle shuffles, and was truly random after 7. (You would need more shuffles if your shuffling technique is poor of course.) Recently, the work of Trefethen et al. has questioned some of Diaconis' results, concluding that 6 shuffles is enough. The difference hinges on how each measured the randomness of the deck. Diaconis used a very sensitive test of randomness, and therefore needed to shuffle more. Even more sensitive measures exist and the question of what measure is best for specific card games is still open.

Here is an extremely sensitive test to experiment with. Take a standard deck without the jokers. Divide it into suits with 2 suits in ascending order from ace to king, and the other two suits in reverse. (A brand new deck already comes ordered this way.) Shuffle to your satisfaction. Then go through the deck trying to pull out each suit in the order ace, two, three.. When you reach the top of the deck start over. How many passes did it take to pull out each suit?

What you are seeing is how many rising sequences are left in each suit. It probably takes more shuffles than you think to both get rid of rising sequences in the suits which were assembled that way, and add them to the ones that weren't!

In practice the number of shuffles that you need depends both on how good you are at shuffling, and how good the people playing are at noticing and using non-randomness. 2-4 shuffles is good enough for casual play. But in club play good bridge players take advantage of non-randomness after 4 shuffles, and top blackjack players literally track aces through the deck.

## References

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## Suits



The four Anglo-American playing card suits: spades, hearts, clubs and diamonds.
In playing cards, a suit is one of several categories into which the cards of a deck are divided. Most often, each card bears one of several symbols showing to which suit it belongs; the suit may alternatively or in addition be indicated by the color printed on the card. Most card decks also have a rank for each card, and may include special cards in the deck that belong to no suit.

## Traditional Western playing cards



A set of 52 playing cards. Credit: 17177, https://en.wikipedia.org/wiki/File:Set_of_playing_cards_52.JPG, $\underline{C C}$ BY-SA 3.0 license

Although many different types of deck have been known and used in Europe since the introduction of playing cards around the 14th century (see playing cards)—and several different ones are still used in various regions for various games-almost all of them have in common that:

- there are exactly four suits (possibly with the addition of some non-suited cards, see below);
- the cards within each suit are distinguished from one another by bearing different numbers or names, known as ranks;
- the ranks serve the explicit purpose of indicating which cards within a suit are "better", "higher" or "more valuable" than others, whereas there is no order between the different suits; and
- there is exactly one card of any given rank in any given suits.

The differences between European decks are mostly in the number of cards in each suit (for example, thirteen in the commonly-known Anglo-American deck, fourteen in the French Tarot, eight in most games in Germany and Austria, ten in Italy, five in Hungarian Illustrated Tarock) and in the inclusion or exclusion of an extra series of (usually) twenty-one numbered cards known as tarocks or Major Arcana, sometimes considered as a fifth suit, but more properly regarded as a group of special suitless cards, to form what is known as a Tarot deck.

The Spanish-style suits are the original suits (which is why the English term 'spade' refers not to the tool, but derived from the Spanish word for sword, which this suit represents), the suits found on the divinatory Tarot deck, and the suits found in the oldest surviving European decks. The French style suits became popular after they were introduced, largely because cards using those suits were less expensive to manufacture; the traditional suits required a woodcut for each card, while with the French suits the "pip" cards-the cards containing only a certain number of the suit objects-could be made by stencils, and only the "court" cards, the cards with human figures, required woodcuts.

| Traditional Western Playing Cards |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Culture | Suit |  |  |  |
| Anglo-French suits | Hearts ( $\left.{ }^{( }\right)$ <br> (Ccours, Hearts) | Diamonds ( $*$ ) <br> (Carreaux, Squares) | Clubs ( <br> (Trefles, Clovers) | Spades (4) <br> (Piques, Pikes) |
| German suits | Hearts (Herz) | Bells (Schellen) | Acorns (Eichel) | Leaves or Grass (Laub or Gras) |
| Swiss German suits | Shields (Schilten) | Bells (Schellen) | Acorns (Eicheln) | Flowers (Rosen) |
| Italo-Spanish suits | Cups (coppe/copas) | Coins (denari/oros) | Clubs (bastoni / bastos) | Swords (spade /espadas) |
| Tarot suits | Cups | Pentacles, Coins | Wands, Rods | Swords |

The above table shows the original equivalence between various names and designs used for the suits in traditional decks in different parts of Europe. It does not show every country individually (for example, France and Denmark have 78-card Tarot decks, but they use the
familiar hearts, diamonds, spades and clubs), although Anglo-American decks are known in every country, and would be used for imported games such as bridge.

## Suits in games with traditional decks

A huge number of card games have been invented for the Anglo-American deck, and as such the general statement that "suits are usually equal" now has countless exceptions.

## Trumps

In a large and popular category of trick-taking games, traditionally called whist-style games although the best-known example may now be bridge, one suit is designated in each hand of play to be trump and all cards of the trump suit rank above all non-trump cards, and automatically prevail over them, losing only to a higher trump if one is played to the same trick. In most such games, trump cards cannot be played if the player can follow suit to the card led to the trick; in a few, trumps can be played at any time. The result of this is that trump cards are more likely to win tricks than cards of a non-trump suit of the same value. The "Major Arcana" of the Tarot cards are used as a permanent suit of trumps in the game of tarocchi or tarock.

It is unclear whether the word "trump" derives from "triumph", documented as the name of a card game in 1529, or from "trump", meaning to deceive or cheat, from the French tromper.

## Special suits

Some games treat one or more suits as being special or different from the others. A simple example is Spades, which uses spades as a permanent trump suit. A less simple example is Hearts, which is a kind of point trick game in which the object is to avoid taking tricks containing hearts. With typical rules for Hearts (rules vary slightly) the queen of spades and the two of clubs (sometimes also the jack of diamonds) have special effects, with the result that all four suits have different strategic value.

## Ordering suits

Whist-style rules generally prevent the necessity of determining which of two cards are different suits has higher value, because a card played on a card of a different suit either automatically wins or automatically loses depending on whether the new card is a trump. However, some card games also need to make a definition of which suit is intrinsically the most valuable. An example of this is in auction games such as bridge, where if one player bids to make some number of heart tricks and another bids to make the same number of diamond tricks, there must be a mechanism to determine which takes precedence.

As there is no truly standard way to order the four suits, each game that needs to do so has its own convention; however, the ubiquity of bridge has gone some way to make its ordering a de facto standard. Typical orderings of suits include (from highest to lowest):

- Bridge: spades, hearts, diamonds, clubs (for bidding and scoring);
- Five Hundred: hearts, diamonds, clubs, spades (for bidding and scoring);
- Ninety-nine: clubs, hearts, spades, diamonds (supposedly mnemonic as they have respectively 3, 2, 1, 0 lobes; see article for how this scoring is used);
- Skat: clubs, spades, hearts, diamonds (for bidding and scoring and to determine which Jack beats which in play).


## Pairing or ignoring suits

In some games, such as blackjack, suits are completely meaningless and are ignored. In a few games, such as Canasta and the Klondike solitaire game popularized by Windows 3.1, only the color (red or black) is important-thus, hearts and diamonds are equivalent to each other, but not to spades or clubs. This, at least notionally, creates problems with four-color decks (see below).

Bridge players constructing complex signaling systems have found it useful to give names to every possible pair of suits (so that they can agree that a particular bid means, for example, that they hold "five of a red suit": see also two suiter). There are three ways to divide four suits into pairs, and they are known as red (hearts and diamonds) versus black, major (spades and hearts, a reference to the suit order as above) versus minor, and pointed (diamonds and spades, which visually have a sharp point uppermost) versus rounded. In the event of widespread introduction of four-color decks, it has been suggested that the red/black distinction could be replaced by pointed bottoms (hearts and diamonds visually have a sharp point downwards, whereas spades and clubs have a blunt stem).

## Suits and colors

It has frequently been observed that printing the four different suits in four different colors would be visually less confusing than the traditional system of using just two (which in any case probably arose from a printing economy no longer necessary-see Playing cards). Indeed, most European languages simply call the suit of a card its "colour". Four-color decks are in use in specific games (such as Barry's \& Les's) or in places where visibility may not be ideal (or on a computer screen). In these, most commonly diamonds are blue cards, hearts are red cards, spades are black cards and clubs are green cards.

## Adding extra suits to the Anglo-American deck

Various people have independently suggested expanding the Anglo-American deck to five, six or even more suits, and have proposed rules for expanded versions of popular games such as rummy, hearts, bridge, and poker that could be played with such a deck (see external links).

## Commercial decks

Commercially available five-suit (65-card) decks include Stardeck, which introduces "stars" as a fifth suit, and Cinco Loco, which introduces " 5 "s. In both decks the fifth suit is colored a mixture of black and red. Older British cards used blue-colored crowns as a fifth suit.

Commercially available six-suit (78-card) decks include the Empire Deck (which has three red suits and three black suits, introducing crowns in red and anchors in black) and Sextet (which has two red suits, two black suits, and two blue suits). Previously, another commercial deck was manufactured by Five Star Games, which had a gold colored fifth suit of five pointed stars. The court cards are almost identical to the diamond suit in a Gemaco Five-Star deck. Cadaco manufactured a game "Tripoley Wild" with a fifth suit, (and other Wild Cards,) which contain pips of all four standard suits (hearts, diamonds, spades, and clubs) on one card. That deck is not sold separately, but as part of boxed game.

## Home-made decks

If extra-suited decks are not readily available or are too expensive, an easier way to create a deck with up to eight suits is to buy two identical decks and modify the suit symbols throughout one of them with a marker. R. Wayne Schmittberger in New Rules for Classic Games originated the idea of drawing an arrow through each heart to create "valentines" and a cross through each diamond to create "kites". Erick Flaig suggests that clubs could have their stem rounded to create "cloverleaves" and spades could have horns and tail added to become "devils".

## Other modern suited decks

## Suit-and-value decks

A large number of games are based around a deck in which each card has a value and a suit (usually represented by a color), and for each suit there is exactly one card having each value, though in many cases the deck has various special cards as well. Examples include Tichu, Mü und Mehr, Lost Cities, Sticheln, Rage, Schotten Totten, Wizard and ROOK.

## Other suited decks

Decks for some games are divided into suits, but otherwise bear little relation to traditional games. An example would be the game Taj Mahal, in which each card has one of four background colors, the rule being that all the cards played by a single player in a single round must be the same color. The selection of cards in the deck of each color is approximately the same and the player's choice of which color to use is guided by the contents of their particular hand.

In the trick-taking card game Flaschenteufel (The Bottle Imp) players must follow the suit led, but if they are void in that suit they may play a card of another suit and this can still win the trick if its value is high enough. For this reason every card in the deck has a different number to prevent ties. A further strategic element is introduced since one suit contains mostly low cards and another, mostly high cards.

A special mention should be made of the card game Set. Whereas cards in a traditional deck have two classifications-suit and rank-and each combination is represented by one card, giving for example 4 suits $\times 13$ ranks $=52$ cards, each card in a Set deck has four classifications each into one of three categories, giving a total of $3 \times 3 \times 3 \times 3=81$ cards. Any one of these four classifications could be considered a "suit", but this is not really enlightening in terms of the structure of the game.

## Fictional decks

Several people have invented decks which are not meant to be seriously played. The Double Fanucci deck from Zork takes the most imaginative licence with the suits: it has no fewer than fifteen, with the names Mazes, Books, Rain, Bugs, Fromps, Inkblots, Scythes, Plungers, Faces, Time, Lamps, Hives, Ears, Zurfs, and Tops. The Cripple Mr. Onion deck uses eight suits, combining the standard Anglo-American ones with the traditional/Tarot/Spanish ones. The Discordian deck is a parody of the Tarot deck, its five suits corresponding to the five Discordian elements.

## C Clubs

Clubs is one of the four suits found in playing cards.

## D Diamonds

Diamonds is one of the four suits found in playing cards.

## H Hearts

Hearts is one of the four suits found in playing cards

## S Spades

Spades is one of the four suits found in playing cards.

## Trumps

In card games, trumps frequently figure in trick-taking games such as bridge, euchre, and hearts.

Trumps are cards which rank above non-trump cards, and which automatically prevail over them unless a higher trump is played. In most such games, trump cards cannot be played if the player can follow suit to the card led in the trick; in a few, trumps can be played at any time. The "Major Arcana" of the Tarot cards were originally used as a permanent suit of trumps in the game of tarocchi or tarock.

## Hand Evaluation

## Beer card | Golden Fit | High Card Points | Law of Total Tricks | Losing Trick Count | Quick Tricks | Suits | Two Suiter | Zar Points | Diagram Convention

## Beer card

The beer card or the 7 of diamonds is a card in the card game of bridge which is given a special importance in popular bridge sub-culture. The "beer card rule" is not an official part of the rules of bridge but it is played commonly in universities in the United Kingdom and elsewhere.

The basic rule is that, if a player wins the last trick of the hand with the 7 of diamonds, his partner must buy them a pint of beer. The additional requirements vary depending whether the beer card trick winner is the declarer or one of the defenders. For the declarer, the requirements are that:

- Must make contract,
- Must win last trick with the D7,

- Diamonds must not be trumps (though some people play that only diamond part scores are excluded),
- Must take a justifiable line on the contract to win as many tricks as possible (i.e. not lose tricks to setup the beer or in order to keep the 7 until the last trick),

For a defender, the requirements are that:

- Contract must be defeated
- Must win last trick with the beer card
- Diamonds must not be trumps
- Must try to win as many tricks as possible (i.e. not lose tricks to setup the beer or in order to keep the 7 until the last trick)

If the contract is doubled then two beers are earned. If the contract is redoubled then four beers are earned.

## Example

South plays in the inferior contract of three notrump, against which the opponents cash the first four spade tricks. To maximize the chance of getting a beer, declarer must discard two top diamond honors and a small club from dummy. If the diamonds do not break $4-0$, it's straightforward to cash nine winners, ending with the beer card. If the diamonds don't break, there's a chance that a defender will be pseudosqueezed and choose to discard a diamond. For declarer to discard three diamond honors risks losing the contract unncessarily, and so forfeits the beer, even if diamonds turn out to break normally.

## Golden Fit

In bridge, a Golden Fit occurs when one partnership has at least eight cards in one suit. Often, a partnership having a golden fit in one suit will bid their contract in that suit; however, partnerships with golden fits in minor suits may prefer to play in no-trump, as they will earn more points for each trick and in some cases, can bid a more reliable game contract in no-trump than in the minor suit.

## High Card Points

High-card point count is a method of hand evaluation.

- Ace $=4$
- King $=3$
- Queen $=2$
- $\quad$ Jack $=1$

There is a total of 40 points in a deal, 10 per suit. An average hand has 10 points. For balanced hands, this is pretty accurate. For unbalanced hands, distribution and honors in long suits need to be considered as well - see point count. This method can also undervalue aces, kings, tens, and nines, and can overvalue queens and jacks.

A total of 26 points combined among partnership's hands means that game in no-trump or a major suit is likely. A total of 29 points is usually enough for game in a minor. A total of 33 is usually enough for a small slam, as the opponents cannot have 2 aces. A total of 37 is usually enough for a grand slam, as the opponents cannot have an ace. These totals can be lowered based on adjustments for distribution. Many expert players play that 25, or even 24, high
card points is enough for a good game. A slam is frequently available on only 29 or even 26 high card points, but advanced bidding methods, such as conventions, are required to bid such slams with confidence.

## Law of Total Tricks

The Law of Total Tricks pertains to the card game of contract bridge, and is used to help determine how high to bid in a competitive auction. It is not really a law (because counterexamples are easy to find) but it describes a relationship that seems to exist somewhat regularly. Written by Jean-René Vernes for french players in the fifties as a rule of thumb, it was first described in English in a 1969 magazine article.

The "law" can be stated as follows:
The total number of tricks available on a deal is equal to the total number of trump cards both sides hold in their respective best suits.

For example, suppose that North-South have an eight-card heart fit and East-West have an eight-card spade fit. The total number of trumps is 16 so the "law" says the total number of tricks is also 16 . That is, if North-South can take 8 tricks playing in hearts, then East-West can take 16-8 (also 8) tricks playing in spades; if North-South can take 9 tricks in hearts, the "law" says East-West can take only 7 tricks in spades.

The "law" is said to be most accurate when the high card points are fairly evenly divided between the two sides and the bidding is competitive. Experts also apply adjustment factors to improve accuracy.

When one combines the "law" with the scoring table, it turns out that the following is quite often winning strategy:

Bid to a number of tricks equal to the number of trumps you and your partner hold (and no higher) in a competitive auction.

Thus, if you have an eight-card fit, you are safe to bid to the two level but are unsafe to go to the three level. But, if you have a nine-card fit, the three level will be safe.

In this context, "safe" does not necessarily mean that you will make your contract. But if not, it means you should have a worthwhile save against the opponents' contract. For example, if the opponents have bid to two spades, and you have a nine-card heart fit, the "law" says you should bid three hearts. Assuming the opponents have an eight-card spade fit, there are 17 total trumps. If the opponents can take 8 tricks, the "law" says you can take 9 . If the opponents can take 9 tricks, the "law" says you can take only 8. But down one (even doubled, if not vulnerable) is a less negative score for you than letting the opponents make three.

There are a number of bridge conventions that take advantage of the "law". For example, when partner opens one of a major suit (showing five or more in the suit) and you hold four of that suit, a Bergen raise gets you immediately to the three level. (You bid three of partner's major with 0-6 points, three clubs with 7-9 points and three diamonds with 10-12 points.)

In 2002, Anders Wirgren called the accuracy of the "law" into question, saying it works on only $35-40 \%$ of deals. However, Larry Cohen remains convinced it is a useful guideline, especially when adjustments are used properly.

## References

- Cohen, Larry (1992). To Bid or Not to Bid: The LAW of Total Tricks. Natco Press. ISBN 0-9634715-0-3.
- Jabbour, Zeke (August, 2004). Lawless Territory. ACBL Bridge Bulletin, pp. 27-28.
- WIRGREN, Anders I Fought the Law of Total Tricks


## Losing trick count

Losing trick count (sometimes abbreviated to LTC) is a method of hand evaluation in the game of Bridge.

A hand can have at most three losers in each suit, for a maximum of twelve in a hand. You count distribution losers ( 0 for void, 1 for singleton, 2 for doubleton, 3 for tripleton or more) and high card losers ( 1 for each missing ace, king, queen). The number of losers in a suit is the minimum of its high card losers and its distribution losers, with high cards covering distribution losers. For example, Ax is one loser: the doubleton has two losers and the ace covers one of them. Another example, Qx is two losers: the doubleton is two losers and the queen is not useful until after two tricks are lost.

A typical opening bid has seven losers, such as AKxxx Axxx xx xx (1+2+2+2=7). To figure out how high to bid, add the number of losers in your hand and partner's hand and subtract from 24. So, seven losers opposite seven losers leads to $24-14=10$, so game in a major is likely. Another example: seven losers opposite five losers leads to $24-12=12$, so a slam is likely.

The flaws in this method are that an ace is undervalued and a queen is overvalued. Also, it undervalues short honor combinations such as Qx or a singleton king. It does not place any value on cards jack or lower.

Recent new insights on such issues have led to the New Losing Trick Count (The Bridge World, Vol 74, Issue 8, may 2003). This count utilises the concept of half-losers: a missing Ace is three half losers, a missing King two half losers and a missing queen one half loser. A typical opening bid has fifteen or fewer half losers. The trick taking potential of two opposing
hands equals 25 minus the half of the sum of the half losers of both hands. So, fifteen halflosers opposite fifteen half-losers leads to $25-(15+15) / 2=10$ tricks.

## See also

- Point count


## Quick Tricks

Quick tricks is a method of hand evaluation. Basically, it counts the number of "sure" tricks in a suit.

- $\mathrm{A}=1$
- $\mathrm{AK}=2$
- $A Q=1.5$ (because the Q has a $50 \%$ chance of winning a trick if you take a finesse)
- $\mathrm{K}=0.5$
- $K J=1$
- $\mathrm{AKQ}=2$ (not 3, because someone will likely ruff the 3rd round)
- $K Q=1$

The disadvantage of this method is that it overvalues Aces and King, and undervalues Queens and Jacks. Both the high card point method and losing trick count methods are better adjusted to this problem.

## Suits

## Black Suit | Red Suit | Major Suit | Minor Suit | Pointed Suit | Rounded Suit | Two Suiter | <br> Point count

## Black suit

In contract bridge the black suits are spades and clubs, because most Anglo-American playing cards print these suit symbols in black. There is nothing special about these two suits as a combination in bridge, but it is often convenient to be able to talk about suit combinations in this way. Other games such as Canasta may give special functions to black cards or red cards.

See: two suiters.

## Red Suit

The red suits are hearts and diamonds, because most Anglo-American playing cards print these suit symbols in red. There is nothing special about these two suits as a combination in contract bridge, but it is often convenient to be able to talk about suit combinations in this way.

Other games such as Canasta give special functions to black cards or red cards.
See: two suiters.

## Major suits

In the card game contract bridge, the major suits are spades and hearts. The major suits are of prime importance for tactics and scoring as they outrank the minor suits while bidding and also outscore them. Much of the tactics of bidding in bridge revolves around the attempt by partners to find a "fit" in one of the major suits that will allow them to easily make a game contract.

## See also

- Two suiter


## Minor suits

In contract bridge the minor suits are diamonds and clubs. They are given that name because contracts made in those suits score less ( 20 points per contracted trick) than contracts made in the major suits ( 30 points), and they rank lower in bidding. In particular, one can make game with a bid of 4 in a major suit, while a bid of 5 is required in a minor.

## See also

- Two suiter


## Pointed suits

In contract bridge, the pointed suits are spades and diamonds. This is merely a mnemonic term used in describing hands, plays, and other situations; there is no game significance to this combination of suits.

See two suiter.

## Rounded suit

In contract bridge, the rounded suits are hearts and clubs. This is merely a mnemonic term used in describing hands, plays, and other situations; there is no game significance to this combination of suits.

See two suiter.

## Two Suiter

In contract bridge, a two suiter is a hand containing cards mostly from two of the four suits. Normally a hand is considered a two suiter if it contains at least ten cards in two suits, with the shorter suit of the two being at least four or five cards long (depending on partnership agreement or some different classification schemes). The six possible combinations are given the names "major suits" (spades and hearts), "minor suits" (diamonds and clubs), "black suits" (spades and clubs), "red suits" (hearts and diamonds), "pointed suits" (spades and diamonds), and "rounded suits" (hearts and clubs).

## Point count

The point count is the fundamental method of hand evaluation now used in the card game of bridge. It consists of high card points plus distribution points (except when bidding notrump). See table 1.

For example, the hand:

evaluates to 12 high card points (an ace, two kings, and a queen). Unless a notrump contract is being considered, Tack

## Table 1

## Feature Point value

High card points
Ace 4
King
3
Queen 2 add one point for the doubleton in hearts for a total of 13 points.

This article briefly describes the distributional point Woid

## Distribution points

 count introduced by William Anderson of Toronto and adopted/developed by Charles Goren in the 1940s. Several other distributional point count valuations are in use, which may assign point values to long suits instead Dolbletotıof or in addition to short suits. One such system awards one point for a five card suit and one additional point for each additional card in the same suit. Which to use is a matter of personal preference and experience.

The basic point count should be adjusted based on several factors. High cards combined in one suit are worth more than the same value cards scattered in two or more suits. High cards in long suits are worth more than in short suits. Distribution is worth more when you have found a golden fit with partner, that is, a suit in which you both have length and that will become the trump suit.

The point count is used to determine the level of the contract a partnership should try to reach on each deal (see table 2). A partscore is any contract less than game. The game contracts are three notrump, four of a major suit (Spades or Hearts), and five of a minor suit (Diamonds or Clubs). A small slam is a contract for six and a grand slam is a contract for seven, in any suit or in notrump.


It is not uncommon for players to reduce these requirements by a point. For example, many partnerships will bid game with only 25 points. Also, note that game in a minor suit usually requires 29 points rather than 26 (it takes at least 9 tricks to win a game in No Trump; 10 tricks for a major suit; 11 tricks for a minor suit). In any event, the point count does not guarantee that a partnership will make its contract at the recommended level-it is just a guideline based on what works in most cases.

The various bids in a partnership's agreed bidding system will reveal each player's point count (within a certain range) and this information is used to determine how high to bid. For example, in Standard American, an opening bid of one in a suit shows 13 (or more) points; a subsequent response of one in a new suit shows six (or more) points and two in a new, lower ranking suit shows 10 (or more) points. When your partner opens the bidding with one of a
suit, and you hold 13 to 18 points, you know that you should strive to bid a game; if you hold 19 or more points, you should strive to bid a slam.

## References

- Francis, Henry; Truscott, Alan; \& Francis, Dorthy (Eds.), (1994). The Official Encyclopedia of Bridge (5th Ed.). Memphis, TN: American Contract Bridge League Inc. ISBN 0-943855-48-9.


## Zar Points

Zar Points is an advanced, statistically-derived method for evaluating Contract Bridge hands developed by Zar Petkov for use by more experienced players. The statistical research Petkov conducted in the areas of hand evaluation and bidding is useful to any advanced bridge player, regardless of their bidding or hand evaluation system, but the research showed that the Milton Work point count method, even when adjusted for distribution, does not accurately describe hands. As a result, players often make incorrect, or sub-optimal bids. Zar Points are designed to take many additional factors into consideration by assigning points to each factor based on statistically weight. While most of these factors are already implicitly taken into account by experienced players, Zar Points provides a quantitative method that allows them to be incorporated into bidding accurately.

## Hand Evaluation

To evaluate an opening hand, in addition to standard high card point count, add points for:

- Controls: add two points for each ace and one point for each king
- Length: add the lengths of the two longest suits
- Shape: add the difference between the length of the longest suit and the shortest suit

When re-evaluating a hand based on earlier bidding, add points for:

- Support: add one point for each honor in partner's suit (up to two)
- Finesse: subtract or add a point for honors in opponents suits depending on whether they are on or off side
- Unguarded Honors: discount honors in short suits bid by opponents
- Extra Trump Support: add three points for each trump over the promised length
- Secondary Fit: add three points for any invitational second suit card over 4
- Super-fit: After agreement on trumps, add points for each trump over 8: 3 if your shortest suit is a void, 2 for a singleton, 1 for a doubleton.

For bidding systems that allow one partner to know the shape of the other's hand, an additional misfit adjustment exists. To calculate the misfit modifier, find the difference in length between spade suits in each hand. Perform a similar calculation for the other three suits and sum the differences. When the partners do not have an 8 card trump fit, the misfit modifier subtracts from the total Zars. When the partners have a trump fit longer than 8 , the misfit modifier adds in place of the super-fit modifier if it is larger.

The misfit modifier(m4) can be estimated if one partner knows the difference in lengths between the two most different suits(m2) because m 2 is approximately $75 \%$ of m 4 when m 4 is below 14 . When m 4 is above $14,0.8 \%$ of the time, m 2 is only $60 \%$ of m 4 . This means that the misfit modifier can be estimated by increasing m 2 by $1 / 3$.

26 Zar Points(Zars) are required to open. 16 Zars are required to respond. 52 Zars is game at the four level. Bidding levels are five points apart yielding:

Two Level -- 42 i.e. $26+16$
Three Level -- 47
Four Level -- 52
Five Level -- 57
Six Level -- 62
Seven Level -- 67

## Use in Existing Bidding Systems

One way to use Zar Points is to convert them into the more traditional HCPs.
To do this, take the total Zar Points, excluding high card points and controls, then subtract eight, and then divide by two. Add to this result points for high cards and controls using this scheme:

- Each Ace as 4.5pts
- Each King as 3pts
- Each Queen as 1.5pts
- Each Jack as .5pts.

The result will be a more accurate estimate of hand strength adjusted to the traditional scale. Several experts have used Zar Points in this fashion.

## New Bidding Systems

Petkov has proposed the guts of bidding method, similar to the Precision Club derivatives Symmetric Relay and MOSCITO, that makes extensive use of limit bids, relays, and the shape defining properties of Zar Points to rapidly describe a hand. Below is a summary of the basics, omitting some of the finer points and the research details supporting the decisions. To make this a full system, a partnership would need to agree on what conventions to use. Most of the ideas from other systems can carry over. Partnerships interested in using this system should familiarize themselves with the reasons behind this basic bidding pattern before selecting specific conventions.

## Requirements for Game

- Grand Slam
- 67+ZP with fit or
- 72+ZP without fit
- First round control in all suits
- Small Slam
- 62+ZP with fit or
- $67+Z \mathrm{ZP}$ without fit
- First round control of at least three suits
- Second round control for the suit with no first round control
- No Trump Game
- All suits stopped
- 52+ZP and any 5-3 fit or 4-4 minor fit
- $57+\mathrm{ZP}$ without fit
- Major Suit Gam
- $52+\mathrm{ZP}$ and major suit fit
- Minor Suit Game
- 57+ZP and minor suit fit
- Does not meet No Trump requirements
- Not more than 2 quick tricks in any suit


## Opening Bids

Opening bids are divided into three intervals: just enough to open (26-30 Zars), one extra bidding level (31-35 Zars), and two or more extra bidding levels (36+ Zars). Because distribution can dramatically affect the playability of a hand, each of these Zar Points ranges can cover a wide number of traditional high card points. The opening level could represent between 3 and 19 HCP. The middle level could represent between 7 and 22 HCP. The maximum level could represent between 11 and 30 HCP . These ranges are inclusive. These three ranges are statistically derived: $60 \%$ of hands will fall in the lowest range, $30 \%$ will fall in the middle range, and $10 \%$ will fall in the top range.

- 1C: 36+ Zars, Any Distribution, or 31-35 balanced
- 1D: 31-35 Zars, Any Distribution, or 26-30 with 6-card minor
- 1H: 26-30 Zars, $4+$ cards in H , may have 4 cards in S
- 1S: 26-30 Zars, $4+$ cards in S, may have 4 cards in H (and 5 in S)
- 1NT: 26-30 Zars, No 6-card suit, no 4-card major, no 5-5 minors
- 2C: 26-30 Zars, 6 H or 6 H and 5 in another suit
- 2D: 26-30 Zars, 6S or 6 S and 5 in another suit
- $2 \mathrm{H}: 26-30$ Zars, 5 -card H suit and 6 cards in a minor
- 2S: 26-30 Zars, 5 -card $S$ suit and 6 cards in a minor
- 2NT: 26-30 Zars, At least 5-5 in minors
- 2C: 26-30 Zars, 7-card Club suit
- 2D: 26-30 Zars, 7-card Diamond suit
- 2H: 26-30 Zars, 7-card Heart suit
- 2S: 26-30 Zars, 7-card Spade suit
- 3NT+: 8+ card suits


## Responding to Opening Bids

Because of the very descriptive nature of each of the opening bids, the responder is in control of the bidding unless the opener bid 1C. Also, the responder will be able after the re-bid by the opener to estimate the misfit modifier, allowing an accurate determination of where to play the hand.

- Responses to 1 H or 1 S
- 1 S response to 1 H is round forcing and asking to the opener to better describe his hand. It shows $4+$ spades. If opener rebids the heart suit, he has exactly 5 hearts.
- 1 NT is "to play", it discourages game and denies 4 spades if in response to 1 H .
- 2C is artificial and forcing; shows prospects for game; denies 4 spades if in response to 1 H .
- Direct raise of the suit is pre-emptive and sign-off.
- All other bids are "natural" and to play.
- Responses to 1 NT
- 2C is a game-forcing relay asking for distribution
- 2 D rebid is 4333 distribution (so 18-22 HCP + Controls). Oriented towards 3NT
- 2 H rebid is 4432 with 3 cards in hearts (implying 2 cards in spades and a 4-4 minors).
- 2 S rebid is 4432 with 3 cards in spades (implying 2 cards in hearts and a 4-4 minors).
- 2 NT is distribution with 5 clubs and no singleton
- 3C is distribution with 5 diamonds and no singleton
- 3 H is 5431 with 3 hearts (implying 1 spade)
- 3 S is 5431 with 3 spade (implying 1 heart)
- 2D is a transfer to 2 H ; Afterward:
- a rebid of 2 NT is invitational to 3 NT or 4 H with $5+$ hearts
- a rebid of 2 S is invitational to 3NT and shows no relevance to either major
- 2 H is a transfer to 2 S ; a 2 NT rebid is invitational with $5+$ spades
- 2 S is a transfer to 2 NT or 3C; 2NT by opener shows interest in game in clubs
- 2NT is a transfer to 3C or 3D; 3C by opener shows interest in game in diamonds
- All level three responses are game forcing and show a 4441 distribution with a singleton in the bid suit
- Respond to 2C with 2D (a relay)
- Rebid of 2H specifies uni-suit (6 hearts)
- Rebid of 2 S specifies 5 card spade side-suit
- Rebid of 3C specifies a 5 card club side-suit
- Rebid of 3D specifies a 5 card diamond side-suit
- Respond to 2D with 2H (a relay)
- Rebid of 2S specifies a uni-suit (6 spades)
- Rebid of 2NT specifies 5 card heart side-suit
- Rebid of 3C specifies a 5 card club side-suit
- Rebid of 3D specifies a 5 card diamond side-suit
- Other responses above 1 NT
- 2NT asks for side top honor
- New suit is round forcing oriented toward fit and then side top honor
- Other bids are "to play" unless partnership has agreed otherwise
- Responses to 1C
- 1D is negative (less than 16), any distribution
- 1 H is positive $(16+)$, at least four cards in hearts
- 1 S is positive (16+), at least four cards in spades
- 1NT 16-20, balanced hand, etc.
- Other bids are similar to Precision Club or related systems of the partnership's choosing
- Responses to 1D
- 1 H forcing, natural asks opener to show his hand, any new suit on the next round is forcing
- 1 S forcing, natural asks opener to show his hand, any new suit on the next round is forcing
- 1NT negative, responder is ready to pass next bid of opener
- 2C artificial, forcing, 21+, game prospects, no 4 card major, will support a major bid with 3 cards on next round
- Other responses are up to the partnership


## Diagram Convention

## Contract bridge diagram convention

A standard convention has been developed to illustrates hands in contract bridge. The cards are shown with each line representing a suit. If the suit is not explicitly indicated by a prefix consisting of symbol describing the suit (S, H, D, or C) (also abbreviated 'S', 'H', 'D' or 'C' respectively), the order is, from top to bottom, as follows: spades, hearts, diamonds and clubs. Each card in a suit is indicated by its abbreviation.
'A', 'K', 'Q', 'J', '10' (or 'T'), '9', '8', '7', '6', '5', '4', '3', '2'.

Spacing is used for readability only (thus A K J being equal to AKJ). It is convention to put a card of higher rank always to the left of a card of lower rank, as in the list above. When one hand is void (i.e. has no cards) in a suit, it is usually denoted by a dash (-). The diagram is always drawn with North on top, and other hands as in geographic maps. One or more hands can be left out if irrelevant for presentation. For reader's convenience, in most diagrams South is declarer, so that the reader can see the hand as if (s)he is playing it; exceptions to this rule can occur when reporting deals from actual matches, but even then the players' seats are often rotated to match the common convention.

The following is an example of a bridge diagram:

- AK43
- 862
+ Q10
* J965
+ 106
- AQ953
+ AJ982
+-

| N | 4 Q95 |
| :---: | :---: |
| W E | - K4 |
| W E | + K754 |
| S | - Q1073 |
| ¢ J872 |  |
| - J104 |  |
| + 3 |  |
| - AK842 |  |

## Bidding Systems

2/1 Game Forcing | Acol | Blue Club | Bridge World Standard | Goren | Polish Club | Precision Club | Preempt | Sacrifice | Standard American | Strong Club System

Bidding system is set of agreements and conventions in bidding between two partners in contract bridge. A bidding system defines the meaning of every possible bid by each partner, and presents a codified language which allows the partners to find out about each other's holdings and determine the correct contract.

It should be noted that, by the rules of the game, the semantics of a bridge system must be public and known to the opponents. Thus, the opponents are entitled to know the meaning of every bid as defined by the system (but not the inferences about the partner's cards that a player draws by looking at his own hand). Also, they are entitled (when it's their turn to bid or play) to ask the partner of the bidder about the meaning of the bid during bidding phase.

Bidding systems can be classified into two large categories: natural systems and artificial systems. In natural systems, most bids (especially in early phase of the bidding) denote length and/or strength in the suit (cards) bid. In artificial systems, the bids are more highly codified, so that for example a bid of 1C may not be related to clubs at all.

Natural system(s) are a "lingua franca" of all the bridge players throughout the world (with certain regional variations). Thus, a one-time partnership can agree to play a natural system and understand each other fairly well.

Every regular bridge partnership often alters certain aspects of a system, adding their specific agreements or preferred conventions. Thus, most systems outlined below present guidelines or general frameworks rather than well-defined sets.

## Classification

1. Natural systems in general have the following features:

- Level- 1 suit bids denote at least 4 or 5 cards in a major suit, and 3 or 4 cards in a minor suit, with strength of about (11)12-20(22) high card points. The suit bid is generally the longest. The former criterion inflicts further classification into fourcard major and five-card major systems.
- Bid of 1 NT always presents a balanced hand in a narrow high card points range. The common ranges are $15-17$ or 16-18 HCP ("strong notrump") and 12-14 ("weak notrump").
- Bid of 2C typically presents a very strong hand (23 HCP up).
- Bid of 2NT presents a strong balanced hand, usually 20-22 HCP.
- Meaning of bids 2D, 2 H and 2 S varies. Two common approaches are that it shows either a weak two bid or an "intermediate" hand (20-22 HCP) with a long suit bid.

The most widespread natural systems are:

- Acol, featuring 4-card majors and weak notrump, originating in Great Britain
- Standard American, originally with 4-card majors but later transforming into 5card majors.
- 2/1 game forcing, based on Standard American and gradually superseding it.

1. Artificial systems can be further clasified into:
2. Strong club systems are the most popular artificial systems, where opening of 1C shows a strong hand (typically 16 HCP up). Other level-1 bids are typically natural, but limited to about 15 points. The most popular strong club systems are:

- Vanderbilt club (the predecessor)
- Precision club
- Blue club

2. In Small club systems, the bid of 1C is ambiguous, showing several types of hands. That typically includes some range of balanced hands, some hands with long club suit, and very strong hands. The represents are:

- Vienna club (the predecessor)
- Roman club, developed and used by famous Blue team
- Polish club, originating (and standard) in Poland but also gained certain popularity worldwide

3. Strong diamond systems are similar to strong club systems, but the bid of 1D shows a strong opening, and the bid of 1C is typically ambiguous, as in small club systems. An example is Leghorn diamond, played by some top Italian pairs in 1970s.
4. Strong pass systems are highly artificial and fairly rare. In those systems, an initial pass shows a hand of opening strength (11+ HCP); as result, weaker hands must be opened with a bid instead (such bids are called "ferts", short for fertilizers). Strong pass systems are mostly banned by World Bridge Federation and other governing organizations from all competitions except the highest-level
ones, because opponents cannot be reasonably expected to cope with such unusual approach.

- Relay systems are based on relay bids - the artificial bids where one partner just bids the cheapest denomination (relay bid) and the other describes his distribution and high cards in detail (relay response) using a highly codified scheme. Such systems are out of the above classification (based on opening bid structure), as the relay feature takes place later in the auction. For example, relatively popular "Moscito system" has variants based on strong-club and strong-pass approaches. Symmetric relay is based on Precision club.


## 2/1 Game Forcing

2/1 game forcing (Two-over-one game forcing) is a bidding system in modern contract bridge, where a non-jump two-level response to a one-level opening bid commits a partnership to at least the game level. It is based on Standard American bidding and has largely superseded it; the principal difference is that a full opening bid is required for a response at the two level to an opening bid of one of a major. Thus, the response of 1NT to 1 H or 1 S opening is forcing or semi-forcing.

Some pairs don't play that 1D-2C is game forcing (although some texts recommend that approach). Also, $2 / 1$ game forcing doesn't apply to a passed hand, or if there is an intervening bid or double by an opponent. Some pairs play that $2 / 1$ isn't absolutely game forcing; the pair can stop below game only when responder rebids his suit. For example, $1 \mathrm{H}-2 \mathrm{C} ; 2 \mathrm{H}-3 \mathrm{C}$ is nonforcing by some $2 / 1$ players. A regular partnership should discuss this possibility.

The $2 / 1$ auctions are $1 \mathrm{H}-2 \mathrm{C}, 1 \mathrm{H}-2 \mathrm{D}, 1 \mathrm{~S}-2 \mathrm{C}, 1 \mathrm{~S}-2 \mathrm{D}$, and $1 \mathrm{~S}-2 \mathrm{H}$. Hands without an opening bid are required to respond 1 NT to 1 H or 1 S . In Standard American, 1NT response is nonforcing, but in $2 / 1$ it is forcing for one round of bidding. Since this bid is forcing, hands with a three-card limit raise can start with 1N and later jump-support partner. See Forcing notrump for additional details. One variant employed is to play 1 NT response to 1 H or 1 S as semi-forcing.

Most pairs combine these basic features of $2 / 1$ system with one or more of the following conventions:

- Jacoby transfers over 1 NT opening,
- Jacoby 2NT, showing strong support with 4 or more cards
- Splinter bids


## Example sequences

1S - 2C
2D-2S
Forcing to game, with original spade support and good club suit. This is different than in standard bidding, in which such a sequence would show about 10 points, and club suit could be semi-fake.

1S-2C
2S - 2NT.
Forcing to game, with balanced hand and a good club suit.
1S-2C
1D-3C
Forcing, unless the partnership has agreed that this is an exception to the " $2 / 1$ rule."
1D
Forcing for a round only (as in Standard American), except in the variant of $2 / 1$ where that sequence is a game forcing as well.

1S-1NT;
2C-2NT;
Shows 10-11 points without support for spades.
1S-1NT;
2C-3S
Shows 10-11 points with 3-card support for spades.
1D-2H
This is a jump response, and there are different ways of handling it. In Standard American, such a "jump shift" shows a very strong hand and is unequivocally forcing. However, since such hands do not occur with great frequency, it is more common today to use such a bid to show a weak hand with a long suit, unsuitable for defense. Another possibility is to play it as a "fit-showing jump", showing 8-10 points, a decent spade suit, and good diamond support.

## Acol

Acol is a bridge bidding system. It is the name of a road in Hampstead, London, where there was a bridge club in which the system started to evolve in the 1930s. It was popularised in Britain by Iain Macleod in his book "Bridge is an Easy Game", published in 1952. The Acol system is continually evolving but the underlying principle is to keep the bidding as natural as possible. It is common in the British Commonwealth but rarely played in America.

## Bidding system structure

The choice between a weak 1 NT opening (12-14 points, balanced) and a strong 1 NT (15-17 points, balanced) influences much of the rest of the system.

Acol is an approach forcing system - whether or not a bid is forcing, i.e. systemically requires a response, depends on the previous bidding (approach). This is in contrast to level forcing systems, such as 2-over-1, where the level of the bid determines whether or not it is forcing.

It is also classified as a natural system, i.e. opening bids and responses almost always promise at least four cards in the suit. It is a four-card major system, unlike Standard American or European systems where, to open 1H or 1S, five cards in the suit are required.

Acol makes extensive use of limit bids. A limit bid is a bid which describes the hand in terms of both distribution and point count. A player making a limit bid has completely described his hand and may pass next round unless partner makes a forcing bid. A typical limit bid is the 1 NT opening. Here the opener promises a limited point count (12-14 for a weak NT) and a particular distribution (4-3-3-3, 4-4-3-2 or 5-3-3-2). Responder now has a more or less complete picture of the partnership's combined strength and distribution and expects opener to pass any non-forcing and non-invitational bid.

## Acol Variants

A version of Acol - called "Standard English" - has been developed by the English Bridge Union (EBU) to facilitate the learning of bridge and to provide a natural bidding system for novices and intermediate players. This system uses the Weak 1NT opening (12-14 points). Conventions such as Stayman and Blackwood convention are included. Players may choose to use 】acoby transfers as they progress their experience.

Benjaminised (Benji) Acol replaces the 2 H and 2 S openings with weak two bids (5-9 points and a 6 card suit). Any Acol 2 hand ( 8 winners with a given suit as trumps) is shown by bidding 2C which forces a 2D response allowing the suit to be shown. A 2D opener shows any hand with $23+$ points.

Reverse Benji is the same as Benji except that the 2C and 2D bids are switched over. 2C is now the strongest bid as in standard Acol.

## Standard Acol

The following is a brief summary of Standard Acol.

## Opening bids

Opening bids promise at least 12 high card points (HCP), or the equivalent in HCP and shape. Apart from NT, opening bids guarantee the ability to make a rebid over any forcing response from partner.

- 1 of a suit - promises at least four cards in the suit bid. Not forcing.
- 1 NT - balanced hand (4-3-3-3, 4-4-3-2 or 5-3-3-2). Subject to partnership agreement, it may be either 12-14 HCP (weak), 15-17 or 16-18 HCP (strong) or vary between weak and strong according to vulnerability (variable). Limit bid.
- 2C - conventional game forcing bid, promising game-going values (normally 23+ HCP) and at least 5 quick tricks. Game forcing unless opener rebids 2NT.
- 2 of any other suit - shows a strong hand with at least eight playing tricks. Forcing for one round.
- 2 NT - balanced hand, 20-22 HCP. Limit bid.
- 3 of a suit - preemptive, normally seven or more cards in the suit bid (may be six at favourable vulnerability), weak hand (not more than 10 HCP). Not forcing.
- 3NT - to play. Normally opener has a long solid minor suit. (Gambling 3NT)


## Responses to 1 of a suit

- pass - less than 6 HCP
- 2 of opener's suit - at least four card support, 6-9 HCP. Limit bid.
- 3 of opener's suit - at least four card support, 10-12 HCP. Invites game if opener has requisite strength ( 14 HCP or more). Limit bid.
- 4 of opener's suit - at least four card support, to play.
- 1 NT - 6-9 HCP, denies ability to bid at 2 level. Not necessarily balanced. Limit bid.
- 2 NT - balanced, 10-12 HCP. Limit bid.
- 3 NT - balanced, 12-15 HCP. Limit bid.
- 1 of a new suit - promises at least four cards in the suit bid, 6 HCP upwards. Forcing for one round.
- 2 of a new suit (below 2 of opener's suit) - normally 5 card suit, at least a good 8 or 9 HCP . Forcing for one round.
- Jump in a new suit - 5 card suit (or support for partner), at least 16 HCP, Game force.


## Responses to 1 NT

- 2C - Stayman. Opener responds 2D with no four card major, 2 H with a four card heart suit and 2 S with four spades (denies four hearts). Forcing for one round.
- 2 of any other suit - to play. Opener must pass.
- 3 of a suit - shows a five card suit, forcing for one round.
- 2NT - 11-12 HCP. invites game if opener is maximum (i.e. for a weak opening NT, if opener has more than a good 13 HCP ).
- 3NT - to play.
- 4C - asks for aces. (Gerber)
- $4 \mathrm{H}, 4 \mathrm{~S}$ - to play.
- 4NT - Slam invitation to 6NT. Opener bids 6 NT with a maximum.
- 5NT - Slam invitation to 6NT. Opener bids 6NT unless a minimum. (Some play as invitation to 7 NT ; opener bids 6 NT if minimum, 7 NT with a maximum).


## Responses to 2 NT

- 3C - Baron. Opener bids his lowest four card suit. Forcing. (Stayman may also be used as in responses to 1NT, i.e. 3D shows no 4 card major)
- 3 of other suit - shows a five card suit, forcing to game.
- Other responses as over 1NT.


## Responses to 2 C

- 2D - negative. Responder lacks the strength for a positive response. Unless opener rebids 2NT (balanced, 23-24 HCP, which may be passed), the sequence is forcing to game.
- 2NT - fairly balanced, 8 or more HCP. Forcing to game.
- 2 of a suit - at least five in the suit, the equivalent of an ace and a king in high cards. Forcing to game.
- 3 of opener's suit -5-8 HCP, at least 3 card support. Forcing to game.
- 3 of a suit - Solid suit of at least six cards. Forcing to game.


## Responses to 2 of a suit

- 2NT - negative. Responder lacks the strength for a positive response.
- Simple bid of a new suit - 8 or more HCP, at least five in the suit. Forcing to game.
- 3 of opener's suit - 5-8 HCP, at least 3 card support. Forcing to game.
- 3NT - flat hand, 8-11 HCP. Not forcing.


## Opener's suit rebid after one-level opening

- Rebid of own suit at lowest level - minimum hand, at least a five card suit, 12-15 HCP, non-forcing.
- Jump rebid of own suit - strong hand, normally at least 6 card suit, 15-19 HCP, non-forcing but highly invitational.
- Bid of new suit at lower level than first suit - minimum hand, 12-15 HCP, first suit has at least as many cards as second suit, non-forcing.
- Bid of new suit at higher level than first suit ("reverse") - strong hand, 16-19 HCP, first suit has more cards than second suit, forcing for one round.
- Jump in new suit at lower level than first suit - strong hand, 16-19 HCP, first suit has at least as many cards as second suit, forcing for one round.


## Opener's NT rebid after one-level opening

(The following bids assume a weak NT opening)
After suit response at one level the traditional rebids are:

- 1NT - balanced, 15-16 HCP, limit bid
- 2NT - balanced, 17-18 HCP, limit bid
- 3NT - balanced, 19 HCP, limit bid

However, the modern approach modifies the ranges for the rebids thus:

- 1NT - balanced, 15-17 HCP, limit bid
- 2NT - balanced, 18-19 HCP, limit bid
- 3NT - Often an Acol two type of hand prepared to play in NT.

After a suit response at two level the traditional rebids are:

- 2NT - balanced, 15-17 HCP, limit bid
- 3NT - balanced, 18-19 HCP, limit bid

The modern approach is to use the 2 NT rebid as forcing and use 3 NT as $15-17$ with support for the minor that responder has bid (one option).

After the 2NT (forcing) rebid, either bid naturally or use an enquiry (3c) to seek definition of the 2 NT rebid.

## Fourth suit forcing

A bid of the fourth suit at the 2 level by responder is a one round force, usually asking opener to bid no trumps with a stopper in the fourth suit. A fourth suit bid at the 3 level is similar, but forcing to game.

## Blue Club

Blue Club is a bridge bidding system, developed mainly by Benito Garozzo. It was used by the famous Blue Team and became very popular in 1960-1970 (nowadays being less and less used).

The main features are:

- Strong club system: 1C opening promises 17 or more HCP with step answers showing controls.
- Four-card majors: 1H and 1S and 1D openings are limited (12-16 $\underline{\mathrm{HCP}}$ ),
- Canapé This is a powerful concept as with a 2 suited hand, your second bid is your strongest suit, whereas other more popular systems bid their weaker suit second - a potential recipe for disaster.
- 1NT ranging from 13-17 high card points. It can be either 13-15 pts which is essentially a replacement bid for a balanced club suit with 2 specific shapes, $3,3,3,4$ and $3,3,2,5$. 2 nd is $16-17$ pts and balanced.

Blue Club is a logical bidding system having been developed 40 odd years after bridge became popular and was developed as an entire concept. Other systems such as Standard American have become incredibly complicated to enable players to compete against systems such as Blue Club and Precision etc.

Blue Club is especially deadly in finding safe slams, slams that other systems miss. It is thought to be complicated and artificial but in reality is straightforward and a pleasure to play.

## References

- "The Blue Club", adopted by Terence Reece ISBN 0571092659


## Bridge World Standard

Bridge World Standard or BWS is a bridge bidding system developed in 1967 and periodically updated. It is based on majority preferences of experts and readers of The Bridge World magazine.

The system shares some similarities with Standard American and $2 / 1$ game forcing, but with many advanced treatments.

## Goren

Charles Goren was a famous bridge player, writer and popularizer. In the course of his writing he made extensive use of the Work Point Count System developed by Milton Work. Previously, bridge players assessed their hands by counting 'quick tricks'. The high card point count system was a large step forward in bridge theory because it was easy to apply. Aces were assigned a value of four points; kings, three; queens, two and jacks, one point. A hand containing thirteen points was considered to be an opening bid.

Of course, hand distribution can add a great deal to a hand's value and so various systems to assess that have been applied over the years. Voids become very useful when there is trump agreement and so a void in the responding hand was counted as five points and a singleton as three.

Another feature of the Goren system was opening four card suits. An approach known as 'five card majors' has become very popular as a major feature of Standard American bidding. As the name suggests a bidder using that system promises five cards in the suit by bidding one Heart or one Spade.

There is much merit in Goren's four card opening approach, though, and many experts still use it. Any method that uncovers a four-four trump fit is very useful. 'Five card major' bidders sometimes use negative doubles to find four-four trump fits. The advantage of 'Five card
majors' is when the opponents bid. Following the 'Law of Total Tricks' is a lot easier in a 'Five card majors' system.

Bridge is an evolving game and many styles and new approaches have been developed over the years. Few people would say that they play 'Goren' now. That takes nothing away from the great skill and competitive spirit that made Charles Goren one of the foremost bridge players of his day.

## Polish Club

Polish Club is a bridge bidding system which was developed in Poland, where it is the most popular bidding system, and also used by players of other countries. It is a type of small club system.

In Polish club, 1C opening bid is forcing for one round but it does not necessarily show a strong hand, in most versions of this system it shows either a weak balanced hand (about 12-14HCP), natural 1C opening or any strong hand. The consequence of that opening is that bids of 1D, 1H and 1 S are limited to about 18 HCP and also 1 D shows at least 4 cards (in some versions of the system it promises even at least 5 cards).

2C opening is usually reserved to show a limited hand with long clubs and possibly 4-card major, similar to Precision 2C opening.

Polish Club ("Wspolny Jezyk") 2005 as outlined in "Polish Club 2005 - A Brief Description" by Krzysztof Jassem:

## 1C opening:

1. 12-14 HCP, no 5-card major, no 4-card diamond suit. Five clubs are possible if the hand is balanced. Opener should not bid clubs on the next round - even in competition.
2. 15-17 HCP, five clubs, unbalanced distribution. Opener bids clubs in the next round.
3. $18+\mathrm{HCP}$, any distribution.

## 1D response

1. negative: $0-8$ HCP. In the $7-8$ HCP range, Responder should not have a 4 -card major (the response of one of a major is $7+\mathrm{HCP}$, the 1 NT response is $9-11 \mathrm{HCP}$ ).
2. 9-11 unbalanced; either both minors (5-4), or one poor minor. (The hand does not qualify for any of the responses: $1 \mathrm{NT}, 2$ in a minor, 3 in a minor).
3. 12-16 HCP balanced without a 4-card major. The hand is not suitable for declaring no trumps.

1C-1D
?
$1 \mathrm{H} / 1 \mathrm{~S}=$ better major (3 cards is possible)
$1 \mathrm{NT}=18-20 \mathrm{HCP}$, balanced
$2 \mathrm{C}=15+\mathrm{HCP}$, natural
2D = artificial GF, exclusive of 2-suiter hands
$2 H, 2 S, 3 C, 3 D=5+$ in the bid suit, semi-forcing
$2 \mathrm{NT}=21-23 \mathrm{HCP}$, balanced
$3 H / 3 S / 4 C=G F, 2$-suiter (5-5):
3H - with hearts, then Responder's 3S shows preference over hearts, 3NT asks for a minor, 4C, 4D are cue bids with agreed hearts, 3S - spades and a minor, then 3NT asks for a minor, 4C, 4D are cue bids, 4C - minors.

## 1H/1S responses

$7+$ HCP, $4+$ cards, can have longer minor if less than GF
1C-1H/1S
$?$
$2 \mathrm{C}=15+$, one-round force, then Responder's 2D forces to game.
2D = Relay, 18+ HCP, promises at least 3 cards in Responder's major.
$2 \mathrm{H}=($ After 1 S response) $5+\mathrm{H},(18+\mathrm{HCP}), \mathrm{GF}$
$2 \mathrm{NT}=18+$ HCP, (semi-)balanced, denies 3-card support in Responder's suit.
After 1C-1H/1S-2D, Responder bids as follows:
$2 \mathrm{H}=7-10 \mathrm{HCP}, 4$ cards in the bid major
$2 \mathrm{~S}=11+\mathrm{HCP}, 4$ cards in the bid major

## NICOLAE SFETCU: THE BRIDGE GAME

$2 \mathrm{NT}=11+\mathrm{HCP}$, at least 5 cards in the bid major
3C, 3D $=9-11$ HCP, 5 in the bid minor, 4 in the bid major
3H = 7-10 HCP, 5 cards, unbalanced (then 3S asks for a shortage, 3NT asks for a side suit)
$3 \mathrm{~S}=7-10 \mathrm{HCP}, 5332$ with 5 in the bid major
3NT $=7-10$ HCP, 6 cards in the bid major

## 1NT response

9-11 HCP, no 4-card major
1C-1NT
$2 \mathrm{C}=$ natural, $15+\mathrm{HCP}, \mathrm{GF}$
$2 \mathrm{D}, 2 \mathrm{H}, 2 \mathrm{~S}=5+$ cards, $18+\mathrm{HCP}, \mathrm{GF}$
2C/2D responses
5+ cards, GF, can have 4-card major

## $2 \mathrm{H} / 2 \mathrm{~S}$ responses

Strong jump shift (semi-solid suit)
2NT response

12+ HCP, GF no 4-card major
3C/3D response
Good 6-card suit, invitational (9-11 HCP)

## 3H/3S responses

7-card suit with 2 high honours, nothing outside

## 1D opening

4+ cards, 12-17 HCP possible canape: 4 diamonds; 5 clubs are possible if weak (12-14 HCP)

- 2C response - natural, promises 5 clubs, one-round force. Rebidding diamonds by Opener shows length ( 5 diamonds) and does not specify strength. The other 2-level bids show 4 -card openings in the range of 12-14 HCP.
- 2D response - inverted minor, 10+ HCP, 4 diamonds
- 3D response - preemptive
- NT responses: $1 \mathrm{NT}=7-10 \mathrm{HCP}, 2 \mathrm{NT}=11-12 \mathrm{HCP}$; both deny a 4-card major.


## 1H/1S openings

5 cards, 12-17 HCP

- 1NT Response - not forcing

Responder's 2 NT is forcing after the suit is repeated. $1 \mathrm{H} 1 \mathrm{~S} / 1 \mathrm{NT} 2 \mathrm{H} 2 \mathrm{NT}=$ forces to 3 of a major; opener shows shortage, and 1S 1NT 2S 2 NT = forces to 3 of a major; opener shows shortage Two-over-one response - forces to three of that suit.

- 2C response is semi-natural.

Rebidding the suit by Opener shows a minimum and does not show length. 2NT rebid by Opener shows strength (15-17 HCP).

- 2 NT response - limit raise with support
- Jump raise - preemptive

Two types of Splinter bids 1H-3S = any shortage, 9-12 HCP (then 3NT asks shortage) 1 S 3NT = any shortage, $9-12$ HCP (then 4C asks shortage) $1 \mathrm{H}-3 \mathrm{NT}=$ spade shortage, $12-16$ HCP 1H/1S - 4C, 4D, 4H (after 1S) = bid shortage, 12-16 HCP Drury-fit by a passed hand 2 of the bid major is the weakest rebid. Jump shift by a passed hand - invitational (9-11 HCP)

## 1NT opening

15-17 HCP

- Stayman 2C

Opener's 2H does not deny four spades. Responder's subsequent bidding is natural: forcing at the 3-level, non-forcing at the 2-level. Also: 1NT - 2C; 2D-2S = invitational (7-9 HCP), 5 spades, 4 hearts, and 1 NT $-2 \mathrm{C} ; 2 \mathrm{H} / 2 \mathrm{~S}-3 \mathrm{D} / 3 \mathrm{H}=$ transfer, agrees Opener's suit, GF

- Jacoby transfers 2D/2H

Transfer to hearts (2D) does not deny five spades. Responder's new suit at the 3-level forces to game. Also: 1NT - 2D; 2H-2S forces to 3 H (8+ HCP)

- 2 S response - transfer for clubs. Opener may choose between a positive 2 NT , and a negative 3C. Responder may continue by showing shortage.
- 2NT response - limit
- 3C response - transfer to diamonds, weak or strong Opener is obliged to bid 3D. Responder may continue by showing shortage.
- 3D - natural, inviting
- 3H/3S - 5431 convention: GF, both minors: at least 5-4, shortage in the bid suit


## 2C Opening

Precision: 5 clubs and a 4-card major, or 6 clubs, 11-14 HCP

- 2D response - relay, forcing to 3C. Opener shows a 4-card suit (3D shows extras) or makes a choice between 2NT and 3C with long clubs.
- $2 \mathrm{H} / 2 \mathrm{~S}$ response - not forcing, good 5-card suit (7-11 HCP)
- 2NT response - weak support in clubs or GF two-suiter. Puppet to 3C. Opener must bid 3C. Responder either passes or shows his suits: 3D = diamonds and hearts, $3 \mathrm{H}=$ hearts and spades $3 \mathrm{~S}=$ spades and diamonds.
- 3C response - limit raise (invitational)
- 3D/3H/3S response - limit, good 6-card suit


## 2D opening

Weak two in a major (limited Multi), 6+ cards, 6-11 HCP.

- $2 \mathrm{H} / 2 \mathrm{~S} / 3 \mathrm{H} / 3 \mathrm{~S}$ response - pass or correct
- 2 NT - relay, forcing to 3 of the major

Opener bids: 3C = good opening, 3D relays and 3 H shows spades. 3 S shows hearts. $3 \mathrm{D}=$ hearts, minimum opening $3 \mathrm{H}=$ spades, minimum opening

- 3C response - GF, any one-suited hand, puppet to 3D.
- 3D - game-invitational with support in both majors

Opener bids 4C with hearts and 4D with spades if the invitation is accepted.

- 4C response - asks Opener to bids the suit below his major. Opener bid 4D with hearts and 4 H with spades.
- 4D response - asks Opener to bids his suit.
- $4 \mathrm{H} / 4 \mathrm{~S}$ response - to play


## $2 \mathrm{H} / \mathbf{2 S}$ openings

Polish two-suiters, 6-11 HCP.

- Opening $2 \mathrm{H}=$ any $5-5$ with hearts (spades possible)
- 2 S response $=$ pass or correct
- Opening $2 \mathrm{~S}=5$ spades and 5 of a minor
- 2NT response - asks for another suit. With hearts and spades Opener bids 3H. Other responses - natural


## 2NT opening

5-5 in minor, 6-11HCP.

- 3 H asks to bid a longer minor or a longer major if minors are equal.
- 3 S - natural, forcing


## 3NT opening

Gambling (no stopper outside)

- 4D asks for singleton.


## Conventions in an uncontested auction

## Jump shift

Strong, semi-solid suit, slam interest

## Fourth suit

Invites to game after an initial one-over-one response. Responder may pass in the subsequent bidding but Opener may not. Fourth suit forces to game after a two-over-one response.

## Third suit

If Opener raises the third suit, that promises four cards in the suit and denies a stopper in the unbid suit. 3NT bid by Opener shows four cards in the third suit and promises a stopper in the unbid suit.

## Forcing 2NT

Responder's 2NT is forcing after a two-over-one response.
2C - check back

Weak with clubs or game invitational, or game forcing Opener's rebids:

- $2 \mathrm{D}=$ minimum opening, no 3-card support
- 2 in Responder's suit = minimum opening, 3-card support
- 2 in the other major = nice opening, 3-card support
- 2 NT = nice opening, no 3-card support

Responder's continuations: 3C signs off. 2 in the bid major is non-forcing (10-12 HCP). Other bids (including 2NT) are game forcing.

## En passant

In an uncontested auction, stoppers are shown. In competition, bidding the opponent's suit asks for a stopper. If opponents bid two suits, bidding the higher-level suit promises stopper in the lower-level suit.

## Slam bidding

## Roman Key Card Blackwood 1430

$5 \mathrm{C}=1$ or $45 \mathrm{D}=0$ or $35 \mathrm{H}=2$ or 5 , no kings $5 \mathrm{~S}=2$ and a king, etc.

## Exclusion Key Card Blackwood (1430 responses)

After trump agreement, an unusual jump shift at the 5-level (or 4 S when hearts are agreed) asks for key cards, exclusive of the ace of the bid suit.

Hoyt
The cheapest bid after key cards are shown asks for kings. The next cheapest bid shows no kings, etc.

## 5NT

Kind of Josephine; asks for the number of high honours (ace, king or queen) in trumps 6C= $0,6 \mathrm{D}=1$, etc.

## Cue bids

First- and second-round controls are treated as equals

## Splinter bids

Weaker and stronger types after 1H/1S openings $1 \mathrm{H}-3 \mathrm{~S}=$ weaker Splinter ( $9-12 \mathrm{HCP}$ ), any shortage, 3NT asks $1 \mathrm{H}-3 \mathrm{NT}=$ regular Splinter (12-16 HCP), spade shortage $1 \mathrm{~S}-3 \mathrm{NT}=$ weaker Splinter, any shortage, 4C asks $1 \mathrm{H} / 1 \mathrm{~S}-3 \mathrm{~S} / 4 \mathrm{C} / 4 \mathrm{D} / 4 \mathrm{H}=$ regular Splinters (12-16 HCP)

## AutoSplinter

An unusual shift jump agrees bidder's own suit only if Partner has not shown any suit.

## Six in the Splinter suit

Asks partner to bid the grand slam with a void in the splinter-suit.

## Interference after Blackwood

DOPI. Double $=0$, pass $=1$, the cheapest bid $=2$ keycards, etc.

## Competitive bidding

## Over opponent's takeout double

- Jump shift - suit and support (fit showing jump)
- New suit - forcing at 1-level (except 1D; see below), non-forcing at 2-level
- Redouble $=10+\mathrm{HCP}$

Opener bids before Responder: this shows a minimum if the bid is cheaper than two in the opening bid, but shows extras otherwise.

- 1D response over opponent's double - natural, not forcing
- Support bidding after Partner's 1H/1S opening is doubled:
- 1NT = 7-9(10) HCP; 3-card support
- $2 \mathrm{NT}=$ limit raise: 4 -card support
- Jump shift shows suit and support.


## Over opponent's overcall

- New suit is forcing at the level of 1 and 3 . New suit is not forcing at the level of 2 .
- Jump raise is pre-emptive.


## Support bidding after Partner's $1 \mathrm{H} / 1 \mathrm{~S}$ opening is overcalled

2NT promises good support (usually 4 cards) and forces to game. Direct cue bid is gameinvitational, or game forcing with flat distribution and defensive values.

## After Partner's 1NT opening is overcalled

- Double is negative - part score range.
- New suit is non-forcing at the two-level, but forcing at the three-level.
- Lebensohl: either GF with 4 cards in the other major or non-forcing with an unbid suit.


## After Partner's 2D/2H/2S opening is overcalled

- New suit = pass or correct.
- Double is for penalties.


## Negative double

Through 4D Negative doubles include, apart from standard agreements, forcing hands with a weak 5 -card suit and - after $1 \mathrm{H} / 1 \mathrm{~S}$ opening - invitational no-trump hands.

## When the second defender overcalls

- Support double. A support double does not show extras but promises offensive values.
- After a 1C opening, double is two-way: either a support double or a stronger variant of the opening.


## Defensive bidding

## No-trump hands

- 1NT and 2NT non-jump overcalls - 15-18 HCP with a stopper. Subsequent bidding: the same as after a 1 NT opening
- 1NT re-opening - 12-15 HCP. Subsequent bidding: the same as after a 1 NT opening
- 2NT re-opening - 19-21 HCP Subsequent bidding: similar to after the 1 NT opening
- Jump overcalls - direct: natural, pre-emptive; re-opening: constructive
- Takeout doubles and strong doubles (17+HCP). Takeout doubles promise three cards in unbid majors and two cards in unbid minors. Equal level conversion shows extras.
- After Partner has doubled 1C, a 1D bid is negative, other 1-level suit bids are forcing.


## After 2D artificial opening (Multi or Wilkosz)

Second hand's double is for takeout of spades. Pass and then double after 2H/3H in the next round is for takeout of hearts:

2 D dble 2 H dble $=$ responsive
2 D dble 2 S dble = punitive
Fourth hand's live double is for takeout:
2 D pass $2 \mathrm{H} / 2 \mathrm{~S}$ dble $=$ takeout of hearts/spades respectively

## Direct cue bid

Michaels cue bid - unlimited

## Jump cue bid

Jump cue bid shows either a solid suit and asks for a stopper or shows any game-forcing onesuiter hand.

## Versus strong 1 NT opening

- Double shows two suits: 5+ cards in a minor, 4+ cards in a major.
- $2 \mathrm{C}=$ any one-suiter (constructive if a minor)
- $2 \mathrm{D}=$ major two-suiter
- $2 \mathrm{H} / 2 \mathrm{~S}=5$ cards in the bid suit and a 4 -card minor


## Versus weak 1NT opening

Double is for takeout. Other bids show the same shape as versus a strong no trump and promise opening values.

## Other

- Drury (2C) promises fit, rebidding the suit is weakest bid.
- Lebensohl after 2H/2S and Partner's double


## Leads and signals

- Leads are 2nd best from bad suits (low from two); 4th best from good suits; top of honours; ace from ace-king, king from king- -queen, etc., except 9 from 109x(x).
- Signals are upside down throughout. In Partner's led-suit count is preferred in suit contracts, attitude is preferred in no trump contracts.
- Echo against no trump contracts - a small card in Declarer's first-played suit (from either hand) accepts the lead. Lavinthal - standard way (discouraging in the suit discarded, suit preference for the other 2 suits).


## Precision Club

In the game of contract bridge Precision Club is a strong club system that was invented by C. C. Wei and used to good effect by Taiwan teams in the early 1970s. Their success kicked off a wave of experimentation with strong club systems around the world.

The central feature of the Precision system is that a bid of one club is used to open any hand with 16 or more high card points, regardless of distribution. An opening bid of one of a major suit signifies a five-card suit and 11-15 HCPs. A 1NT opening bid signifies a balanced hand (no five-card suit) and 13-15 HCPs.

After the success of Taiwan (Republic of China) teams in 1970 and 1971 Bermuda Bowls with the system, the entire Italian Blue team switched to Precision club and won yet another World olympiad in 1972. The modifications to the system were made chiefly by Benito Garozzo and he titled it "Super-precision".

In North America, Precision sees relatively limited use as compared to Standard American and later $2 / 1$ game forcing. Precision is generally more efficient (and precise, as the name would suggest) than Standard American, but the bids tend to be less natural and have very specific meanings that must be memorized by the partnership. This has led to its reputation as an advanced player's bidding system. In fact, a disadvantage of playing Precision in North America is that a partnership ends up having to explain their bids frequently to opponents not familiar with Precision.

The most notable today's pair who plays Precision club are multiple world champions Jeff Meckstroth and Eric Rodwell.

## Main Opening Sequence

- 1C: Conventional, 16+
- Responses:
- 1D: 0-7 or any 4441
- 1H, 1S, 2C 2D: 8+, 5-card suit
- 1NT: 8-10, balanced
- $2 \mathrm{H}, 2 \mathrm{~S}: 4-7,6$-card suit
- 2NT: 11-13 or 16+, balanced
- 3C, 3D, 3H, 3S: 4-7, 7-card suit
- 3NT: 14-15, balanced
- 1D: 11-15, (2)3-card suit
- 1H, 1S: 11-15, 5 -card suit
- 1NT: 13-15, balanced
- 2C: 11-15, 6-card suit or a 5 -card suit with a 4-card major
- 2D: Conventional, 11-15, 3-suiter with singleton or void in diamonds
- 2H, 2S: Weak two bid, 7-10, good 6-card suit
- 2NT: 22-23, balanced
- 3C, 3D, 3H, 3S: normal preempts
- 3NT: solid 7-card minor suit, no outside strength


## References

- Reese, Terence Precision Bidding and Precision Play


## Preempt

Preempt (also spelled "Pre-empt") is a bid in contract bridge whose primary function is to take up bidding space from the opponents. A preemptive bid is usually made by jumping, i.e. skipping one or more bidding levels. Since it deprives the opponents of the bidding space, it is expected that they will either find a wrong contract (too high or in a wrong denomination) of their own, or fail to find any.

Preempting is often made with the aim of a sacrifice, where a partnership bids a contract knowing it cannot be made, but assumes that (even when doubled), the penalty will still be smaller than the value of opponents' bid and made contract.

A preemptive opening bid is an opening bid on level 2 or higher, typically made with a weak hand containing a long, strong suit. Preemptive opening bids on level 3 and higher are common for most bidding systems in the world. For example, the hand of S4 HKQJ9854; DJ62 C 95 is a typical 3 H opener. The bid is made on presumption that, without any additional tricks from the partner, at least 6 tricks can be taken with hearts as trump, and the potential penalty of 500 points in 3 H doubled is smaller than the value or opponents' likely game or slam (cca. 600 and 1400 points respectively).

A partnership can preempt the opponents cooperatively, having discovered that they have an excellent suit fit but not much overall defensive strength. For example, after the partner opens 1D and RHO doubles, the following hand is suitable for a bid of 5D, outbidding opponents' major suit game in advance:

## S83 H4 DQ108542 CQJ64

In a more general sense, even low-level and non-jump bids can have a preemptive value if they deprive the opponents of bidding suits that they could otherwise bid on level 1 or 2 . For example, weak 1 notrump (characteristic for Acol system) opening takes up entire level 1 from the opponents, who could bid their long suit on level 1 had the opening been 1 of a minor, like in Standard American bidding. However, there is always the danger that the preempting side could preempt themselves, taking up their own bidding space that could be used for constructive bidding. For example, four-card major openings have a more preemptive effect compared with five-card major openings, but also carry less precise information, as the partner should not support the opened suit without at least 4 cards; that could result in missing a partial contract or even a game.

## See also

- Weak two bid


## Sacrifice

A sacrifice is a usually deliberate bid of an unmakeable contract in contract bridge in the hope that the penalty will be smaller than the value of an opponents' contract. In rubber bridge, a sacrifice can be also made in an attempt to prevent the opponents to score a game, hoping that the cards in subsequent deals will turn the side and provide a compensation.

In bridge scoring, making a game yields approximately 620 points vulnerable and 420 points non-vulnerable. As the opponents will often double the sacrificial bid, it will turn out profitable if it commences less points than that; 3 and 2 doubled undertricks when the sacrificing side is non-vulnerable cost 500 and 300 points respectively, and 2 vulnerable
doubled undertricks cost 500 points. Similar reasoning can be drawn for slams and partscores.

A sacrifice most often occurs when both sides have found a fit during bidding (8 cards or more in a suit), but the bidding indicates that the opponents can make a contract. Also, it is possible to perform an advance sacrifice, when it is more or less clear that the opponents have a fit somewhere and greater strength. For example, after the partner opens 1D and RH0 doubles, the following hand is suitable for a bid of 5D, outbidding opponents' major suit game in advance:

## S83 H4 DQ108542 CQJ64

Vulnerability significantly affects the sacrifice: statistically, the success is most likely in the situation the opponents are vulnerable but the sacrificing side is not. At equal vulnerabilities, sacrifices are less frequent, and vulnerable sacrifices against non-vulnerable opponents are very rare (and often not bid deliberately, but in an attempt to make the contract). Also, the scoring method affects the tactics of sacrifice - at matchpoint scoring, -500 or -800 (down 3 or 4) against -620 is a $50 / 50$ bet on a top or a bottom, but at IMPs it can gain 3 IMPs (120 difference) but lose 5 (180 difference), making it less attractive.

However, if it turns out that the sacrificing side misjudged, and that the opponents' contract was unmakeable (or unlikely to make), such sacrifice is referred to as false or phantom one. A false sacrifice can cost heavily, as the sacrificing side has in effect turned out a small plus into a (potentially huge) minus score.


Law of total tricks can be a guideline whether the sacrifice can be profitable or not.
Sacrifices are practically always made in a suit contract; sacrifices in notrump are extremely rare, but can occur, as in the following deal:

The bidding starts:


1 Michaels cuebid, indicating both majors
South can see that East-West have a huge spade fit and that it's quite possible that they can make 4 S . However, the best bet seems to be 4NT rather than 5D, since it requires a trick less, while there's not much indication that 5D would provide more tricks than 4NT. Indeed, 4NT is down one and 5D down two.

## See also

- Preempt


## Standard American

Standard American is a common bidding system for the game of bridge in the United States, and is now the most widely used method of bidding at Bridge in the world. This system, or a slight variant, is learned first by most beginners in the U.S. Most advanced or expert players in the U.S. play a variant of $2 / 1$ game forcing.

## Role of bidding systems

The purpose of bidding is to exchange information with your partner so that you can arrive at an optimal contract, while preventing the opponents from finding their optimal contract. A bidding system is a set of agreements about the meanings of the different bids that the players can make during the auction phase of each hand. Bids are generally defined in terms of the hand's suit distribution and strength. In Standard American, strength is evaluated by the high card point method, with adjustments for distribution. Most beginners rigidly follow point count requirements, but experts will make adjustments based on their hand and the bidding so far.

## History of Standard American

"Standard American" was the label given to the bridge bidding system developed by Charles Goren in the 1940s. This system was the first to employ the point-count method to evaluate the strength of a bridge hand. Most bids had fairly specific requirements regarding hand strength and suit distribution. The Goren point-count system became so popular that nearly all bridge players in the United States, social and tournament players alike, used it. American bridge teams won world championships using Goren's Standard American.

Modifications began to appear from the 1960s foreward. By the year 2000, some completely new bidding systems had evolved, including "Precision" and "2/1 Game Forcing" which, although still relying on point-count rules for hand evaluation, are otherwise substantial departures from the early Goren system. Most tournament pairs now assemble their own system from a variety of new treatments and conventions that have evolved. The nearest thing to a common system in tournament play is the Standard American Yellow Card (SAYC) promulgated by the American Contract Bridge League. SAYC is widely used in internet bridge play, but only rarely in on-site tournament play.

There is no longer a universally recognized standard for social/rubber bridge players. However generally they follow the rules described in Standard American 21, The Rubber Bridge Players Guide for the Twenty-first Century by John Sheridan Thomas. The essential elements of StdAm21 are:

- Five-card majors: opening a major suit promises a five-card suit.
- Weak two openers: Two diamond, heart or spade openers are made with a sixcard suit and 6 to 10 high-card points.
- The Two Club Convention: All unbalanced hands too strong to open at the onelevel are opened with an artificial 2 club call.
- Pre-emptive openers: All suit openers above the two level are pre-emptive, promising a long suit and 6 to 10 high-card points.
- Notrump openers show a balanced hand, and may contain a five-card minor (see note 1 below), with the following point ranges:
- $1 \mathrm{NT}=16$ to 18 points (15-17 is now preferred in duplicate bridge play)
- $2 \mathrm{NT}=21$ to 22 points balanced (no void, no singleton, at most one doubleton)

Note 1: Some experts, notably Marty Bergen and John S. Thomas, strongly advise opening 1 NT also with a five-card major in preference to the major, arguing persuasively that the notrump choice produces better results considerably more often than $50 \%$ of the time.

- Notrump point requirements may include distribution points for a good five-card suit.
- Balanced hands stronger than 22 points are opened using the Two Club Convention.
- Notrump conventions include Stayman, Jacoby Transfers and Gerber.


## Opener approximate hand strengths

- 13-15 points: Hands of 13 points or more are strong enough to open the bidding. Follow up with a call that shows a maximum of 15 points (or does not show more than the minimum opening range).
- 16-18 points: A hand in this range is strong enough to open the bidding and bid again freely. This range may be defined accurately by making a reverse bid (forcing) after opening.
- 19 to 20 points: Opener shows this strength by a jump shift or by jumping to 2NT after opening a minor suit. This call is forcing to game. Having such accurate information (the jump shift shows 19 to 20 points, a five-card suit and a four-card suit) responding partner should be able to place the final contract.
- 21+ points: Normally a hand this strong should open at a higher level than one, either a strong 2 club (conventional), or 2NT ( 21 to 22 points).


## Responder approximate hand strengths

- 0-5 points: A hand in this range normally should not bid unless partner shows a very strong hand and makes a forcing bid.
- 6-9 points: This is a minimum response hand. You should always respond (minimally) when partner opens.
- 11-12 points: This is known as invitational strength. A hand in this range should not open the bidding, but holding a good suit may overcall an opponent's bid. When partner opens the bidding, this hand should bid in a manner that is recognized by partner as inviting to game.
- 13 to 16 points: If partner opens and you hold a hand in this range, the partnership has sufficient strength for game in notrump or a major suit (26 points) and you should press on to game whenever a suitable contract can be found.
- 17 to 18 points: If partner opens, you are in a slam invitational range (slam requires 32 points). You may show this strength by a jump-shift response (gameforcing) immediately following partner's opening bid.
- 19+ points: If at any time a responder has a hand of this strength, he or she should press on to a slam contract providing a suitable strain can be found. The only requirement below game is to make forcing calls. A new suit by responder is forcing.


## References

- Standard American 21 by John Sheridan Thomas, ISBN 1412020638


## Strong Club System

In the game of contract bridge, a strong club system is a set of conventions that uses an opening bid of 1-Club as an artificial, unlimited-strength opening. Compare this with Standard American, which used the opening of 2 Clubs for a similar purpose.

Generally, because of the lower level, the strong 1-Club opening can be assigned a minimum strength much lower than would be advisable for Standard American's 2-Club opening. Commonly, the strong 1-Club will promise 16 or more high card points. All other bids would therefore be limited to a maximum of 15 high card points.

The generally acknowledged strength of the strong club systems is accuracy in uncontested slam-strength auctions, because the bidding starts at such a low level when opener has a fairly strong hand. The generally acknowledged weakness of such systems is the fact that the opponents can aggressively overcall the 1-Club bid to deprive the stronger opponents of their bidding room.

The original strong club system was the Vanderbilt Club, invented in the 1920s by the man who invented contract bridge itself, Harold Vanderbilt.

Precision Club is another example of a strong club system.

# Bridge Conventions 

Blackwood Convention | Canapé | Drury | Drury convention | Flannery | Forcing notrump | Game try | Grand slam force | Jacoby 2NT | Jacoby Transfer | Kamikaze 1NT | Lebensohl | Lightner double $\mid$ Meyerson convention $\mid$ Michaels cuebid | Multi 2 diamonds | Relay bid |<br>Rosenkrantz redouble | Semi-forcing notrump | Splinter bid | Stayman Convention | Takeout double | Unusual notrump | Weak two bid | Defenses to 1NT

In the game of contract bridge, a convention is an agreed-upon meaning for a call (a bid, double or redouble, or a pass) during the auction phase of the hand. Often, the inventor of the convention gives it a name; some widespread conventions got a name after their (perceived) authors.

Conventional opening leads and discards may also be used. The term, however, usually denotes just a bidding convention.

Partnerships must agree on conventions beforehand, and must disclose all conventions to their opponents. If they fail to do so, this can be considered an illegal transfer of information.

Conventions may make use of natural or artificial bids. A natural convention, for example, is the one notrump opening (showing a balanced hand and 10-13, 11-14, 12-14, 15-17, 15-18 or 16-18 high card points, depending on the partnership and perhaps other factors). An example of an artificial convention is the Stayman convention, in which the responder's 2 C response to a 1 NT opening says nothing about the clubs in responder's hand. (In this case, the convention asks opener for further information on his major suit holdings.) The term "treatment" is often used for a "natural convention" and reserve the term "convention" strictly for an artificial bid or response.

The most widely-known and used conventions are Blackwood and Stayman. Other popular conventions are Drury, Jacoby transfers and the strong 2C opening. In the strict sense, takeout double is also a convention, but its use is so old and widespread that it's considered an integral part of the game.

Under the rules of the sponsoring organization (national federations such as ACBL, zonal organizations, or World Bridge Federation for international events), certain conventions are alertable, meaning that the partner of the player making a conventional call or play must say "alert" before the right-hand opponent calls or plays. The right-hand opponent may ask the alerter about the meaning of the convention, or can simply proceed as usual. If the right-hand opponent does not ask about the convention, her partner may do so when it is her turn. In ACBL, a few conventions are also announced, such as Jacoby transfers and 1NT openings. When a player uses a Jacoby transfer, his partner simply says, "transfer". When a player opens 1 NT , the partner announces the high card point range.

Sponsoring organizations can require players at all or some levels of competition to have a convention card. The convention card is a form which must be properly filled in by the
partnership, and contains general notes of the system, and bidding, leading and discarding conventions. In ACBL-sanctioned games, all pairs are obliged to have it, and both members of a partnership must have identical ones. On the ACBL convention card, alertable conventions are shown in red and announced conventions are shown in blue.

## Blackwood Convention

The Blackwood convention is a popular bidding convention in contract bridge that was developed by Easley Blackwood Sr.. It is intended to be used in cases where the combined hands of a partnership are so strong that a slam is a possibility. It allows one partner to gain information on the number of aces, and possibly the number of kings, in the other partner's hand.

When this convention is in force, a bid of 4NT (No Trump) asks the partner to provide information on the number of aces in his or her hand. With no aces or four aces partner replies 5 C ; with one ace, 5 D ; with two aces, 5 H and with three aces, 5 S . The asking bidder usually has one or two aces, so it is easy to discover the partnership's combined assets. A continuing bid of 5 NT asks for Kings with the replies following the same pattern.

This system is not without problems, however. With hands that have a void, a player is not able to tell whether partner's ace is in the void suit (where it would not be of great help) or in a side suit (where it would be very useful.) For this reason cue bidding to show aces is a superior method with hands that contain a void. In fact, most beginner-level players misuse this convention; they ask for aces when they really need other information from partner.

Beginners-and even more advanced players-often fail to comprehend the fundamental purpose of the Blackwood convention. They believe-incorrectly-that the convention is designed for the purpose of ascertaining if the partnership holds all four aces. In fact, the purpose of Blackwood is fundamentally to determine if the partnership is missing two (or more!) aces. If the partnership is missing only one ace, then 12 tricks are still attainable, assuming that the partnership resources are sufficient to capture this many tricks.

Blackwood should not be used when the information gleaned will not answer the question that needs to be answered. A simplified, but instructive, way to think about Blackwood is this: "I am concerned that we may lose the first two tricks, if we bid a slam. I can use Blackwood as a kind of insurance policy, to guarantee that this will not happen." But Blackwood will not help if, due to the structure of the hands, there are multiple ways to lose the first two tricks. It only helps, for the most part, if the exclusive risk of losing the first two tricks is due to the opponents' holding two cashable aces. Obviously, the opposition might hold the ace and king of a side suit, and could bang those tricks right down, resulting in an immediate set.

Thus, a player should use Blackwood only when he can ascertain that the partnership holds at least second-round controls in all suits (kings or, if a suit fit is found, singletons). Thus, a

Blackwood query by the player holding two quick losers in a side suit is a wild gamble, as it is still possible that the suit is not controlled by an Ace or a King.

For the same reason, it is generally wrong to use Blackwood with a void. (This is not always true, but the author's rule is: Don't use Blackwood with a void unless you are absolutely sure you know what you are doing, and why you are doing it. If you don't understand why it is correct, in a given case, to use Blackwood with a void, then it's very likely that its usage will be incorrect.) You may be missing two aces, but your void may compensate for the lack of one of the enemy aces. Thus, Blackwood will not tell you what you want to know: Are we at risk of losing the first two tricks? If your side has two aces and a void, then you are not at risk of losing the first two tricks, so long as (a) your void is useful (i.e. does not duplicate the function of an ace that your side holds) and (b) you are not vulnerable to the loss of the first two tricks in the fourth suit (because, for instance, one of the partnership hands holds a singleton in that suit or the protected king, giving your side second round control).

Other problems can easily occur when Clubs is the agreed upon trump suit. The reply to Blackwood could take the partnership past their agreed suit and going to the next higher level may be one trick too high. The adage is 'don't use the convention if there is a possibility you won't like the reply.'

## Roman Blackwood

A variation of the convention, known as Roman Blackwood, was popularized by famous Italian Blue Team. In Roman Blackwood, the responses are even more ambiguous, but more space-conserving. The basic outline of responses is:
$5 \mathrm{C}-0$ or 3 aces
5D - 1 or 4 aces
$5 \mathrm{H}-2$ aces
In practice, the ambiguity is unlikely to occur, as a strength difference between hands with 0 or 1 and 3 or 4 aces is big enough that it can be established in previous rounds of bidding. In other words, a partner who has previously shown e.g. 12-15 range of high points is unlikely to hold 3 aces for his bid, etc.

Even Roman Blackwood convention has several variations, revolving around 5 H and 5 S responses. In all variants, they denote 2 aces. One variation is that 5 S shows extra values, while 5 H does not. In other variations, responses $5 \mathrm{H}-5 \mathrm{NT}$ denote specific combinations of aces (same color, same rank, or "mixed").

If the querying partner ascertains that all aces are present, he can continue as follows:

- 5NT is a Grand slam force
- The first available bid which is not the agreed suit is the Roman Blackwood for kings. The partner responds stepwise, as above.


## Roman Key Card Blackwood (RKCB)

In modern times, a system called Roman Key Card Blackwood (RKCB) has largely replaced the original sytem, at least among more advanced players. The king of trump is included as a control or a "key card"- in effect, as a "fifth ace"- and so more information is gained. The responses are basically the same as for Roman Blackwood, but with five "aces" in play, and aditionally queen of trumps:
$5 \mathrm{C}-0$ or 3 key cards
5D - 1 or 4 key cards
5H-2 key cards without trump Queen
5S - 2 key cards with trump Queen
As with Roman Blackwood, for the ambiguous answers in the minor suits the asking partner can almost always work out which it is by looking at the controls in his or her own hand and by analyzing the bidding. The response of five key cards does not exists, as it is simply forbidden for the partner lacking any key card to query Blackwood. The old bridge joke that applies here is, if your partner used RKCB (or regular Blackwood), and you have all four aces (or all five key cards, playing RKCB), then don't respond at all. Instead, rise slowly from your seat and leave the room quietly, because you are playing with a lunatic and your life may be in danger.

Even if partner gives a minor suit response to the RKCB 4NT inquiry, the inquiring partner may still determine if his side holds the queen of trumps. Bidding the next "meaningless" suit up from the 5-level response of the interrogated partner is a "queen ask" for the queen of trump. It is interesting to note that, in case when one player can ascertain that a 10 -trump fit exists, the queen of trump is considered to be held even if it isn't, because two rounds of trumps will draw all the outstanding trumps in a very high percentage of the cases.

All the foregoing bidding is predicated on the assumption that a trump suit has been agreed upon. Without trump agreement, the last suit bid before the 4NT bid is considered to be the agreed trump suit for responding purposes. When No Trump was the last bid made, 4NT is considered to be a quantitative raise and invitational to a small slam. Therefore a bid of 4C (Gerber) is used in many partnerships to ask for aces in no trump sequences.

## Canapé

Canapé is a bridge convention which refers to a system of bidding where the second suit bid is always longer (or at least as long) as the first. With a minimum 5-4 it may be necessary to bid the first suit twice before the short suit. It is often found in European systems such as Blue club. The chief advantage is that with a moderate 2 suiter, you often get to bid a short major, which has marked preemptive value.

Invention of the concept is attributed to early French master Pierre Albarran.

## Drury

Drury is a convention which allows a passed hand to show a strong raise of a major suit at the two level. This convention uses a bid of 2 Clubs by a passed hand to show a limit raise. Originally, opener would rebid 2 of the major with a "real" opener--that is, a hand which would have opened even in first or second seat--and 2 Diamonds with a weaker hand. However, today most players using this convention play Reverse Drury, in which the rebid of the major is the weakest bid. Another variation is Two-Way Drury in which a response of 2 Diamonds shows 4 -card support and 2 Clubs shows 3-card support.

## Drury convention

The Drury convention in bridge is a convention used to show a game-invitational major suit raise (often called a limit raise) by a passed hand. In the simplest form, a response of 2 clubs, by a passed hand, to a 1 heart or a 1 spade opening, is artificial and shows three or more cards in opener's suit and ten or more support points. (Responder's raise is limited to less than an opening hand, of course, because of the original pass.)

The Drury convention is valuable because:

1. Since you called first and passed, your partner has opened in third or fourth seat, and therefore may have opened "light" (that is, with slightly less than normal opening values). Opening light in the third seat is a valuable tactic, since the player in the fourth seat almost assuredly has the best hand at the table, and may very likely open the bidding if given the opportunity; a third seat opening will therefore effectively preempt the player in fourth seat.
2. Most partnerships play that when a player opens in third or fourth seat, she may pass any response; that is, the passed hand has no forcing bid available. Thus, it is important to describe your hand in a single bid.
3. The methods used to show a limit raise by an unpassed hand normally involve jumping to the 3 -level. If partner has opened light, this may be too high even though you have good support.

## Opener's Rebid

In the original Drury convention, if opener rebid 2 diamonds, it showed a light opening. Today, most people play Reverse Drury and a rebid of 2 of opener's original major suit shows a light opening (that is, no game interest) and responder is expected to pass. Any other rebid by opener confirms a full opening hand (or better) and shows game interest. With a good hand, say 15 or more points, opener may simply jump to game ( 4 of her major suit). Other bids tend to be natural and descriptive, in effect a game try. Of course, with an excellent hand, opener may be interested in a slam and will bid accordingly.

## Two-way Drury

In this variant, the passed hand with $10+$ points responds 2 clubs to show exactly three-card support and 2 diamonds to show four- (or more) card support. This may help opener evaluate the probability of a successful game contract.

## Real club (or diamond) suit

If the passed hand has $10+$ points and a real club suit (or a diamond suit, when playing twoway Drury), she cannot show it naturally at the 2 -level. Some people play that a jump to 3 clubs (or 3 diamonds) shows this hand. Others agree to use the forcing notrump.

## Flannery

Flannery is a bridge convention using an opening 2 Diamond bid to show a hand of minimal opening bid strength (11-15 high card points) with exactly four spades and five (or sometimes six) hearts. Responder can inquire further about opener's hand by relaying with 2 Notrump.

This convention is particularly useful when playing a forcing notrump, to prevent opener from having to respond in a nonsuit after 1 Heart - 1 Notrump when not strong enough to reverse.

## Forcing notrump

The forcing notrump is a bidding convention in the card game of bridge.
In standard bidding, the response of 1 notrump to an opening bid of 1 of a suit shows 6 to 9 high card points and is non-forcing. Opener, with a balanced minimum, may pass the 1 NT response and, if the opponents also pass, that will become the contract.

A partnership may agree that this bid is forcing for one round; if the intervening opponent passes, opener must bid at least once more. This guarantees the responder at least one more opportunity to bid or pass. This mechanism allows the partnership to use the 1NT response for a greater variety of hands: in particular, invitational as well as minimum responder
holdings. The forcing notrump is used over major suits only; 1 NT is always standard and non-forcing over the minor suits.

A bid of 1 forcing notrump shows 6 to 12 HCP , denies the ability to make a single raise (but not necessarily an invitational raise), and denies holding four spades if the opening bid was 1 heart.

## Opener's rebid

Opener is forced to bid again as follows:

- 2 of original major shows a six-card suit
- 2 of a lower-ranking suit shows a second suit (which of necessity may be shortsee below)
- 2 NT is natural and invitational (showing about 18 HCP )
- 3 of a new suit (jump shift) is natural, normally agreed to be game-forcing, and shows about 19 points or more

When opener does not have a six-card original suit nor a four-card lower-ranking second suit, she will have to bid a short suit. Normally, she bids her three-card minor. If she has three cards in both minors, she bids 2 clubs.

If opener holds exactly four spades, five hearts, two diamonds and two clubs (and thus originally opened 1 heart), she bids 2 clubs (a two-card suit!). There is no point in showing the spades, because responder has denied holding four spades (having skipped the 1 spade response to bid 1 notrump). After a 1 spade opening, however, there is no distribution that would compel opener to rebid a two-card suit.

Some partnerships agree not to rebid a 2 -card suit, preferring to promise $3+$ cards. This allows responder to pass with 0,1 hearts and $4+$ clubs. Instead, these partnerships rebid 2 H (violating rule \#1), or pass (if playing Semi-forcing Notrump.)

## Responder's rebid

Responder categorizes her hand as either minimum (6-9 HCP) or invitational (10-12 HCP).
The minimum responder rebids are:

- 2 of opener's original major (shows two-card support)
- 2 of a new suit (shows a five-card or longer suit; some play a six-card or longer suit)
- pass denies either of the above (shows a distinct preference for opener's secondbid suit)

The invitational responder rebids are:

- 3 of opener's original major (shows exactly a three-card limit raise)
- 3 of a new suit (shows a six-card or longer suit)
- 2NT (natural)
- 3 of opener's second suit (shows at least four-card support)
- over a first suit of hearts unusual 2S may apply (see below)

Variation. There are more than one school of thought for responder's second call. The above text represents only one theory. Another widely utilized theory is the following:

With a minimum (6-9 support pts):

- pass (or raise) holding 5+ cards in the suit bid: exception - see false preference.
- bid openers first suit with 2 card-support: exception see false preference.
- pass holding 4+ cards in the current suit bid
- with a 6+ card suit with reasonable top-cards in the suit, bid that if it is between the current suit and 2 of openers suit. Example: (opponents passing) $1 \mathrm{H}-1 \mathrm{~N}-2 \mathrm{C}-$ ? 2D would fit this bid, but 2S would not (you would have bid 1S the first time, see unusual 2 S )
- if none of these options work, usually pass with 3 in the current suit, otherwise bid openers first suit false preference (see below) may apply.


## Further bidding

When responder rebids 2 of a new suit, opener should pass with a minumum and two or more cards in the suit. With a singleton or void in responder's suit, opener should rebid her original major. Responder may yet have a doubleton there and pass, or will be able correct to 3 of opener's second suit or her own good six-card (or longer) suit. In this way, the partnership is normally assured of at least a seven-card fit.

After an invitational responder rebid, opener is expected to pass (or sign off below game) with a minimum opening hand, or to bid game with extra values.

In line with the above Variation, when responder bids their own suit it is 'drop-dead', and Pass should is the expected response. However, with a good hand and 3+ card support a raise
may be appropriate. Otherwise, the only reason to bid should be a good hand with 0 cards in the bid suit, and extra length in one of the first 2 suits, as partner has at most 1 card in our major and 3 cards in our minor.

## Tactical raise

When responder has a very weak hand (0-4 points), but yet support for opener's major (three or more cards), standard bidding dictates a pass (because opener may have a very good hand and get overenthused after a single raise). This may allow the opponents to get into the bidding at a low level. Playing the forcing notrump, however, it is sometimes tactically advantageous to bid 1NT with this hand and then correct to 2 of opener's major. The 1 NT bid tends to shut out the opponents and make partner cautious at the same time.

## System implications

The forcing notrump is required for players using the $2 / 1$ game forcing system, but may be used to advantage by other players as well.

## False Preference

When in the maxi-minimum range (8-9 support points), and holding 2 cards in openers major and 5 cards in openers minor, you are worried about passing and missing game when partner has some extra-values. So you 'preference' to 2 of openers major. This keeps the bidding alive and allows partner to take another call even though your preference would in fact be for the minor.

When in the mini-minimum range (6-7 support points) and holding 2 cards in openers major and 4 cards in openers minor, you Pass. Even though the 'rule' says to preference to the major, the last thing you need is for partner to take another bid with extra values. By passing in a known fit, you hope to ensure the partnership a plus score.

## Unusual 2S

Specific to the auctions: $1 \mathrm{H}-1 \mathrm{~N}-2 \mathrm{C}$ and $1 \mathrm{H}-1 \mathrm{~N}-2 \mathrm{D}$. In these auctions responder is known to have fewer than 4 spades. Thus a call of 2 S would have no sensible meaning. In these situations the raise of partner's minor is a slightly weaker hand, and the 2 S bid is a 'power' raise to 3C. Usually based on 5+ of partners minor and invitational values.

## Game try

A game try in the card game of bridge is a bid that shows interest in bidding a game and asks partner to help in making the decision.

For example, suppose the bidding goes 1 spade, 2 spades and opener has a good 15 points. Responder has shown 6 to 9 support points. If responder has the maximum 9 points, then game is a good bet and should be bid; otherwise, the partnership should settle for a partscore.

The original method to solve this problem was to have opener bid 3 spades; responder would raise to 4 spades with a maximum single raise, and pass otherwise.

Another method, which permits more accurate decision-making, is to have opener bid a new suit. By agreement, this can be a long suit, short suit, or help suit game try. In any event, responder will evaluate the additional information and make one of the following choices: sign off in 3 of the agreed suit; jump to game in the agreed suit; or make a counter try in yet another new suit.

## Long suit game try

After a single raise, opener shows extra values by bidding a second suit naturally at the 3level. Responder can promote length and/or high-card values in that suit, or shortness combined with an extra trump, and jump to game. Conversely, responder with weakness in opener's second suit should sign off.

## Short suit game try

With this agreement, opener bids a short suit (singleton, void, or perhaps a doubleton) at the 3-level, showing extra values and, by implication, side length in the unbid suits.

## Help suit game try

This agreement is similar to the long suit game try, but slightly more precise. Responder should envision opener holding three small cards in the new suit (although the holding may in fact be better, perhaps as good as KJx). Then, regardless of point count, responder bids game with zero or one loser in that suit and signs off with three losers in that suit. With two losers in that suit, responder bids according to her point count.

## Counter try

If responder cannot bid game based on opener's game try suit, but has a good holding in a higher-ranking side suit, she can bid that suit at the 3-level. This in effect says, "I cannot accept the invitation based on your suit, but if you had asked in this suit, I would have." Opener can then reevaluate based on this new information and either sign off or bid game.

## 2NT game try

Yet another possibility is to use the rebid of 2 notrump as a game try. By agreement, this may be natural, or may be a game try showing solid holdings in the side suits and a weak trump suit, or may have some artificial meaning.

## Preemptive reraise

When playing new suits (and perhaps 2 NT ) as game tries, partnerships can agree that a reraise to 3 of the agreed suit is not a game try, but simply an attempt to block the opponents from entering the bidding at a low level. With this agreement, of course, responder will pass the reraise.

## Slam evaluation

Sometimes opener may have such a good hand that she sees a possible slam opposite a single raise. In this case, she can get more information about responder's hand by using a game try bid. If responder rejects the game try, opener can sign off in game. If responder accepts the game try, then opener can further investigate the slam.

## Grand slam force

The Grand Slam Force is a bidding convention in contract bridge that was developed by Ely Culbertson in 1936. It is intended to be used in cases where the combined hands of a partnership are so strong that a slam (winning at least 12 tricks) is a near-certainty and a grand slam (winning all 13 tricks) is a possibility. It allows one partner to gain information on the quality of trumps in the other partner's hand.

When this convention is in force, a bid of 5NT (No Trump), when it does not conflict with other conventions used by that partnership (e.g., a 5NT Blackwood bid), is forcing to slam in the suit last bid, unless the trump suit has already been agreed on earlier in the auction. The partner of the 5 NT bidder bids as follows:

- 6 of the agreed trump suit if holding one of the top three trump honors (e.g., the ace)
- 7 of the agreed trump suit if holding two of the top three trump honors (e.g., the king and queen)

For example, if a partnership is using the Grand Slam Force and one member bids 1 H and his or her partner bids 5 NT , it is implied that hearts are the desired trump suit. The original bidder will sign off with 6 H with one of the top three heart honors, and bid 7 H with two of the top three heart honors.

As with all bidding systems, the Grand Slam Force has its limitations. Also, numerous variations on this convention have been developed.

## Jacoby 2NT

Jacoby 2NT is a bridge convention in which a bid of 2 Notrump, over partner's 1 of a major opening, is used to show typically a balanced hand of game-forcing strength, with at least four cards in opener's suit. Opener's rebids show strength and shape. It is usually used in conjunction with splinter bids to show similar unbalanced hands.

The convention is named for its inventor, Oswald Jacoby.

## Jacoby Transfer

The Jacoby transfer, in the card game contract bridge, is a convention used by a responder following partner's trump opening bid.

## History and usage

American bridge players became aware of transfer bids by way of an article in The Bridge World in 1956 by Oswald Jacoby. Transfers have such utility in notrump bidding that they enjoy broad acceptance of most players, in duplicate and in rubber bridge.

For instance, Two Diamond and Two Heart responses following partner's One No-trump (1NT) opener are conventional bids, each requiring the opener to bid the next higher ranking suit. The one who initiates the transfer promises five cards in the major suit (Spades or Hearts) into which opener is required to transfer. The primary objective is to have the strong hand become declarer whenever the final contract is the major suit. Additionally, transfers enable describing certain invitational hands that standard bidding cannot accommodate.

Partner opens 1NT. You have a five-card heart suit that may make a better contract than notrump if partner has three or four hearts. Absent the transfer, you would respond in hearts, becoming declarer whenever partner supports hearts. At times it may be more profitable for the strong, opening hand to become declarer because this keeps his honors hidden from the defense; and it results in the opening lead coming into the strong hand.

## Transfer procedure

The transfer procedure is quite simple. Any time you respond to 1 NT with a 2 diamond or 2 heart bid, opening partner is compelled to bid the next higher ranking suit. For instance, if you have five hearts and desire to transfer, answer 1NT with 2 diamonds; partner must then call 2 hearts. If your strong partner likes hearts (three-card support) you are likely to play in hearts with partner becoming declarer. Similarly if your suit is spades, bid 2 hearts, forcing partner to be first to call the spade suit. The transfer can be used after 1NT and 2NT openings
and certain other situations where partner's last bid was notrump. The transferor guarantees holding at least five cards in the transferred suit.

When you play the transfer convention, you give up the ability to play in a 2 diamond contract after partner opens 1NT. (It's still possible to play in 2 hearts or 2 spades by transferring into them and then passing.) The inability to play in 2 diamonds is deemed not to be a substantial deficiency since 1NT often produces a higher score. Using the transfer convention frees the 2 Spade response for other uses, such as minor suit transfers (which are considered nonstandard applications).

## Subsequent bids

After the transfer is completed by the 1 NT opener, subsequent bids by the transfer initiator are:
for Weak hands:

- pass, to play a partial game in the transferred suit
for Invitational hands:
- 2 NT , giving the strong partner the option of continuing to game or playing a partial game, in either no-trump or the transferred suit
- 3 of the transferred suit, promising a six-card suit
for Game strength hands:
- New suit, showing 5-4 or 5-5 and game forcing
- 3NT, allowing opening bidding a choice of 3NT or 4 of the major
- 4 in the transferred suit, to play promising a six-card suit

Transfers may be made in a similar manner after the strong hand opens 2NT and after certain other bidding sequences. Additionally there are some circumstances where the transfer process should be avoided.

## References

- Standard applications of the Jacoby transfer are fully described in Standard American 21 by John Sheridan Thomas (ISBN 1412020638).


## Kamikaze 1NT

Kamikaze 1NT is a pre-emptive 1NT opening. Unlike traditional 1NT openings, which show hands of significantly better than average strength, it shows 8-10 balanced high card points, hoping to make 1 NT opposite an average hand.

## Lebensohl

Lebensohl is bridge convention used after an opponent's intervention over 1NT opening bid. It emerged "in wild" in 1960s and was subsequently attributed to Kenneth Lebensold as a misspell, but he denied any contribution. The article about it appeared in 1970. in The Bridge World, by George Boehm.

The convention emerged out of need that the partner of 1 NT opening bidder effectively competes over RHO's overcall without committing the partnership to the game. The basic outline after the sequence (1NT by partner-2x by RHO) is:

- 2 in any suit - natural, non-forcing,
- 3 in any suit except overcalled - natural, forcing to game,
- cuebid (3 in overcalled suit) - akin to Stayman convention, inquiring the partner about 4-card major and promising a stopper in the overcalled suit,
- 3NT - to play, promising a stopper,
- 2 NT - a relay bid forcing the opener to bid 3C; after that:
- 3 in suit of lower rank than overcalled - natural, non-forcing,
- 3 in suit of higher rank than overcalled - natural, forcing to game, but denying the stopper,
- cuebid - Stayman as above, but denying a stopper in the overcalled suit,
- 3NT - to play, denying a stopper.

In summary, the responder must decide whether he has a sign-off or a game-forcing hand (i.e. invitations are not possible). He may freely bid a sign-off on level 2 if there's room, or via 2NT otherwise. With game-forcing hand, he should bid directly on level 3 to promise a stopper, or via 2 NT to deny it.

When the responder's long suit is lower-ranked than the overcalled, there's no room to distinguish presence of a stopper.

The above description describes so-called "slow denies" variant, where strong hands must bid 2NT first to deny a stopper. In the "slow shows" variant, direct bid of level 3 denies a stopper and 2NT promises it.

## Lightner double

Lightner double' is conventional double in bridge used for directing the opening lead against slam contracts. It was devised by Theodore Lightner.

The Lightner double is always performed by the (to-be)dummy's LHO, directing the partner to choose an unusual opening lead. The opening lead is often a crucial trick in a deal, and it can be the last chance for the defenders to collect needed tricks. The doubler will most often have a void in a side suit, or sometimes AQ or KQ in the suit bid by the dummy. The partner is expected to find the correct lead, which might be unusual from his viewpoint; in any case, he should not lead a trump or any suit previously bid by defenders (if any).

## Meyerson convention

In contract bridge, the Meyerson convention is a defensive bidding convention to an opponent opening bid of 1 No Trump. Double shows at least 4 cards in a major and at least 4 cards in a minor, with both suit lengths totalling at least 9 cards. 2 Clubs shows at least 4 cards in each major. The other suited 2 -level bids are natural; they simply show cards in the bid suit.

After a player doubles using the Meyerson convention, his partner may bid 2 Clubs to ask the doubler to bid his longer suit or pass if that suit is clubs. Doubler's partner may also bid 2 Diamonds to ask the doubler to bid his major suit. Any other bid that doubler's partner makes is natural.

The Meyerson convention may be used in either direct or balancing position, and it may also be used against strong or weak 1 No Trump openings.

The Meyerson convention is named after its inventor, Adam Meyerson of Los Angeles, California. The convention is quite similar to another convention known alternatively as Woolsey, after Kit Woolsey, or Robinson, after Steve Robinson of Arlington, Virginia. The Meyerson convention was originally developed as an ACBL General Convention Chart alternative to Woolsey/Robinson, which is not allowed in many ACBL sanctioned events.

## See also

- List of defenses to 1 NT


## Michaels cuebid

A Michaels cuebid is a conventional bid which shows a two-suited hand. It was first devised by Mike Michaels.

The requirement for a Michaels cuebid is a two-suited hand with at least 5 cards in each suit. Point counts vary but most play with a range of 5-11 high card points with favourable vulnerability, stronger if vulnerability is unfavourable.

To use the convention, when the opponents make a one level opening, bid the same suit at the two level. There are two normal cases where this bid can be applied. Over an opponent's minor opening a cuebid shows both majors. For example, 1C-2C shows hearts and spades. Over an opponent's major opening a cuebid shows the other major and a minor suit. For example, $1 \mathrm{~S}-2 \mathrm{~S}$ shows hearts and either clubs or diamonds. Partner can make a 2 NT relay bid to find out what the minor suit is.

## Multi 2 diamonds

Multi or Multi 2 diamonds is contract bridge convention whereby the opening bid of 2D shows multiple types of hands, which always includes a weak two bid in either major suit, while the additional meaning can be either a balanced hand in 18-20 high card points range, or a 20-22 three suiter.

Although it's technically a brown sticker convention (since no long suit is initially known), its popularity and availability of defenses persuaded World Bridge Federation to allow its usage on tournaments of lesser ratings. It is described in WBF Convention Booklet.

## Description

An opening bid of 2D shows one of three types :

1. Weak two in a major suit (6-11 HCP)
2. A strong balanced hand of a defined range
3. Strong three-suited hand

The first response assumes that opener has a weak two in a major.

- 2 H : Pass or correct
- 2 S : Pass or correct to 3 H implies interest in game if the opener has hearts;
- 2NT: Forcing, asking opener to clarify his hand.

Opener's rebids:

- With type (1):
- Over 2H: pass or bid 2 S
- Over 2H: with hearts, bid 3H.
- Over 2NT:
- bid 3C to show hearts, upper range;
- 3D to show spades, upper range;
- 3 H or 3 S with lower range.
- With type (2):
- rebid in notrumps at minimum level
- Other rebids show type (3) and should be specified on the Convention card.


## Relay bid

In contract bridge, relay is a general term for conventional bidding of (usually) the cheapest available bid. The relay bid normally has no descriptive meaning, i.e. its primary purpose is to give partner room to describe his hand instead. Thus, a relay bid is not a convention per se, but a part of many other conventions.

The rationale for introducing relay bids emerged from the idea that it is not always costeffective (i.e. the best use of bidding space) for both partners to describe their hands. Instead, only one partner can make the cheapest bids available (relays) while the other describes his hand.

Relay bidding systems are for the most part based on relay bids: in most sequences (especially forcing ones), one partner just relays while the other describes his hand in a highly codified manner. While relay systems offer a higher level of exchanged information than natural systems, they also have the drawbacks that they are complicated to memorize and often exclude the players' judgment, particular in regard to honor location, which can be crucial on occasion.

Relay bids are a part of several conventions:

- Lebensohl (3C relay by 1NT opener, waiting for the partner to declare his hand)
- Cappelletti (2D relay over partner's 2C overcall, meaning "pass or correct")


## Rosenkrantz redouble

The Rosenkrantz redouble is used to distinguish between different types of raises in competitive auctions. When one's partner makes an overcall and the next player (responder) makes a negative double, a redouble is used to show a raise which includes the ace or king in the bid suit; an actual raise shows a similar hand but denies a top honor.

This convention is named after its inventor, George Rosenkrantz. Variants include Guildenstern, in which the meanings of the redouble and direct raise are reversed, and Munson, in which the redouble shows a two-card raise including the ace or king. In both cases, the reasoning is that a better hand for the bid suit should raise the level of the auction to make things difficult for the opponents.

## Semi-forcing notrump

The semi-forcing notrump is a bidding convention in the card game of bridge.
In standard bidding, the response of 1 notrump to an opening bid of 1 of a suit shows 6 to 9 high card points and is non-forcing. Opener, with a balanced minimum, may pass the 1 NT response and, if the opponents also pass, that will become the contract.

As a variation in the $2 / 1$ game forcing system, some partnerships choose to play their 1 notrump response to 1 of a major suit as semi-forcing. The rebids and subsequent auctions are the same as with the forcing notrump, except: Opener is allowed to pass with a 5-3-3-2 minimum and no interest in game opposite a limit raise (including 3-card support for opener's major).

This changes follow-up auctions in that opener is assumed to either have 4 or more cards in any new suit bid, or some extra values when holding only 3 cards in a newly bid minor.

## Splinter bid

A Splinter Bid is a bid in a side-suit that indicates a trump fit and a singleton or void in the suit bid. For example, a 4 clubs response to a 1 heart opening establishes hearts as trump suit and indicates a singleton or void in clubs. A splinter bid like this is made on hands of such a strength that opposite suitable strong hands that might be held by the partner, a slam in the agreed trump suit is makeable. Whilst taking away a lot of bidding space, splinter bids are very descriptive as they help partner to revaluate his/her hand: soft honors (a king, queen or jack) in the splinter suit lose value, whilst honors in the other three suits gain value.

In some positions if a simple bid of the suit would be forcing then a single jump can be a splinter. For example 1H, 2C, 2D would be forcing so $1 \mathrm{H}, 2 \mathrm{C}, 3 \mathrm{D}$ may be used as a splinter.

The shortage is preferably a small singleton though can occasionally be a singleton honour or a void. The idea is that the partner of the player who splintered can easily tell if he has wasted values in the suit splintered; for example Axxx is ideal where KJ9x is almost worthless.

The 4 diamond bid in the following (undisturbed) bidding sequences are generally agreed to be splinter bids establishing spades as the trump suit:

1S - 4D
1C
4D
1C
1S - 4D
Some partnerships use one of the various forms of mini-splinters to explore for game rather than for slam.

## Stayman Convention

## Puppet Stayman

In contract bridge, the Stayman convention is a convention used to find a four-four trump fit in a major suit after someone opens the bidding with a bid of 1 No Trump. It may also be modified for use after an opening 2 No Trump or a strong 3 No Trump bid.

The opening bidder's partner, the responder, bids 2 Clubs to ask the no trump bidder to name a four card major suit if he has one. By using the Stayman convention the responder takes control of the bidding since a description of the opener's hand is already known within a limited range. Usually, the responder has at least one four-card major himself, and is looking for a possible 4-4 fit, but he may also have other motives in using the convention. It is generally understood that playing in an 8-card major fit is often superior to playing in no trump, hence the logic of this convention. The opener has the following rebids available:

2 diamonds - denies having a four card major
2 hearts - promises a four card heart suit, may also have a four card spade suit
2 spades - promises a four card spade suit, denies having a four card heart suit
In the most basic variation of the convention, the responder normally continues as follows:
2 notrump - invitational, no 4-4 major suit fit apparent
3 notrump - game values, no 4-4 major suit fit apparent

3 of opener's major - invitational, 4-4 major suit fit
4 of opener's major - game values, 4-4 major suit fit
After an invitational bid, the opener will pass with minimum values (for the agreed opening notrump range) or bid game with maximum values. For example, if the opening 1 NT range is agreed as $15-17 \mathrm{HCP}$ then an invitational responder hand will have a good 8 or 9 HCP . Opener will pass with 15 HCP , bid game with 17 HCP , and use judgement with 16 HCP .

When the responder continues in notrump and the opener holds four cards in both majors, the opener should correct the contract to spades at the appropriate level. (It can be inferred that responder holds four spades, else he would not have any reason to bid Stayman with an invitational or better hand.)

Some partners may by agreement also use the 2 No Trump, 3 hearts or 3 spades rebids after Stayman to show the same card distributions but with the high card point being the maximum for the 1 No Trump bid. Other rebids by the opener are undefined.

The bid has no relation to the 2 Club bidder's club suit. It is a convention, because its meaning is derived from a pre-arranged agreement rather than a natural interpretation of the bid. Like any bridge convention, there are many variations on the theme, and differences of opinion as to the details of its use. It is one of the most widely-used conventions in the game.

While the convention is named after the person who first wrote about it, Samuel Stayman, it was actually invented by his partner, George Rapee.

Jacoby transfers are often used to complement Stayman.
Another variation of Stayman is Puppet Stayman.

## Puppet Stayman

In contract bridge, Puppet Stayman is a variation of the Stayman convention which serves two purposes:

- it allows the side to find a 5-3 fit when the notrump opener has a 5-card major.
- it allows the side to find a 4-4 fit without revealing unnecessary information about the notrump openers hand to the opponents.

After 1NT by opener, responder starts by bidding 2 clubs just as in the standard Stayman convention. But the opener now responds 2 hearts or 2 spades only with a 5 -card major. Otherwise the response to 2 Clubs is 2 Diamonds which says nothing about 4-card majors.

After 1NT-2C-2D, responder then tells opener which 4-card major he is interested in, and opener can either raise or go back to NT. Responder tells opener he has a 4-card major by
bidding the other major, thus 1NT-2C-2D-2H shows 4 spades and thus 1NT-2C-2D-2S shows 4 hearts. Responder can show both 4-card majors by 1NT-2C-2D-2NT;.

Here is a typical Puppet Stayman auction
1NT-2C
2D-2S
3NT.
Note that opener has denied a 5-card major and has denied a 4-card heart suit by not raising hearts after responder bid 2 S , but opener's bidding has not revealed anything about whether he has a 4 -card spade suit as he would have had to do in a standard Stayman auction. This may be an advantage during the play in 3NT.

## Takeout double

A takeout double is a conventional double used in a competitive auction (most often, immediately after an opponent's opening bid) to show a desire to compete, in contrast to a penalty double, which indicates a desire to defend against the opponent's contract. Usually, the call indicates support for the unbid suits and a hand of opening strength or more. This call asks the doubler's partner to bid a suit, and usually implies shortness in the suit(s) doubled. Normally, a double is considered takeout only in the first round of bidding, and any subsequent ones are regarded as penalty (but see balancing double below).

In the strict sense, takeout double is a convention, as it does not show desire to penalize the opponents (which is the usual meaning of a double) - quite the opposite. However, it is possibly the oldest bridge convention and treated as an integral part of the game, thus considered natural.

## Requirements

Most common requirements to make a takeout double are:

- Shortness (doubleton or less, tripleton at most) in the opponents' suit(s),
- Length (at minimum 3 cards, preferably 4 ) in the unbid suits,
- High-card point strength of at least a minimal opening bid (11 HCP)

The most common treatment is that the fewer high card points the hand posesses, the distribution must be more strict (i.e. opponent's suit(s) shorter and unbid suits longer). Most players play that cards of $16(17)$ high card points should double regardless of distribution (unless the hand is suitable for 1NT overcall). Also, more high-card strength is required when opponents have bid on higher levels (e.g. preempted). Most players play that a double up to
the level of 4 H is takeout, while doubles on higher levels are for penalties or "cooperative" (i.e. the partner is supposed to pass unless his distribution and/or strength indicates that playing a contract of their own on a higher level is a better prospect).

## Examples

1) SQ974 H9 DAJ93 CKJ85 - This card is a minimal takeout double when the opponent opens 1 H . With other opening bids, it should be passed though. Also, if the opening bid was 3 H , the hand would be not strong enough to double.
2) SKQ83 HA52 D10 CAJ1062 - If opponents have bid 1D - 1H, the takeout double shows unbid suits (spades and clubs)
3) SKJ63 HAQ2 DA84 CQ93 - With 16 balanced points, this card is suitable for 1NT overcall over any opening bid rather than for a double.
4) SKQJ1063 HAK72 DA4 C6 - With 17 points and excellent spade suit, this card should double RHO's opening bid rather than overcall spades. Whatever partner bids, a subsequent bid of spades will indicate a stronger hand than a simple overcall.
5) S8 HAQ1094 DKJ107 CA83 - Over an opening bid of 1S this hand can double or overcall 2 H depending on style and agreements. However, over an opening bid of 1 H , it should pass, expecting to double later opponents' heart or notrump contract for penalties.

## Responses

Normally, (assuming the RHO passes) the doubler's partner should make a descriptive bid indicating a long suit of his own and the high-card strength:

- A minimal-level bid of a suit indicates a weak hand (normally, below 8 high-card points).
- A jump-bid of a suit shows a long (at least a 4-card) suit and invites the partner to bid on if the double was not minimal. Normally, such bid is made with 8-11 points.
- A bid of 1NT shows 8-10 HCP and balanced hand with at least one stopper in the opponent's suit. A bid of 2NT shows 11-12 HCP and balanced hand with stopper(s).
- With any card of opening-bid strength or higher, the responder should cuebid opponent's suit. The doubler is supposed to make a descriptive bid
- Finally, the takeout double can be passed for penalties in extreme situations, when the hand has 5-6 or more excellent trumps. The doubler is supposed to lead a trump, so that the opponent's trumps can be drawn.

If the RHO bids, the doubler's partner is not forced to make a bid anymore; if one is made, it is a free bid, indicating a certain strength and/or length in the suit bid.

The strength requirements above are lowered when the partner is known to be stronger (e.g. if he doubles an opponents' preempt), and raised when partner can be weak (as in protective position).

## Protective and balancing doubles

Distribution and strength requirements for a takeout double are lowered in situations when opponents' previous auction indicates that the partner has high-card strength, but was likely unable to take an action of his own because his distribution was not suitable for a double or an overcall.

A protective double can be made with as little as 8 high card points if both the RHO and the partner have passed the opening bid. Such a situation indicates that partner has strength, but was unable to act, perhaps because he had a hand like 1) or 5) in the table above:

## West 1H

North Pass

## East Pass

## South?

South, holding SQ863 H84 DA85 CK1054 can now double, expecting to find partner with strength and likely length in hearts, allowing him to pass for penalties or make a bid.

A balancing double occurs in later rounds of bidding, in situations where opponents have found a fit, but stopped on a low level, placing some points with the partner. It is normally done with a relatively weak hand and the distribution need not be perfect.

West 1C 2H
North Pass Pass

## East 1H Pass

## South Pass?

South, holding SQ863 H984 DK1085 CAJ was not strong enough to double in the first round. However, he can expect the partner to have shortness in hearts and likely 4 cards in spades or diamonds and make a balancing takeout double. Such doubles are more frequent on matchpoint scoring, where even a penalty of -100 for the failure to make $2 S$ can be profitable against -110 or -140 that the opponents could score in 2 H .

## Unusual notrump

In the card game of bridge, the unusual notrump is a conventional bid showing two lower unbid suits.

When the right-hand opponent opens 1H or 1S, the immediate overcall of 2 NT shows at least 5-5 in the minor suits (that is, at least five clubs plus at least five diamonds) and, presumably, a weakish hand ( 6 to 11 points). If the next player passes, the partner is expected to select the monor suit that he/she prefers and bid it at the 3-level.

The unusual notrump is used only after the opponents open the bidding. In addition to succinctly describing the hand to the partner, it also deprives the opponents of a lot of bidding space (that is, it has a preemptive value).

Many players extend the convention to have it show the "two lowest unbid" suits rather than strictly the minors. Thus, over 1C, 2NT shows diamonds and hearts; and over 1D, it shows clubs and hearts.

If the 2 notrump bidder bids again freely, then it shows a strong two suiter. To distinguish the weak and strong holdings, many partnerships agree not to use the unusual notrump for intermediate hands (about 12 to 14 points); they would simply overcall with one of their suits and show the other later if the bidding offers a chance. However, for two-suiters, many players apply losing trick count (LTC) instead of point count, as it more accurately depicts the offensive trick-taking potential of the hand. With LTC in effect, the required strength is about 4.5-7 losers, the latter only in favorable vulnerability.

Similarly, a 4NT overcall shows an extreme two suiter (usually at least 6-5, often 6-6 or 7-6) and enough trick-taking potential so that a 5 -level contract can be made, or a sacrifice will likely be profitable. It shows the same two suits as 2NT would show. Note that 4NT is "unusual" only when the opponents open the bidding; when your side opens the bidding 4NT is normally played as the Blackwood convention or a quantitative invitation to 6NT.

The unusual notrump is one of the earliest conventions devised for the game. It extended the principle that when the natural meaning of a bid is not generally very useful, it is profitable to agree that it means something somewhat opposite. That is, while natural notrump bids show a strong hand with balanced distribution, the unusual notrump shows a weak hand with very unbalanced distribution.

The Michaels cuebid is a similar convention which is used to show a two suiter with one or both major suits.

To counteract the unusual notrump, the opening side may employ unusual vs. unusual.

## Weak two bid

The Weak two bid is a common treatment used in the game of contract bridge to signify a weak hand with a long suit. It is a form of preemptive bid. Most often, the term refers to an opening bid; there is also a "weak jump overcall", which denotes a similar type of hand, but bid over an opponent's opening bid.

The requirements for a weak two bid vary from pair to pair. The most common treatment is that it requires:

- an exactly six-card good suit (the definition of "good" being subject to interpretation)
- no more than one Ace or King in other suits
- no side 5-card suit or 4-card major
- about 6-11 high card points total.

For example, the American Contract Bridge League recommends that the opener hold at least two of the top three cards in the suit, and hold no outside ace. Others recommend no more than eleven points, or at least three honors.

In Charles Goren's original bidding system, when a player opened the bidding with two of a suit, this signified that the player held a very strong hand. (This later became known as the strong two bid.) Later players found it more effective to reserve only the conventional opening 2 C to show a strong hand. That left the room for opening bids of $2 \mathrm{D}, 2 \mathrm{H}$, or 2 S to show a weak hand with a six-card suit. This became known as the weak two bid. In some systems, a bid of 2C shows a strong hand with a five-card suit, and a bid of 2D shows a hand that is similarly strong, but balanced. These alternate versions are less common.

Responses to a weak two opening bid are limited. A single raise of the bid suit is either invitational or preemptive, a raise to game is to play. A bid of any other suit asks the bidder to support the suit with 2 or more card support or rebid the original suit. A bid of 2 NT is forcing for one round and may ask the opener to show an outside feature such as an Ace, a King, or a void, or to give a coded response as to the strength of his suit and hand (the Ogust convention). The meaning of any of these bids should be discussed by the partners prior to play.

## Defenses to 1NT

## Brozel | Cappelletti | DONT | Landy

This List of defenses to $\mathbf{1 N T}$ gives the names of defensive conventions used to compete over an opening 1NT bid.

- Astro
- Brozel
- Cappelletti
- Crash
- DONT
- Landy
- Woolsey


## Brozel

Brozel is a method for intervening against an opposing 1 NT opening bid. It features the following calls:

- Double - shows any single suit; advancer bids 2C, after which intervenor corrects to his actual suit (or passes with clubs). This was originally played as requiring either a solid suit or a very good suit and an entry, leaving advancer the opportunity to pass with a couple of side-suit stoppers, though many partnerships now allow a weaker suit.
- 2 C - shows both minor suits
- 2D - shows both major suits
- 2 H or 2 S - shows the bid major and an unspecified minor suit

The convention is named loosely after its creator, Bernard Zeller.

## See also

- List of defenses to 1 NT


## Cappelletti

Cappelletti (often misspelled Cappeletti, also called Hamilton and Pottage) is bridge convention used for interventions over opponents' 1NT opening. Its invention is usually attributed to Mike Cappelletti, but origin of the concept is also claimed by Fred Hamilton, John Pottage and Gerald Helms.

Over 1NT, the intervening opponent can artificially overcall in second or fourth position, showing a one-suited or a two-suited hand:

- 2C shows one-suited hand (usually, 6 or more hands). The partner is supposed to:
- bid 2D with a weak hand, where the overcaller is supposed to correct, or
- bid 2NT with a strong hand, (overcaller bids the suit)
- 2D shows both major suits (at least 5-4),
- 2 H shows hearts and a minor,
- 2 S shows spades and a minor,
- 2NT shows both minor suits.


## See also

- List of defenses to 1 NT


## DONT

DONT, which is an acronym for Disturb Opponents' Notrump, is a method for intervening against an opposing 1NT opening bid. It features the following calls:

- Double - shows any single suit; advancer bids 2C, after which intervenor corrects to his actual suit
- $2 \mathrm{C}, 2 \mathrm{D}, 2 \mathrm{H}$ - shows the bid suit and any higher-ranking suit
- 2 S - shows spades


## See also

- List of defenses to 1 NT


## Landy

Landy is the first bridge conventional defense against over opponents' 1NT opening and one of first conventions ever introduced. It was invented by Alvin Landy.

Over 1NT, the overcall of 2C shows both major suits, while all other bids are natural. Requirements for the overcall vary from partnership to partnership: some require $5-5$, some 5-4, and yet others only 4-4 (provided the overall strength is sufficient). The partner can take a preference to either major or make a non-forcing bid of a suit; 2NT is used as a forcing query.

Various modifications have appeared over years, by various authors.

## See also

- List of defenses to 1 NT


# Bridge Techniques 

## Squeeze | Avoidance play | Coup | Crossruff | Duck | Dummy reversal | Endplay | Finesse | Holdup | Loser on loser | Ruff | Ruff and discard | Safety Play | Signal | Smother Play | Trump promotion | Uppercut

## Contract bridge playing techniques

One of the most fascinating aspects of the game of contract bridge is the numerous ways that exist to establish extra tricks.

The simplest way to establish extra tricks is to establish tricks by driving out (or ruffing out for that matter) all higher cards in a suit. There are finesses, plays that gain from some favorable position of the opponent cards, by leading up to combinations of cards (e.g. the Ace and the Queen. The more complex the positions become, the more fascinating the possibilities. That is particulary true for techniques involving more than one suit. These techniques include squeeze plays, end plays, dummy reversals and combinations of these.

## Squeeze

Automatic Squeeze | Backwash squeeze $\mid$ Compound squeeze | Criss-cross Squeeze | Double Squeeze | Entry-shifting Squeeze | Guard squeeze | Progressive Squeeze | Pseudo-squeeze |

Simple Squeeze | Single-suit Squeeze | Stepping-stone squeeze | Strip squeeze | Suicide Squeeze | Trump squeeze | Winkle squeeze | Squeezee

Squeeze play (or simply squeeze) is a play in contract bridge that often occurs late in the game and involves the play of a card (often, but not necessarily, a winner) which forces an opponent to discard a vital card from his hand, thus giving up a trick (or two in some cases). The discarded card can be either a winner or any card that solidifies defender's defensive position.

Although the squeeze was already discovered and described in whist, its use was best described and perfected in contract bridge.

The squeeze operates on the principle that, in a $n$-card ending with $n-1$ combined winners, the two hands can have one potential trick (threat card) each, but there's no room in single defender's hand to cover both of those. In order for a squeeze to work, the victim might not hold any "idle" cards, but all his cards must be "busy", covering some sort of menace.

In general, a squeeze requires the following conditions to be fulfilled. In most common scenarios, all of them are present, but there are also squeezes where one or more of the them is not required:

- The declarer has all but one (in extreme situations, two) winners in combined hands. In other words, the count is rectified, i.e. the declarer has already lost all the tricks he was about to.
- In at least two suits are present cards which are not immediate winners, but present a menace or threat of becoming one;
- At least one of the menaces is placed after the squeezed defender(s) (squeezee).
- The declarer has sufficient entries (winners serving as communication between two hands) to cash the developed menaces.
- The squeezed defender(s) must not hold any idle cards, i.e. the ones that could be safely disposed of.

This mechanism can be shown on a simple squeeze.


South leads the club ace in the following position, and West is squeezed between hearts and spades - if he throws away the heart ace, south discards the jack of spades in north, plays hearts and north makes the 9 K and the SA, if he throws away one of the spades, south discards the king of hearts in north, plays spades, and again north makes the two remaining tricks.

In this position:

- Three cards are remaining, and the declarer has two immediate winners (SA and CA).
- SJ and HK are the menaces;
- Both menaces are placed after the squeezee (West);
- SA serves as an entry to the promoted menace card;
- West has no idle cards.

This is a positional squeeze - East holding West's cards would not be squeezed as one of the two menaces (the spade Jack and the heart King) would be discarded before his turn to play. If north had discarded the king of hearts, east could discard the ace of hearts (provided west still had at least one heart), if north had discarded the spade jack (or the spade ace), east could have discarded a spade.

We will see more of this in simple squeezes.
These plays typically occur late in the game, because they often require the player to have an exact count and location of certain high cards in one or more suits, and must know exactly what cards an opponent will be forced to play, as the following example demonstrates:


This time when the club ace is cashed, West simply sheds his small diamond, an idle card.
To avoid this kind of failure, south needs to 'rectify the count' - that is, he must lose all tricks except the ones he is entitled to and the one he intends to gain with the squeeze. In this case that would mean that he should grant the diamond queen to east first; however, in this case east returns a spade, taken in north, and the communication is lost: south cannot reach the club ace in his hand.

## Classification

There are several possible classifications of squeezes, depending on the position. Most common ones are named, some involving a combination of factors:

- According to the operation of squeeze:
- In automatic squeeze, either opponent can be squeezed (provided he protects appropriate suits).
- In positional squeeze, only one particular opponent can be squeezed.
- According to number of opponents squeezed:
- Single, where only one opponent is squeezed
- Double, where both opponents are squeezed
- According to number of suits involved:
- Two-suit squeezes, where menaces in two side suits are involved
- Three-suit squeezes
- Single-suit squeeze is peculiar and rare, and presents a specific type of endplay rather than "real" squeeze.
- According to the gain:
- In material squeezes, opponents are forced to give up a trick directly;
- In non-material squeezes, opponents are forced to give up strategic position; the extra trick, however, may materialize later. For example, an opponent can be squeezed out of a card which disturbs declarer's entries, or an exit card.
- According to the count rectification:
- In squeezes with count, the count is rectified before the squeeze card is played, and declarer will not concede any tricks (they're strongly related with material squeezes).
- In squeezes without count, the count is not rectified; often, it involves a throw-in in the end position (strongly related with non-material) squeezes.

The following articles describe the mechanisms of different types of squeezes:

| Name | Automatic | No. | No. of suits | Material | Count rect'd |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Simple squeeze | Both | 1 | 2 | material | Yes |
| Criss-cross squeeze | Positional | 1 | 2 | material | Yes |
| Trump squeeze | Both | 1 | 2 | material | Yes |
| Progressive squeeze (aka Triple squeeze) | Positional | 1 | 3 | material | Yes |
| Double squeeze | Both | 2 | 3 | material | Yes |
| Compound squeeze | Positional | 2 | 3 | material | Yes |
| Entry-shifting squeeze | Positional | 1 | 2 | material | Yes |
| Single-suit squeeze | Positional | 1 | 1 | non-materia |  |
| Strip squeeze | Positional | 1 | 1 | material | No |
| Backwash squeeze | Positional | 1 | 2 | material | Yes |
| Suicide squeeze | Positional | 1 | 2 | material | Yes* |
| Stepping-stone squeeze | Positional | 1-2 | 2 | non-materia |  |
| Guard squeeze | Positional | 1-2 | 2-3 | material | Yes |
| Winkle squeeze | Positional | 1 | 3 | non-materia |  |
| Saturated squeeze |  |  |  |  |  |
| Pseudo-squeeze | $N / A$ | N/A | $N / A$ | non-materia | $N / A$ |

## Automatic squeeze

In contract bridge, an Automatic squeeze is a squeeze which can be executed automatically that means without guesswork. The cards that have to be played and the order in which they are played can always be determined. In other words, if the squeeze is on ,it can always be executed successfully. This is in contrast to a non-automatic squeeze in which the contract can always be made, if the discards of the opponents are guessed. A good example of an automatic squeeze is the simple squeeze an example of a non-automatic squeeze would be the criss-cross squeeze.

## Backwash squeeze

Backwash squeeze is a rare squeeze which involves squeezing an opponent which lies behind declarer's menace. It was first attested by famous bridge theorist Géza Ottlik in an article in The Bridge World in 1974, as well as in his famous book Adventures in Card Play, co-authored with Hugh Kelsey.

By nature, backwash squeeze is a non-material trump squeeze without the count. It occurs when the declarer (or dummy) has high trump(s) but must not draw opponent's remaining trump(s). Instead, he ruffs a card high, and the opponent playing after, still having trump(s), must choose to under-ruff or give up one of menaces, either in form of a direct trick or an exit card, allowing later endplay. Since the squeeze is without the count, the squeezed defender will be allowed to take a later trick.

## Example



Spades are trumps, and South needs five of six remaining tricks, the last trick having been taken by dummy. The material for those is theoretically there by means of DA and crossruffing, but West's S8 is in the way, as he can overruff declarer's S7 if he tries to ruff hearts. However, West also protects diamonds, and can be thrown-in with that trump if the correct position is set up. The declarer now ruffs a heart with trump Ace (establishing the
suit), and West is backwash-squeezed. As he must not unguard diamonds, and under-ruffing will allow the declarer to draw trumps with dummy's KJ, he discards a club-his exit card. Now, the declarer draws trumps and plays now high heart from dummy; when West overrufs, he has only diamonds left and must give up a trick in the suit.

## Compound squeeze

A compound squeeze is a type of play in the game of contract bridge. In this squeeze one opponent is squeezed such that some form of other squeeze emerges involving either or both players. Usually this term is used to reference a pentagonal squeeze. In this form of squeeze both players guard two suits, and one player guards a third suit. On the play of a card the player guarding three suits must give up one of the shared guards (so as not to provide immediate winners). Now each opponent singly guards one suit, and there is a third suit that is jointly guarded. This means that a double squeeze matrix exists. Note that there are pseudo compound squeezes, where the triply squeezed opponent can select the 'correct' shared suit, such that the entry situation precludes the proper functioning of the double squeeze.

Other variations of compound squeezes:

- hexagonal squeeze: where one opponent is triply squeezed, and the resulting matrix is that of a pentagonal squeeze. Both opponents are squeezed in the same three suits.
- saturated squeeze: similar to the hexagonal squeeze, but all four suits are involved, with each opponent singly holding length guards in 2 suits, and then the 2 other suits are shared.


## Example



South plays 6 S, East having doubled the bid of 5C. West leads the C10. Despite the potential defensive ruff, the declarer must duck the lead to East's queen in order to rectify the count. East returns a trump (although the heart would kill the squeeze). The declarer has 7 spade tricks, a heart, a club, and two diamonds. The twelfth trick can be obtained by compound squeeze: assuming only East guards clubs, he will have to ultimately unguard one of red suits on the first squeeze card; that suit will serve as the "common suit" for the latter double squeeze. The declarer draws trumps, cashing the CA in the process for a Vienna coup. When declarer leads the sixth trump (S5), the position as on the right diagram is reached.

West discards a heart, dummy a club, but East now has a problem, as he must discard one of red suits:

- If he discards a diamond, declarer can now cash DK and DA. On the last spade, a classic double-squeeze position occurs, where both players cannot guard hearts.
- If he discards a heart, declarer can now cash HA and DA. Again, a double-squeeze is executed, as both players cannot guard diamonds.

The motive is similar to the one in guard squeeze - East is squeezed in three suits and forced to abandon the help to his partner in one of them.

## Criss-cross squeeze

In contract bridge, the criss-cross squeeze is variant of the simple squeeze. (Squeezes are techniques in this game to gain extra tricks.)


This is one in which both menaces are blocked, thus providing the necessary entry to the other menace. Unblocking in the right order will establish the additional winner, but unless one has an exact count of the hand it might be a guessing game. This squeeze is therefore not an automatic squeeze. A simple example will be sufficient to explain the mechanism:

After cashing the ace of clubs, one has just to cash the ace of the suit in which West has bared his king and then "cross" to the other ace, serving as an entry to the established queen. This is a non-positional squeeze, as it would work against East holding West's cards as well.

## Double Squeeze

## Simultaneous double squeeze | Non-simultaneous double squeeze

The double squeeze is a type of squeeze play in the card game of Bridge.
Double squeezes are a combination of two simple squeezes carried out against both opponents. If both squeezes are executed by the very same trick, that is the same squeeze card, the double squeeze is called simultaneous. If both opponents are squeezed on different tricks (the squeeze card is then a card in the suit that was menacing the opponent squeezed first) the double squeeze is called non-simultaneous.


As there are only four suits in contract bridge the two simple squeezes can only be combined by using a menace for both opponents, the squeeze card being in the fourth suit.

The following diagram demonstrates the basics of a double squeeze.
When the two of clubs is played, West has to keep his ace of hearts (menaced by dummy's king) and gives up his spade guard (spades being the double menace). In the same trick (this is therefore a simultaneous double squeeze), East is squeezed in the pointed suits.

The following two links will demonstrate the basic matrices of the simultaneous double squeeze and the non-simultaneous double squeeze.

## Simultaneous double squeeze

A simultaneous double squeeze is a double squeeze the card game contract bridge in which both opponents are squeezed by the same squeeze card. There are three basic matrices:


1) When the club deuce is played West has to shed a spade, dummy sheds the now useless king of hearts and East is squeezed in the pointed suits. This is a positional squeeze.

2) The two of clubs is cashed and again West has to give up the guard in the double menace suit (spades). The now useless king of hearts is played from dummy and East is squeezed in the pointed suits. This is a non-positional squeeze - we can swap the hands of East and West - but it is not an automatic squeeze as was (1). We have to know who guards each red suit.

4 AK 2
4 -
$+2$

3) This is the most comfortable endposition of the three simultaneous double squeeze matrices. Simply because this squeeze is automatic and non-positional. We can swap the hands of East and West and we discard the two of diamonds on the three of clubs without any reflection. We know that, as long as the squeeze worked, all spades in the North hand must be winners, unless one of our two queens became a master.

## Non-simultaneous double squeeze

A Non-simultaneous double squeeze, in the card game of bridge, is a double squeeze in which the pressure is not applied to both opponents at the same trick. Before categorizing a little more about it we will show a diagram for the four basic matrices.


1) When the club ace is played West is squeezed immediately and has to shed a spade. North plays the now useless jack of hearts and East still has an idle card to throw, the three of hearts. But when the heart deuce is led up to the ace, East is squeezed on his turn in the pointed suits. This is a positional squeeze.

2) When the club ace is played West can shed a heart, but East is squeezed and has to give up his spade guard. When the heart deuce is led to the ace it is West who is squeezed in the pointed suits. This is an automatic squeeze.

3) When the club ace is played West is squeezed immediately and has to shed a spade. North plays the now useless jack of hearts and East still has an idle card to throw, the three of hearts. A spade is led to the king and the heart ace is cashed. On that card East is squeezed in the pointed suits. This is a positional squeeze.

4)When the club ace is played West is squeezed immediately and has to shed a spade. Two hearts are cashed and East is squeezed between the pointed suits on the second of them. This is an automatic squeeze.

In all double squeezes the second squeeze card is opposed to (that is in the other hand than) the first squeeze card (it could be in the same hand in diagram (2) though). The double menace is always in the same hand than the first squeeze card. In matrices (1) and (2) the second squeeze ecxecutes immediately after the first. For that reason the squeeze card is an entry to North. In matrices (3) and (4) we cross to the North hand and then execute the squeeze, two tricks later than the first one. But that could even be later as demonstrated by the following diagram, which is a somehow extreme variation of (4).

We have an eight card ending and by playing the club ace West is squeezed, forced to give up a spade. East will be squeezed five tricks later on the heart ten.


## Entry-shifting squeeze

In the card game contract bridge, an entry-shifting squeeze is a mixture between a material squeeze and an immaterial squeeze. The material part is the same as in a trump squeeze or a squeeze without the count. The immaterial part is that depending on the choice of discards of the squeezee an entry into one or into the other hand is created. For that very reason an entry-shifting squeeze is always a positional squeeze.

In the first diagram clubs are trumps and South could claim all tricks on a crossruff were it not for the trump in East's hand. When the club jack is played the entry-shifting squeeze comes to his rescue. If West sheds a heart the jack is overtaken with the ace, a heart ruffed and North is left with the last trump and a master heart. If West chooses to discard a diamond, the club jack is underplayed with the five. North's club ace ruffs the diamonds good and the South hand wins the last two tricks.

The entry-shifting mechanism works also in No Trumps, as can be seen in the next example.


As we have only four tricks this is a squeeze without the count. It is not possible to rectify the count as there are not enough communications between the two hands. The entryshifting mechanism will overcome this though. South leads the DA and West has no good discard. If he discards a spade, the DJ is played and South continues with a spade to the ace and the spade eight. West returns a heart to South's ace, but the diamond king serves as an entry to the established spades. If West chooses to discard a heart, the diamond king is played and after ace of hearts and another heart, the DQ will serve as an entry. There is an interesting variation about this ending. If East guards only the third round of one of the menace suits, the squeeze does not work, given that he as an outside winner too. If the H9 and the H 10 were interchanged in the above diagram, best defense can always restrict South to his four top tricks: West discards a heart honor on the DA. Now East can gain the trick that has to be lost in that suit and cash his side winner.

## Guard squeeze

Guard squeeze is a type of squeeze in contract bridge where a player is squeezed out of a card which prevents his partner from being finessed. The squeeze operates in three suits, where the squeezee protects the menaces in two suits, but cannot help his partner anymore in the third suit after the squeeze is executed.

The following example shows a guard squeeze:


South plays the S2 and West must keep all his red cards to protect menaces of H5 and DQ in the dummy, thus he must discard the jack of clubs. Now, the declarer plays a heart to the king and can finesse the East's queen of clubs.


A double guard squeeze is very rare. Again, in the diagram South leads the spade 2 . If West discards CJ , the position comes down to the one from the previous diagram. So, he must discard the diamond king. The declarer ditches now unnecessary club from the table, and the pressure comes to East - he must not throw the DA nor a club, and after the discard of the HJ the declarer has a free way to finesse West's queen.

## See also

- Double squeeze


## Progressive squeeze

The progressive squeeze is a contract bridge squeeze that gains two tricks by squeezing one and the same player twice, hence the name. It is also called triple squeeze for the simple reason that the opponent is squeezed in three suits.

The first diagram shows a basic example:


When the ace of clubs is cashed East is squeezed and has to discard one of his red aces, the established king is cashed (this is the progressive squeeze card) and East is squeezed for another trick. In the above example an extended menace, threatening the immediate loss of two tricks was present. That is not always necessary, a progressive squeeze still works if we have an additional entry as compensation.


When the ace of clubs is cashed East can either discard the diamond ace, after which the diamond king will seal his fate, or bare one of his major suit holdings in which case the jack in that suit will be the progressive squeeze card. Had West East's cards the best defense to discard a spade will break the second squeeze.

## Pseudo-squeeze

Pseudo-squeeze is an "ingenuine" type of squeeze in contract bridge, where the declarer goes through the motions of a squeeze where none actually exists - simulating a genuine squeeze in the hope that a defender gets the position wrong.

For example, consider the simple positional squeeze as given in the main squeeze page:


Club ace is lead from dummy in the following position, and East is genuinely squeezed between hearts and spades - if he throws away the heart ace, declarer discards the SJ from hand, plays hearts and makes the $\triangle K$ and the SA. If he throws away one of the spades, South discards the Hking, plays spades, and again makes the two remaining tricks.

Now consider the following layout (South as declarer):


Now, seeing all the cards it is obvious that on the play of the CA East can safely throw a spade, as his partner still guards South's spade 2 menace. However, he cannot see declarer's hand and if he throws the ace of hearts, then he has been pseudo-squeezed. Similarly, the position could have been:


Now, if East throws the spade on the ace of clubs, South makes the rest of the tricks.
Defenders can usually avoid pseudo-squeezes by accurate counting and signalling.

## Simple squeeze

The simple squeeze is the most basic form of a squeeze as frequently applied in the game of contract bridge. By playing a winner in one suit, an opponent is squeezed out of a winner in a different suit. (The card led that leads to the squeeze is called the "squeeze card").

The simple squeeze is a squeeze against one opponent and gains one trick. It normally only works with the count, that means that the player executing the squeeze in order to gain an additional trick needs to have all winners but one. The following diagram shows the most basic matrix:


When the ace of clubs is cashed, West is squeezed in the major suits. Obviously the key factor is that West has to discard before North. This squeeze matrix will not work if East's and West's cards were swapped. It is a positional squeeze.

The next diagram shows a distribution of the menaces that allow to squeeze either of the opponents as long as one of them holds the three key cards in the majors.


When the ace of clubs is played the heart king is discarded from dummy and East is squeezed in the majors again.


Sometimes the suit containing the menace adjacent to the squeeze card is blocked. If the suit can be unblocked before the squeeze is executed that is called the Vienna coup the play being
described the first time in a Viennese coffee shop at the beginning of the 20th century. The play was therefore then conducted in a game of whist.

South leads and needs to make all the tricks. The only successful sequence is to unblock the heart ace before then cashing the two clubs (shedding a heart from North). If South cashes his two clubs immediately, it is North who is squeezed, East simply discards in the same suit than North.

As long as a Vienna coup can be performed, or the menace is not blocked, this is an automatic squeeze. If for some reason, e.g. a lack of entries, the menace cannot be unblocked, the squeeze becomes positional.

We have seen that, unless blocked, distributed menaces always provide an automatic squeeze. There is a squeeze with blocked distributed menaces that is positional, the crisscross squeeze.

## Single-suit squeeze



A single-suit squeeze is a unique squeeze play in contract bridge that occurs with an awkward defensive distribution of one suit. It is a kind of immaterial squeeze, in which a discard does not cost a trick directly, but gives up a position, allowing the opponents to adopt
a winning line. The first example is a one-suit squeeze in which the victim can choose between an endplay or a simple promotion:

If the five of diamonds is played, East must choose whether to discard the spade three or an intermediate honor. By throwing the three East chooses an endplay; South simply ducks a small spade to East, who has to lead up to the king. By throwing an intermediate honor, East allows for a promotion of the eight; South leads the nine, West has to cover in order to avoid an endplay and the eight will eventually become master. Note that if the spade five and three were exchanged the squeeze still works. East can choose between an endplay to the king, or an endplay to the eight.

## Stepping-stone squeeze

The stepping-stone squeeze is an advanced type of squeeze in Contract Bridge. It is used when the Declarer has enough high cards to take all but one of the remaining tricks, but does not have enough communication between the hands to cash them.

The following position is an example of a Stepping-stone squeeze:


South has three winners: The SK, SA, and CA. Unfortunately, after cashing the SK, there will be no entry to the North hand to enjoy the SA. However, on the play of CA, West is squeezed. Discarding a spade allows South to overtake the SK to get two tricks in the suit. Throwing
the HA lets South cash the HK. Therefore, West parts with the D2. Now South is able to play the SK and lead the HK, putting West on lead with only the SQ remaining in hand.

It is called a Stepping-stone squeeze because West's HA is used as a stepping-stone to reach the abandoned SA.

This squeeze would work equally well with the East and West hands reversed.
An interesting variation is the following ending playing in no trumps with the lead in South:


Needing all but one of the remaining tricks, the declarer lead the ten of spades covered by West, dummy winning with the Ace. When the winning diamond is led from dummy (declarer throwing a heart) both defenders are subjected to a stepping stone squeeze. If they both throw spades then declarer cashes the spades in dummy. If one defender keeps two spades then declarer plays a small spade to the jack and leads a heart. Now the defender who kept spades wins his stiff honour and must lead a spade to dummy's winners. His partner cannot overtake as this sets up the queen.

## Strip squeeze

A strip squeeze is a declarer technique at Contract Bridge combining elements of squeeze and endplay.

This squeeze occurs when declarer has two or more losers remaining. By cashing winners, declarer forces the defender to discard winners and/or exit cards so that when they are put on lead they cannot defeat the contract. Eventually, the defender will be forced to lead a suit that will cost them a trick.


South is in the contract 6 H with 11 top tricks on the CK lead. To perform a simple squeeze, South would have to lose a trick at some point to rectify the count. This will not work on this hand because the only menaces South has are in clubs and spades. Ducking a trick in clubs would allow East to guard the suit.

South must rely on a strip squeeze to make the hand. The first club trick is won, and the hearts then the diamonds are cashed. South has remaining SQ6 CJ. North keeps SA3 and another card. West must choose between baring the SK or CQ. If West keeps SKx, South puts West on lead with a club to lead away from the spade. Otherwise, South plays a spade to the Ace to drop West's King.

An experienced West will try to make things as difficult as possible for South so that the correct route to 12 tricks is not certain. Making the key discard before the final winner is cashed will introduce as much ambiguity as possible. Although double-dummy it is impossible to go wrong, occasionally South will make the wrong decision in real life.

## Suicide squeeze

Suicide squeeze or cannibal squeeze is a type of squeeze in bridge or whist, in which an opponent is squeezed by a card played by his partner. Normally, this occurs with less-thanperfect defense, but there are also legitimate positions where the defense could not have prevailed.

The most common position for a legitimate suicide squeeze occurs when a side suit is "tangled" (neither side can lead it without giving up a trick), and another suit is protected by the partner of the player who is a trick, as in the following diagram:


West is to lead; if he leads a diamond, it will "untangle" the suit for the declarer. However, when he leads the high heart, he induces a simple squeeze on his partner, who must either discard the high C7 or unguard the diamond king. (Dummy has an idle card, and East is to play before the declarer).

## Trump squeeze

In contract bridge, the trump squeeze is a variant of the simple squeeze. (Squeezes are techniques in this game to gain extra tricks.)

In a trump squeeze, declarer has a suit that can be established by ruffing, but the defender being squeezed is guarding that suit. However, if he happens to also guard another suit, the squeeze card will force him to unguard one. This end position below shows a trump squeeze in action:


Hearts are trumps, and the lead is in the North hand. Declarer plays the DA, discarding the S3 from hand, and East has no good discard. If East plays a spade, declarer cashes the SA to set up the spade suit. If East plays a club, declarer cashes the CK ruffs a club, and has the Ace of spades as an entry to dummy.

The key elements are:

- A suit that declarer can ruff to set up extra tricks
- An entry in another suit which can also yield extra tricks
- One declarer that guards both suits

A trump squeeze is not a positional squeeze, and will work if the defenders' hands are swapped.

A very rare example is the double trump squeeze, where both opponents suffer the same fate. Here is an example from the quarterfinals of the 2004 Olympiad, in the match between Italy and the USA. Declarer, Norberto Bocchi of Italy, declared 4H and achieved the following end position with the lead in dummy:


Declarer led the Ace of Hearts from dummy, discarding the S8, and the defence had no answer. If both pitched spades, declarer could play the Ace and King of spades, establishing the ten. If both pitched diamonds, a spade to the Ace and a diamond ruff would establish the Queen. Declarer's play depended on who released the diamond guard. If it was West, a spade to the Ace and the Ten of diamonds would set up the Queen. If it was East, a spade to the Ace and the Queen of diamonds would smother the Jack and create a ruffing finesse position.

Note that the squeeze was not automatic, but Bocchi read the situation accurately when West discarded the Seven of Diamonds.

## Winkle squeeze

A winkle is a rare squeeze/endplay in contract bridge in which a trick is offered to the defenders but whichever wins the trick is then endplayed. Often one defender would be forced to offer a finesse or ruff and discard while the other could overtake and thereby promote a trick in that suit for declarer.

An example end-position, South needing 4 tricks:


On the play of the last spade, West and North let go clubs, and East is squeezed. Pitching a heart yields an immediate trick in that suit, but if a diamond is pitched declarer follows with Ace and 3 of diamonds. If East wins the trick, they must lead hearts conceding the last two tricks there. If west saves partner by playing the king of diamonds on the 2nd diamond trick, then they must concede the last two tricks to dummy's now high Ace of clubs and Jack of diamonds.

## Squeezee

In card games of the whist family, a squeezee is a player who is squeezed, in other words he/she is forced to play a card and any card she/he can legally play results in a loss. This loss
may be material (e.g. establishing a winner for the other side) or immaterial (e.g. loss of an exit card in case of a Strip Squeeze).

## Avoidance play

In contract bridge, avoidance play is a play technique whereby the declarer tries to avoid one particular defender to take a trick, so as to eschew a dangerous lead from that hand. The dangerous hand is usually the one who is able to finesse through declarer's honors, or to give a ruff to the partner. Avoidance play can be regarded as one type of safety play.

## Example



South plays 4 S and West leads HK (indicating the ace), East playing the 3 (signalling the odd number of hearts and discouraging the continuation). West continues with a club, increasing the probability of defensive ruff in that suit.

The declarer has plenty of tricks, but is missing the trump queen and two top hearts; giving up the third heart early would probably mean losing the contract. Since HA is almost certainly with West, if East gets the trump queen, he could finesse declarer's HQ. Thus, the declarer must not allow East to get the trick, and so must play a trump Ace first and finesse against the queen in East's hand. If West has the SQ and takes it, he could only take one more heart trick.

## Coup

## Bath coup | Coup en passant | Devil's coup | Trump coup | Morton's fork coup | Scissors coup

In contract bridge, coup is a generic name for various techniques in play, denoting a specific pattern in the lie and the play of cards.

There are various types of coup which can be effected.

## Pure Coups

There are many coups where the opponents can do little about:

## Bath coup

The original coup was referred to as the Bath Coup, whereby a player holding the Ace, Jack and small card(s) plays small against the lead of a King-Queen sequence, so as to get two tricks (if the suit is continued) or gain tempo.

Crocodile coup
The Crocodile coup is a technique used by the defense. It is executed by overtaking your partner's winner, when he or she is about to be endplayed.

Deschapelles coup
The act of sacrificing a card that would ordinarily be an eventual winner (such as an offside King) to establish an entry into partner's hand. The Deschapelles Coup is used more often on defense than offense.

## Devil's coup

The Devil's coup is the act of stopping defenders getting a trump trick from Qx opposite Jxx - surely the work of the Devil?

## Coup en passant

The act of ruffing through the player who has bigger trump(s), so that the trump is taken either by ruffing or by making it master trump if the other player ruffs.

Galileo coup
The Galileo coup is so named because Galileo Galilei is usually credited with the invention of the telescope; this coup arises when the contract is in a suit in which the declaring side is
missing both the Ace and King; if successful, the defenders end up being forced to play the Ace and King of trumps to the same trick, thus "telescoping" their two trump tricks into one.

Grand coup
A Trump coup where the cards ruffed in order to execute a trump reduction are winners.
Merrimac coup
The Merrimac coup is the act of sacrificing an honour (usually a King) in order to remove an entry from an opponent's hand.

## Morton's fork coup

The forcing of an opponent to choose between establishing one or more extra tricks in the suit led and losing the opportunity to win a trick in the suit led.

## Scissors coup

The Scissors coup is so named because it cuts communications between defenders, most commonly by discarding a key card from either the declarer's own hand or dummy. This enables declarer to prevent the defenders transferring the lead; usually for a defensive ruff.

## Trump coup

The Trump coup happens in the end-game when declarer needs to finesse in trumps but doesn't have one to lead up. It is often assotiated with a Trump Reduction.

Vienna coup
The Vienna coup is the act of cashing an ace opposite the queen (or, more generically, an immediate winner opposite a menace) in order to enable a squeeze to work on either opponent.

## Deceptive Coups

Some coups rely on the opponents making a mistake.
Grosvenor gambit
The act of deliberately misplaying a hand in order to induce a mistake by an opponent which results in either the same or a superior result. Even when the gambit does not yield a material gain, it usually induces a big psychological impact on the opponents who were offered a trick for free but couldn't have believed it were possible.

## Idiot coup

The act of only losing one trick when missing AKx of trumps. Declarer leads through one of the defenders hoping they will play the king from Kx which then falls under their partner's stiff ace. Obviously going up with the king is foolish as with the ace declarer has a legitimate line escape a loser (play the ace and hope for stiff king or take a finesse), hence the name.

## Illegal Coups

There are also a number of insidious and illegal coups which should only be tried out against friends in social bridge:

Alcatraz coup
The Alcatraz coup is performed by purposely revoking when declarer is uncertain which defender to finesse. After the trick is over, declarer knows which defender to finesse, "notices" and corrects his misplay, and finesses the correct defender. Note: performing an Alcatraz coup is explicitly against the rules of bridge, and can get you kicked out of tournaments.

Superglue coup
Another dishonest (and quite subtle) coup; the Superglue Coup is where a defender pulls out two cards together (as if they were superglued together). Declarer sees the cards and assumes they are adjacent in rank in the defender's hand. For example if declarer is missing KT3 and one defender pulls the K and 3 out together declarer can assume that the defender does not have the T! If declarer alters his line based on this information and loses to the T in the defender's hand then he has fallen victim to the Superglue Coup! An excellent couple of examples are at poorbridge.com.

## Bath coup

Bath coup is a coup in the game of contract bridge, where the declarer, holding AJx in a suit ducks the left-hand opponent's lead of a King (or a Queen). The coup is named after the city of Bath in England and dates from the game of Whist, the predecessor of Bridge.

The purpose of the Bath coup is to either gain a trick by means of a free finesse if the suit is continued, or to gain a tempo, because the suit may not be continued by opponents without the loss of a trick. The basic position for the bath coup is like on the diagram:

West leads the King at a notrump contract. If South takes the trick immediately, his Jack can be subsequently finessed if East gains a later trick, providing four tricks in the suit for the defense. However, if South applies the Bath coup by ducking, he will either take two tricks with AJ, or the opponents would have to regain the lead twice to cash the suit - first, East must gain the lead for a finesse, and later, West must regain the lead to cash the suit. If the suit is divided $5-2$, as in the diagram, the declarer has in effect performed a holdup with an additional gain in tempo, as the opponents have to regain the lead once each. If the suit were divided $4-3$, the last lead could be gained by any opponent to cash the suit, but the number of available tricks would be smaller.

A43
KQ1098 76
J52
The coup also occurs when ace and jack are split, but the jack lies before KQ.

## Defense



The defense can relatively easy prevent giving away the trick by free finesse by accurate signaling. The most common signaling method on partner's lead is
encouraging/discouraging (high card/low card respectively). In the examples above, East would play the six (the lowest), indicating that he doesn't have the jack. However, there are situations when West may misread the signal. To overcome the situation, some players agree that throwing away the Jack is mandatory when a King is lead at a notrump contract; yet others play that the only lead of the Queen requires the partner to drop the Jack if he has it.

However, when a Bath coup position arises, defenders can't regain the tempo. What they can do, though, is to utilize the order of their entries correctly, as in the above deal.

West leads SK against 3NT, South executes the Bath coup by ducking, and West must switch. If he plays a red suit, declarer will play on hearts (of course, he will have to guess the position correctly). When West takes his ace, he still cannot continue spades, and the declarer will have time to develop a club trick as his ninth (along with four heart tricks, SA, and three diamonds). However, if West plays a club, the declarer is doomed: East will take his CA and play a spade through, while West still has the HA as an entry to good spades.

## Coup en passant



Coup en passant is a type of coup in contract bridge where trump trick(s) are "stolen" by trying to ruffing a card after the player who has the master trump(s).

Just as the trump coup resembles a direct finesse, except that trumps are not the suit led, so the coup en passant similarly resembles an indirect finesse.

In this example, spades are trump, and declarer (South) takes two tricks by playing hearts first. Then, with clubs led from the dummy, declarer ruffs if and only if East does not. South's diamond loser will go under East's ace of spades on one of the last two tricks, and South's king will take the other trick.

Here both players have the same number of trumps, but the hand would play the same way if either or both had a small trump in place of the small diamond. The important thing is that declarer must have few enough trumps that dummy can be entered at the critical time.

## See also

- Trump promotion


## Devil's coup

The Devil's Coup is a declarer play in Bridge to prevent opponents from taking a natural trump trick, typically with Qx opposite Jxx in trumps.

The aim is to come to a position similar to below. Spades are trumps and the lead is in dummy (North):


The H3 is lead. If East declines to ruff high then declarer ruffs and cashes the Ace and King of spades. If East ruffs high declarer overruffs and finesses to make the remaining two tricks. (Thus an expert will find a way to go down if East has QJ bare.)

Devil's coups are fairly rare as the other suits have to behave.

## See also

- Smother play
- Trump coup


## Trump coup

The trump coup is a contract bridge coup used when the hand on lead (typically the dummy) has no trumps remaining, while the next hand in rotation has only trumps, including a high one that would have been onside for a direct finesse if a trump could have been led. The play involves forcing that hand to ruff, only to be overruffed. A similar motive is met in coup en passant, where indirect finesse is used instead of direct.

In the end position below, spades are trump. The king of spades is onside, but declarer (South) cannot finesse against it because dummy has no trumps remaining.


Declarer takes all three tricks by playing a heart first. When a club is led from dummy, East has nothing but spades remaining and therefore must ruff, and South can overruff with the ace or queen according to which spade East plays.

A trump coup is not possible in a double-finesse position, since declarer with a holding like A-Q-10 over defender's K-J-x would take the first trump trick and then would have to give the defender a free finesse. In effect, a trump coup against a king (or rather, the secondhighest remaining trump) must find it guarded by exactly one other trump. (If East held another card instead of the small trump, say a diamond, North-South could still play the hand as just described, but the trump coup would be unnecessary as South could just drop the king of spades instead.)

Similarly, with A-K-J of trumps in hand, a trump coup against $\mathrm{Q}-\mathrm{x}-\mathrm{x}$ on the right is possible, and so on.

To execute a trump coup, declarer must have exactly the same number of trumps as the defender. If declarer had more trumps, entry could not be given to dummy at the critical point when the defender will have only trumps remaining. Sometimes a declarer with too many trumps, but needing to do a trump coup, can set up the desired position by entering dummy and leading a suit he can ruff, to shorten his own trumps. (If the card ruffed would have been a winner, the play is called a grand coup.)

## See also

- Smother play
- Devil's coup


## Morton's fork coup

A Morton's Fork Coup is a coup in contract bridge involving the forcing of an opponent to choose between establishing one or more extra tricks in the suit led and losing the opportunity to win a trick in the suit led. It takes its name from the expression Morton's Fork.

## Example

South receives the lead of the jack of diamonds against his six-spade contract. It appears that the contract has unavoidable losers in both hearts and clubs. Although an extra winner can be built in diamonds, the discard it provides is not of a losing card.

However, the contract can be made. South plays low from dummy, ruffs, draws trumps, and leads a low heart from hand. If West takes the ace, declarer can unblock hearts, ruff out the ace of diamonds, then discard two clubs on dummy's winning diamond and king of hearts. If West ducks, declarer again ruffs out the ace of diamonds, but now uses the established winner to discard the queen of hearts, losing only a club.


Note that declarer must be careful not to play a high diamond on the opening lead, as East could then withhold the ace, forcing the declarer to choose a discard prematurely.

## Scissors coup

Scissors coup is a type of coup, named so because it cuts communications between defenders, most commonly by discarding a key card from either the declarer's own hand or dummy. This enables declarer to prevent the defenders transferring the lead, usually for a defensive ruff.

Consider the following hand played in 5 diamonds (after the bidding E: 3H; S: 5D; All pass) on the lead of the 8 of hearts, with East playing the queen:


Superficially, it looks like there are only 2 losers: A heart and a diamond. However, if East gets the lead with the ace of hearts, he can lead a third round to give his partner a trump promotion. The solution is elegant; upon winning the king of hearts cross to the king of spades and lead the king of clubs, throwing the jack of hearts. This Scissors coup has removed the heart entry to East's hand and the threat of a trump promotion vanishes.

## See also

- Loser on loser


## Crossruff

A crossruff is a play in contract bridge, in a suit contract, where the tricks are made by taking alternate ruffs in each hand. It is used mainly by the declaring side, but can be used by the defenders in some situations.

In order to use a crossruff, each player in the partnership must have shortness in a nontrump suit, accompanied with appropriate length in the opposite hand. Also, each partner must be short in the suit that his partner is long in. It is preferable that both players have an equal number of cards in the trump suit, otherwise a regular ruff is usually more effective, as it has the added benefit of establishing the trump suit.

The mechanics of the crossruff are simple. This is an extreme example of crossruff:


West plays the grand slam of 7S despite having only 7 high card points. The declarer can draw the outstanding trump king, ruff the diamonds in dummy, going back to the hand by club ruffs. Unless both minor suits are divided 6-0, one of the minor suits will ultimately become high and provide the missing two tricks. In summary, the declarer took one trick by leading a high card (the ace of trumps) and 10 tricks by cross-ruffing; the remaining two tricks came as result of long suit establishment.

However, there are several risks involved with crossruffing. First of all, when the opponents run out of cards in the suit(s) lead by declarer, they can overruff, that is, play a higher trump card than the declarer's. Also, this play leaves the trump suit unestablished, so the defenders can possibly steal back a trick or two because the declarer used the trumps for ruffing rather than drawing out the opponents' trumps. Therefore, this play is only suggested when other means of gaining tricks, such as establishing the trump suit or traditional ruffing, would fall short. However, this play is preferred over a finesse, especially if only one or two extra tricks are needed, as the risks are rather low unless you take several tricks using this method.

It is often important to cash side-suit winners before commencing a cross-ruff, otherwise the opponents may discard in the side-suit, allowing them to trump the winner later.

In some cases, it is effective to cross-ruff after drawing the opponents trumps, when this can be done with trumps remaining in both hands. In other cases, it is effective to cross-ruff only until one opponent becomes likely to be void in a particular suit, and revert to drawing trumps thereafter.

The basic defense against crossruff is simple: lead trumps whenever possible, removing trumps from both declarer's hands. Often, the defense must lead trumps from the very opening lead in order to prevail. Thus, it is important to recognize the situations when a trump opening lead is called for - usually, they arise when both declarer and dummy have bid other suits but found the trump fit in the third one.

## Duck

In the card game of contract bridge, the term duck means to play low to a trick, thus losing it intentionally. Ducking is helpful in a variety of situations.

## Preserving an entry

AK432
98 QJT
765
There are no side entries to the North hand. If declarer plays ace, king and another, East will win the third trick. The remaining two small cards are good, but there is no way to get to them.

Proper procedure is to duck the first trick. Then, when the lead is regained, playing the ace and king will establish the suit and the remainder of the suit can be cashed.

Note that defenders can benefit by ducking as well. A defender with a holding like the above (AK432) and no outside entries may do well to duck the first or second round of the suit.

## Denying an entry (declarer play)

1087
92 KQ3
AJ654
West leads the top of a doubleton against a suit contract, and East plays the queen. Suppose South wins the first trick with the ace and West gets in before trumps are drawn (with the ace of trumps, for example). Now West can lead her remaining card in the suit to East's king, and East can return the suit for West to ruff.

Proper procedure is to duck the first trick, and win the ace on the second round of the suit. Now, when West gets in, she is void in her short suit and cannot use that suit to get to East's hand.

Ducking to deny an entry when playing no trump is known as a holdup play.

## Denying an entry (defender play)

KQJ2

10987 A65

The declarer (South) plays toward dummy's long suit. Assuming there are no side entries, on the distribution shown East must duck once to prevent declarer from running the suit.

Note that West must give a proper count signal in this situation. In the distribution shown, West signals an even count; East assumes it shows four and ducks once. (If West has only two, then South has four and ducking neither helps nor hurts.) If West signals an odd count, East will have to decide (possibly from the bidding or previous play in other suits) whether it shows three or five, and win the first or third trick accordingly.

## Rectifying the count

Often, to set up a squeeze, one or more tricks must be lost in advance. This is known as "rectifying the count", but it is actually just another instance of ducking.

## Endplay

Here is a simple endplay situation:


At no trump, South is on lead with three cards left to play. South ducks a heart to West, who must now lead spades into South's ace-queen tenace and South wins two tricks. If South plays spades first, she wins only one of the last three tricks.

## Dummy reversal

Dummy reversal (also known as reverse dummy) is a technique in the card game of contract bridge, when the declarer uses trump cards to ruff from the hand with longer trumps, and retains the trumps in the other hand to draw the opponents' remaining trumps.

In the "normal" technique, the ruffs are taken from the hand with shorter trumps, retaining trumps in longer hand for control. Since, by rules, the declarer becomes the player which first mentions the trump suit in the bidding, usually the hand with long trumps will be declarer's one - thus the name "reverse dummy", as the normal roles of dummy's and declarer's trumps are reversed.

In strict sense, dummy reversal can be called that only if it yields more tricks than the normal technique.

Some indicators that a hand may lend itself to dummy reversal are:

- shortness (singleton or void) in declarer's hand (with corresponding length in the same suit in dummy)
- loser(s) in declarer's hand that cannot be ruffed or discarded on a side suit
- adequate trump strength and length in dummy (typically a three or four card trump suit with at least two honors for drawing the final trumps)
- entries to dummy outside of the trump suit


## Example

South is in 4 S and receives a trump lead. There are five trump tricks, three aces and king of diamonds off the top, but there is no tempo to ruff a club in dummy, as the defenders will deprive it off the trumps after they regain the lead in clubs. The solution is to ruff hearts in hand instead - in trick two, South plays HA, ruffs a heart, enters the dummy with CA, ruffs a heart, enters the dummy with DA and ruffs a heart. In this way, the declarer took three ruffs in hand, and still has two trumps in dummy to take care of opponents' trumps.


## Endplay

An endplay (also throw-in), in bridge and similar games, is a tactical play where a defender is put on lead at a strategic moment, and then has to make a play that loses one or more tricks. Most commonly the losing play either constitutes a free finesse, or else it gives declarer a ruff and discard. In a case where declarer has no entries to dummy (or to his own hand), the defender may also be endplayed into leading a suit which can be won in that hand.

For example, South is playing in 6 S with these hands:
West leads the diamond king. If the adverse spades are divided 21 , there are 12 certain tricks ( 6 spade tricks, 2 hearts, 1 diamond, 3 clubs) and the possibility of a 13th by correctly guessing the two-way finesse (or dropping the queen) in hearts. But if the spades are 3-0, he will need an endplay to avoid the heart guess. He should start by winning the diamond ace and ruffing a diamond in dummy, then cash the spade ace and spade king. If this reveals a 3-0 trump split, he now ruffs another diamond in dummy. If this is not overruffed, the contract is now assured.

4 A 98532

- KJ54
$+\mathrm{K} 4$


4 K 764
A 109
$+A 87$

- AQ9

Declarer's plan now is to play the king, ace, and queen of clubs, discarding a heart from dummy to reach this end position:

South now exits with a spade, and whoever wins is endplayed. If he leads a heart, North-South must make three heart tricks; if a club or diamond, declarer will ruff in one hand and discard a heart from the other, making an extra trump trick. Or if the defender has fewer than 3 clubs and chooses to ruff before the above position is reached, he is likewise endplayed, having to lead a heart or a diamond.

## Finesse

In contract bridge and similar games, a finesse is a technique which allows one to promote tricks based on a favorable position of one or more cards in the hands of the opponents. If one can lead up to a finessable position such as ace-queen, an additional trick can be won if the king is positioned in front of the combination of ace and queen.

A more precise definition of a finesse would be: A play that attempts to win either the current trick or a later trick with a certain card of the suit led, although the opponents hold a higher card in the suit, by taking advantage of the position of the particular cards.

A finesse is said to be on or off depending on whether or not the finessable honor is favorably placed (onside) or not (offside). Many finesses involve a combination of non-touching honors in the same hand, called a tenace.

## Direct finesse

A direct finesse is a finesse that gains a trick without losing one, as long as it is "on". For example:

SAQ
S 72
If South (declarer) is on lead he can lead to the queen; that is, he leads a small spade and, if West plays low, plays the queen from dummy. If West is holding the king (it is "onside"), North-South will win two tricks, for a gain of one trick without losing a trick. (If West actually plays the king on the first trick, of course, North-South win two tricks by covering with the ace.)

## Indirect finesse

An indirect finesse is a finesse that gains a trick - if it is on - but may involve losing a trick first. A typical example is:

S K 7
S 63
South leads a spade toward the king; if West holds the ace, the king will either win the current trick or will become the highest remaining spade and win a later one. (More precisely, the king is set up as a winner, but that doesn't mean it will necessarily take a trick. It might be ruffed, or at No Trump the defense might run another suit for a squeeze and force it to be discarded. But this article is about finesses, and having acknowledged that such issues exist, we will ignore them henceforth.)

## Double finesse

A double finesse is a finesse against two outstanding honours. Sometimes it can gain two tricks:

S A Q 10
S 743
South leads a spade to the 10; if it holds (or later on, if it loses), he reenters his hand in a different suit and then leads another spade to the queen. North-South will take three spade tricks if West has both the king and the jack (probability about 25\% in the absence of any information), two if East and West have one each (50\%), but only one if East has both (25\%).

Other times it can gain one trick:
SAJ 10

## S 743

South leads a spade to the 10 . Assuming it loses, he reenters his hand and then leads another spade to the jack. North-South will take two spade tricks if West has either the king or the queen, or both (probability about $75 \%$ in the absence of any information), but only one if East has both (25\%).

Similarly, a triple finesse is possible, and occasionally desirable, with a holding such as A-Q-$10-8$. This would be a low-probability desperation play if you needed four tricks in the suit, but you will probably make two or three.

Deep finesse

A deep finesse is a maneuver that allows one additional trick to be won, but only if two cards are favorably positioned. A deep finesse has therefore a probability of only about $25 \%$ of success.

S A K 10

## S 743

South leads a spade and inserts the 10 if West plays low. South will gain a trick if both the queen and the jack are with West. NB: If there are no entries back into the South hand, West can assure himself one trick by splitting his honors, that is playing the queen or jack, on South's original lead.

## Leading high for a finesse

If the length of a particular suit in both the declarer and dummy hands is less than the total number of high cards in the suit in the two hands, then at some point you will have to play two high cards on the same trick. In that case, if you are going to finesse in the suit, it is often desirable to start by leading one of the high cards, in order to retain the lead in the same hand if the finesse is on.

## Example 1:

S A Q 10
S J 43

## Example 2:

SAQ4
S J 103
Examples 1 and 2 play the same way. If you intend to finesse, you normally should not start by leading to the queen: if you did and it held, you would still have to reenter your hand in order to take a total of three spade tricks. Instead you should finesse by leading the jack, and if West plays low, playing the small spade from dummy. This is called running the jack. Now you are still in your hand and can simply repeat the finesse by leading low to the queen. Or if West does have the king and covers your jack with it, then you can put the ace on the same trick and, because you started with four high cards, you still have the queen and 10 to win the two remaining tricks as well.

## Example 3:

SA43
S Q J 10

## Example 4:

SAQ4
S 1093
Examples 3 and 4 show that when you lead high for a finesse, the honors do not have to form a tenace that you lead toward. Example 3 can be played exactly like examples 1 and 2, by running the jack (or queen or 10). In Example 4, you can take a double finesse by running the 10 (or 9).

## Marked finesse

A marked finesse is one that cannot lose, because the opponents' honor is known to be onside.
SA1054
S J 987 S 6
S K Q 32
If South begins by leading the king-queen, he learns on the second trick that East has no more spades. The finesse of the 10 is now a sure thing.

## Two-way finesse

A two-way finesse is a situation where you can finesse by leading from either hand toward the other.

SA 102
S KJ 3
You may start by playing the king of spades (or if in dummy, leading the 2 to the king) and then running the jack; this makes three spade tricks if East has the singleton queen or if West has the queen, and if that's not the case, then East will be on lead. Or you may start with the ace and 10, making three tricks in the opposite situation, or leaving West on lead. You may decide which way to finesse based on which opponent is more likely to have the queen, or on which opponent it would be safer to give the lead to, if you must. Or, of course, you also have the option of not finessing.

This holding similarly presents a two-way finesse, but along with a suitable entry it will always produce 5 spade tricks no matter how the opponents' spades are placed.

S A K 103
SQ9542
You simply play the ace on the first spade trick. If both opponents follow suit, you know that the jack will drop with no finesse needed; if one shows out, you have a marked finesse available against the other. For example, if East shows out, next play a small spade to the queen, then score the $K$ and 10 via the marked finesse; finally enter the South hand in another suit and cash the 13 th spade (or if spades are trump, use it by ruffing).

## Ruffing finesse

The ruffing finesse is a variation of a finesse in trump contracts where the finessing player chooses to ruff or not, rather than choosing which card to play from a tenace.


In this example, hearts are trumps and South's 2 is the last one remaining, and the lead is with North (dummy). Then North-South can take all tricks if East holds the ace of spades. A spade is led from the North hand; if East plays low, a diamond is discarded and the lead is repeated. If East never covers, North-South get three spade tricks and a trump. If East plays
the ace, South trumps and leads a club to return to the dummy, which is high, so taking two spades, a trump, and a club trick.

Note that while a conventional finesse is "on" if the opponents' critical honor is positioned before yours, the reverse is true for a ruffing finesse. Consequently, there is a form of twoway finesse where you can take a ruffing finesse against one opponent or an ordinary finesse against the other. If there is no other reason to choose one play or the other, the ruffing finesse may be a superior alternative because it allows you to lead high and retain the lead. Let us look at a complete hand:


East plays a contract of 4 hearts. After the opening lead of a diamond, he wins the ace and plays the two top trumps; they break 3-2. He leads a spade to the queen, but the finesse is off, and the opponents now cash two diamonds. With a trump still to lose, one down.

Out of luck? Not at all. The contract is cold as long as trumps break 3-2 (and the defense cannot get an early ruff). The correct play is to win the ace of diamonds and to continue with the ace of spades, followed by the queen for a ruffing finesse. If North does not cover with the king, declarer pitches a losing diamond. If North does play the king, declarer ruffs and later pitches a diamond on the jack of spades. Even if the king is with South, declarer loses 3 tricks only, if trumps are 3-2. And if trumps are 4-1 the game will still make if the king of spades is sitting with North. The advantage of the trump finesse over the ordinary finesse here is the gain of tempo if it loses.

## Free finesse

A so-called free finesse is not technically a finesse at all, as it is not dependent on the position of the opponents' cards, but only on their choice of lead. You have a free finesse when an opponent leads a suit, so that the hand containing a tenace position plays last to the trick. In the first example:

SAQ

## S 72

the normal finesse only works if West has the king, but if East leads spades, you simply play the lowest card that will win the trick, and so get two tricks no matter whether East or West
has the king. Similarly, in the first two-way finesse example, you make three spade tricks automatically on a free finesse if either East or West is the first to lead spades.

Free finesses often happen due to the defense guessing wrong about high cards in declarer's hand, especially on the opening lead. But it is also possible to force the defense to give you a free finesse, by endplaying them. Consider the two-way finesse example again, but with an additional card:


Nobody has played any spades at any point, so the defense is known to have 7 of them, and their other card is known to be a heart. Declarer leads a heart, losing to whichever defender holds the high heart; and that defender is now on lead with nothing but spades. North-South will take 3 spade tricks for certain, and declarer need not guess which way to finesse the suit.

## Bath Coup

## Main article: Bath coup

This specific case of a free finesse is important enough to have its own name (after the city of Bath in England). It occurs when the declarer holds a suit headed by A J x and the left-hand opponent leads the king or queen of the suit. If the declarer ducks and the opponent now repeats the lead, two tricks with the ace-jack will be gained.

The Bath coup is not just a deceptive play. Even if the suit is not continued, the declarer gains a tempo, since he still has a sure stopper in that suit.

## Trump coup and coup en passant

In positions where a finesse in trumps cannot be taken because the hand that would need to lead trumps has none, a trump coup or coup en passant may be used. See those articles.

## Suit combinations

The Official Encyclopedia of Bridge has a long list of suit combinations and how best to play them depending on how many tricks you need. A good player does not need to memorize this, and can usually deduce the correct play at the table. However, it is worthwhile to study the suit combinations table. But remember that the optimal play in a suit may not be best in the context of the entire hand.

## Holdup

Holdup is a play in contract bridge, whereby the declarer ducks one or more trick to opponents, usually in notrump contracts, in order to cut their communications. The primary purpose of holdup is to give as many tricks to opponents as enough to exhaust all the cards in the suit from one of their hand's. If that hand regains the lead, it will not be able to put the partner on lead to cash its tricks. Holdup is one of basic techniques in play.

## Example

South is playing a contract of three notrump, and West leads the king of diamonds. There are nine needed tricks: two spades, two hearts, one diamond and four clubs. However, if the declarer wins the ace of diamonds at trick one and drives out the ace of clubs, the defenders will cash four diamond tricks to set the contract.

South can assure the contract (provided the ace of clubs is with East) by holding up the ace of diamonds: (s)he plays low to the first two diamond tricks (known as ducking) and wins the ace of diamonds on the third trick. Now, when East wins the ace of clubs, (s)he has no diamonds left to play. If West holds the ace of clubs, the contract is impossible to make. If, on the other hand, East had a diamond, that would mean that diamonds were originally split 44 and defenders could only cash three tricks in the suit, so the contract wasn't endangered.


## Rule of seven

Take the number of cards you hold in the defenders' suit, subtract from seven, and duck that many tricks.

In the hand above, there are five diamonds in the combined North-South hands, and declarer must duck two tricks (winning the third).

If there were an additional diamond in either the North or South hand, for a total of six, then declarer need only duck one trick (winning the second). This is because if West has five diamonds (and North-South six), then East will have only two and will be out of diamonds after two rounds of the suit. If East does have three diamonds, then West will have only four and the defenders can cash only two additional diamond tricks (for a total of three) upon winning the ace of clubs.

This rule, of course, assumes you are playing in 3 NT. It can be generalized for all notrump contracts as follows:

Add four to the rank of the contract and subtract the number of cards you hold in the suit.

## See also

- Avoidance play


## Loser on loser

Loser on loser play is a type of declarer's play in contract bridge, usually in trump contracts, where the declarer discards a loser card (the one that is bound to be given up anyway) on an opponent's winner, instead of ruffing.

Loser on loser technique can be executed for the following goals:

1. To maintain trump control of the hand,
2. To transfer the ruff to a "safer" suit (e.g. in order to perform a latter crossruff).
3. To rectify the count for a subsequent squeeze play.
4. As part of an endplay.

## Example

4 ATS

- 984
+ A862
4 AQ

$+\mathrm{KQ106}$
45
* K943
* KJ62

After the auction:


South plays in a 4-3 spade fit. The defense leads and continues hearts. The declarer has four clubs, two diamonds and four spade tricks in total; however, assuming the most probable 42 trump break, if South ruffs the second heart in hand, the opponent with 4 trumps can gain later control of the hand by trumping one of South's minor winners and cashing the remaining hearts. Thus, South must discard his losing diamonds on 2nd and 3rd heart, allowing the dummy's shorter trumps to ruff the fourth round, or to regain control with a minor-suit winner. After that, South can draw trumps and claim the rest.

## See also

- Safety play
- Duck


## Ruff

In trick-taking games, to ruff means to play a trump card to a trick (other than when trumps were led). According to the rules of most games, you must have no cards left in the suit led in order to ruff. Since the opposing players are constrained to follow suit if they can, even a low trump can win a trick.

In many games, a player who cannot follow suit is not required to ruff. He may instead discard (play any card in any other suit).

Normally, ruffing will win a trick. But it is also possible that a subsequent player will overruff (play a higher trump). This is not always a bad thing-see uppercut (bridge).

In partnership games such as contract bridge, you give a ruff when you lead a card in a suit in which your partner is void, so that he can take the trick with a trump card. With luck, your partner will be able to get the lead back into your hand (by leading a certain suit) so you can give him another ruff. When your partner gets back to you by leading a void suit of yours, it sets up a crossruff.

Normal suit play in bridge (as opposed to the play at no trumps) revolves around the trump suit. Usually the declarer and dummy together will have the majority of trumps, as they chose the suit in which to play. Declarer will attempt to draw the opponents' trumps, leaving them with none. Declarer's remaining trumps ensure that the opponents cannot establish long cards, as they will just be trumped.

Although drawing the opponent's trumps is nearly always to be recommended, there are occasions when other strategies yield more tricks. One is crossruffing - drawing the opponents trumps in this case reduces the number of trumps (and hence tricks) for the crossruff. Another case is when after drawing one or two rounds of trumps the opponents are left with one master trump. In this case drawing it will use two of declarer's trumps for one of the opponents'. Unless entry problems are feared, it is usually better to let the opponents take their trump when they will.

It is important to realize that trumping in the hand with more trumps does not add tricks, as these are long cards which will win anyway. In order to gain tricks by trumping, the ruff has to be taken in the short hand, or enough ruffs must be made in the hand which was originally longer in trumps to make it shorter than the other hand.

## Ruff and discard

A ruff and discard (also known as ruff and slough or ruff and sluff) is a play in contract bridge. It occurs when a defender in a suit contract, usually by mistake or because of lack of choice, leads a suit that dummy and declarer are both void in, when dummy and declarer have at least one trump each.

This gives declarer the option of discarding a losing card from one hand while playing a trump from the other, usually garnering an undeserved trick in the process. Thus the ruff and discard is generally to be avoided by the defenders, except in rare cases where declarer has no side suit loser to discard. It is often inflicted upon the defence via an endplay.

In the following position West is on lead and ${ }^{*} 9$ spades are trumps:

When West leads a heart, declarer can ruff in one hand and throw a club loser from the other, making both the remaining tricks. With any other player on lead, declarer would only make one trick.


However, if one of N-S hands had a diamond instead of a club, the West's (nor any other player's) play would make no difference: the declarer can always take the remaining two tricks by crossruffing clubs and diamonds.

## Safety play

Safety play in contract bridge is a generic name for plays where the declarer maximizes the chances for fulfilling the contract (or achieving a certain score) by possibly neglecting a slightly higher score. By performing safety play, the declarer attempts to cope with possible unfavorable lie of opponent's cards, ensuring that the contract is fulfilled even in worst-case scenarions, but giving up the possibilities of overtricks. There are perfect safety plays, which assure a certain number of tricks, and there are imperfect safety plays, which maximize the chance to make a certain number of tricks. Perfect safety plays are sometimes known as precautionary plays in order to distinguish them from imperfect safety plays.

Safety plays adapt the odds of the cards to the scoring system. In IMP-scoring tournaments and rubber bridge, the primary concern is to fulfill the contract while overtricks are of secondary interest. Thus, knowledge about safety plays are an important issue in declarer's technique. In matchpoint games, the goal is to maximize the score on every board and overtricks are very important; in that case, safety plays also have a certain role, but are often neglected if the odds for making the contract are substantially high and overtricks are likely.

The following hand is a first example:
$4 Q 932$

- KT3
- A63
+J92
N
S
4 AK 864

4. J 6
*R 54
+54

South plays a contract of four spades and West leads the club king after which he shifts to a diamond, South winning his king. After three rounds of trumps, which are sufficient to extract all trumps, South has a perfect safety play for ten tricks. South gives up another club, wins the diamond return with dummies ace, ruffs the last club and exits in diamonds. The North-South cards remaining are:


This example was a case of an elimination play with a throw-in type of an endplay. Whatever is led from the opponents, South takes the rest, either by discarding a heart and ruffing in the other hand, or by winning three heart tricks.

On a tactical basis this was an easy hand, the safety play was perfect and without risks. This kind of safety play is applicable for both IMP and matchpoint scoring, as the declarer never had a possibility of an overtrick; the upper limit of the hand is 10 tricks, and the safety play merely ensured them. Often safety plays have their price though, the next example will demonstrate that point and we will see that the hand shall be played differently depending on the form of scoring.

South declares four spades and West leads the heart queen. After ducking this trick South plays the ten on the second trick. East
\& J 643

- K T 6
$+872$
$\$ 543$
N


4 AK 952

- 852
+ AK
$* \mathrm{AKQ}$
wins the ace and returns a heart to dummies king. A trump is led from the board and East plays the seven spot. Declarer has two lines, either he plays the nine spot absolutely assuring his contract (unless East has a minor suit void). But he might give up an unnecessary trick to a doubleton ten or queen in the West hand. The alternative line is to play an honor, but if West is void in trumps there is no chance any more to avoid the loss of two trump tricks. (Note: There is no entry to dummy for a diamond ruff that South would need to establish a trump endplay.)

In an IMP or rubber game it is obviously right to choose the safety play, but in matchpoints, where every overtrick might score many additional points, the choice is not clearcut at all.

Safety plays, of course, are not limited to trumps, the following is an example of a safety play in no trumps.


South declares 3 no trumps on the lead of the heart queen. After making the thoughtful play of the ace to the first trick, the spade deuce is lead from the board, East playing a small card. The play of the 9 assures the contract. If West wins the trick he cannot play another heart without giving the ninth trick to declarer and the tempo to develop more in spades. West will therefore switch to a diamond that South wins in hand. The spade king is overtaken by the ace, the key play on this hand, and the diamond ace assures an entry to two more spade tricks. If spades are played from top the hand might not make if East holds Q J x x and both minor suits fail to break.

## See also

- Scoring and tactics in duplicate bridge
- Loser on loser
- Holdup
- Avoidance play


## Signal

In the card game of contract bridge, the partners defending against a contract may choose particular cards to play to communicate a signal.

## Standard signals

## Attitude signal

When signaling standard attitude, a high card is encouraging and a low card is discouraging. Attitude is normally signaled when following suit to partner's led suit and when discarding on declarer's led suit.

For example, if partner leads the Ace of spades, you might signal with the nine if you held the King (requesting partner to continue the suit), or with the three if you held nothing but small cards in spades (notifying partner that a switch to another suit is likely best).

Of course, you can only signal with the cards you hold. Signaling low is easy for you, but if your lowest card is the eight, partner might have difficulty "reading" it as low. When you are signaling high, play the highest card you can afford. Having easily-readable cards to signal with is part of the luck of the deal.

Suppose declarer is drawing trumps and you are out on the third round. Your discard should be an attitude signal for partner. If you play a high-spot diamond, for example, you ask partner to lead diamonds if she should gain the lead. Normally, you would have an honor or honors in diamonds in this case. If you play a low diamond, you ask partner to not lead diamonds if she should gain the lead. Partner will usually be able to figure out which of the other suits you do like (if any).

If declarer plays yet another round of trump, you may be able to play yet another diamond. This will make it unambiguous to partner whether you are encouraging diamonds (by playing high-low) or discouraging diamonds (by playing low-high).

## Count signal

The standard count signal is to play high-low with an even number of cards, and low-high with an odd number. Normally, you "give count" when following suit to declarer's led suits. This will help partner determine the distribution of the suit. See duck for an example.

Count in the trump suit is normally inverted. Thus, high-low shows an odd number of trumps (probably three). Some partnerships (by advance agreement) signal this way only when they have a desire or ability to ruff something.

## Suit preference signal

This signal is used infrequently, in situations where partner does not need to know attitude or count, but rather which of two suits to lead. A high card means lead the higher-ranking suit and a low card means lead the lower-ranking suit.

When leading a suit for partner to ruff, lead a high card to have her return the higher-ranking side suit and lead a low card to have her return the lower-ranking side suit. Letting partner know where your entry is in this way may allow you to give her another ruff.

Many partnerships play that when dummy shows up with a singleton in the suit led to the first trick, third hand's play is suit preference telling partner which side suit to switch to. This can be advantageous, but be aware that there are hands in which continuing the original suit or switching to a trump is the right thing to do. Playing a "middle" card can help here, but it can be difficult for partner to read.

When declarer leads a long suit in dummy missing only a single honor that you hold, partner's signal type will depend on dummy's side entries. If there is no side entry, partner must give you a count signal so you will know when it is best to take your trick (see duck) for an example). But if there are one or more side entries available, partner should give a suit preference signal so you will know what suit to lead when you win your trick.

Sometimes, discarding an unusually high card in a side suit (a Jack or Queen, even) is suit preference for the higher-ranking other suit.

## Discarding agreements

Some partnerships agree in advance to assign special meaning to the first discard (failure to follow suit).

## Lavinthal (McKenney)

With this agreement, the first discard is suit preference. You do not like the led suit, of course, and you do not like the suit discarded. Your suit preference signal tells partner which of the two remaining suits you prefer. Known in the United States as Lavinthal, the British term these discards McKenney.

## Odd-Even

With this agreement, the first discard shows the following: if it is an odd spot card (three, five, seven or nine) it is encouraging in that suit; if it is an even spot card (deuce, four, six or eight) it is suit preference for the other two suits.

## Upside down count and attitude

Some partnerships agree in advance to play UDCA. With this agreement, the standard count and attitude signals are inverted: when signaling attitude, a low card is encouraging and a high card is discouraging; when signaling count high-low shows odd count, low-high shows even count.

Many experienced players believe UDCA is superior to standard signaling. Most importantly, it is often easier for partner to read your signals. Also, you do not have to "waste" high cards in suits you like.

Caution: UDCA, as the name states, applies to count and attitude signals only. Suit preference signals are played standard. Also, your leads (as opposed to signals) are unchanged--you still lead high from a doubleton, for example, barring another special agreement to the contrary.

As mentioned above, standard count in the trump suit is already "upside down". Experts recommend that trump signaling be the same in UDCA as standard trump signaling, that is, when playing UDCA, signal the same in all four suits.

## Disclosure

Declarer is entitled to know what signaling agreements you have with your partner, and you must disclose them if asked. However, you do not have to interpret any particular play. For example, if partner plays the six of clubs and you are asked what it means, you should simply say "a high club encourages clubs, a low club discourages clubs" (assuming that is your agreement). You do not have to say whether on this deal the six is encouraging or not.

## Falsecarding

Remember that declarer can see your signals and attempt to read them. Generally, your partner will gain more from your signals than declarer, so it is worthwhile to signal honestly most of the time. However, if you are known as a player that always gives accurate count, for example, that might be used to your disadvantage. So, throw in a misleading signal now and then, hopefully when it won't matter to partner.

## Smother Play

Smother Play in contract bridge is a type of endplay where an opponent's apparent trump trick goes away. The situation can be best illustrated with the following end-position:


Spades are trump, and the lead is in the North (dummy) hand, declarer needing 2 tricks. It appears that the declarer is fated to take just one more trick with the Ace of spades. However, if the declarer leads dummy's diamond, pitching a heart (loser on loser play) (as does West), East gains the trick and has to lead something at trick 12. Whichever card he leads, South will play his trump and West's king is "smothered" - whatever spade he plays, South will take the last two tricks.

## See also

- Devil's coup
- Trump coup


## Trump promotion

Trump promotion is a technique in contract bridge where the defenders create an, otherwise non-existing, trump trick for themselves. The most common type of trump promotion occurs when one defender plays a side suit through, in which both the declarer's hand and the other defender are void:


Spades are trump. If the declarer were on lead, he could draw trumps and claim the rest of tricks; however, with East on lead, when he leads a diamond, declarer has two infavorable choices: if he ruffs low, he will get overruffed by West. If he ruffs high (with an honor), the West's spade jack will become a trick.

In general, it is not required that the defense leads to the trick; often, the "killing suit" can be lead by the declarer (because of an error or because he doesn't have anything else to lead).

Sometimes, a defender can get a trump promotion by refusing to overruff:


Spades are trump, and hearts are led by South or West; knowing that East is void, declarer must ruff high (with the queen or jack). If East hastily overrufs with the king, that will be the last trick for the defense. However, if he discards a minor suit card, he will suddenly come into possession of two trump tricks -- the king (which he was always entitled to) but also the ten.
When the same motive is used by the declarer, it is referred to as Coup en passant.

## See also

- Uppercut
- Coup en passant


## Uppercut

In Contract Bridge, an uppercut is a defensive play that involves one of the defenders ruffing high in the knowledge that an overruff by the declarer will result in the promotion of a trump card in his/her partner's hand into a winner.

It is best illustrated with an example:


Here declarer is South, spades are trump and the declarer can cash his two top spades, drawing all the defender's trumps, and claim the rest of the tricks. But if West, on the lead, plays a heart, covered by dummy's ace, East
should ruff high with his jack of spades. Now, if South overruffs with the ace or king, West's queen will be promoted into a winner and the defense is assured of an otherwise unavailable trick.

## Principle of restricted choice

The Principle of restricted choice is used in bridge to guide a player (usually the declarer) into finding the best line of play in certain situations. It is closely tied to the Monty Hall problem.

The principle can be expressed in several different ways; one of them is:
When a defender freely plays an important card (over declarer's lead), assume that it had to be played rather than it was result of a particular choice; adjust the subsequent play accordingly.

In other words, if an opponent unprovoked plays a honor card (e.g. a king) on declarer's or dummy's lead, it should be assumed that he had to play it (i.e. it was a singleton) rather than it was played from a combination of equal-rank cards (e.g. king-queen). With KQ, he could select either king or queen, but with bare king he had no choice. That makes singleton king twice as possible as bare KQ, so it should be assumed that it was singleton.

## Example

AJT9x
xxxx
Consider the situation as in the diagram (with "x" denoting insignificant cards with a small face value).

South leads a small card to dummy's (North's) Jack, but East wins with the King. Later in the hand, South leads a small card again, and West plays low. In the absence of other information, is it better to play the Ace in an attempt to crush East's Queen, or to take another finesse by playing the ten, playing West for three cards? The Principle of Restricted Choice explains that finessing is roughly twice as likely.

The initial possibilities were (ignoring 4-0 breaks):
KQ | xx
xx | KQ
$\mathrm{Kx} \mid \mathrm{Qx}(\times 2$, as the small cards can be swapped around)
Qx $\mid K x(\times 2)$

Kxx \| Q (and Q Kxx)
Qxx | K (and K Qxx)
$K Q x \mid x($ and $x K Q x)(\times 2)$
However, the remaining possibilities are:
Qx | $K x(\times 2)$
Qxx|K
xx \| K
$x \mid K Q x(\times 2)$
The only combinations where it matters what you do are:
Qxx|K
xx | KQ
Which is more likely? Naïvely playing for KQ doubleton seems more likely as a 2-2 split is just over 50\% but the Principle of Restricted Choice shows that it is almost twice as likely to be the first combination.

Simply put; if RHO had both the King and the Queen he had a choice over what card to play half the time he would play the King. Therefore the weighting of the xx KQ possibilty is halved! With stiff King he has a restricted choice (i.e. none) and always plays the king.

Restricted choice applies in many situations in bridge in addition to the frequent occurrence described above.

## Math theory

The Principle of Restricted Choice is an application of Bayes' theorem.

## Contract bridge glossary

The following terms are used in Contract bridge, Duplicate bridge, and Auction bridge. Some of them are also used in Whist, Bid whist, and other trick-taking games.

Note: Except for ones indicated bold, all the links in this article are internal, i.e. lead to other list entries rather than external articles

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## A

ACBL

## American Contract Bridge League

## Agreement

An understanding between partners as to the meaning of a particular bid or play. The set of all the agreements in a partnership forms the Bidding system and the Signals.

Alert
An indication to the opponents that the partner's bid is artificial (or that its meaning might be otherwise unexpected). An alert is made by pronouncing "alert", displaying an appropriate card from the bidding box, or sometimes by just knocking on the table. Use of alert (alert procedure) is regulated by sponsoring organizations.

Artificial

1) A call or play that is not natural.
2) A bidding system that contains many such calls.

Autobridge
A non-digital game for one person, designed to teach bridge (see image).
Auction

1) see bidding.
2) Auction bridge, an older form of bridge, now replaced by Contract bridge.

## B

Balanced hand
A hand is said to be balanced if it has a distribution of 4-3-3-3, 4-4-3-2, or 5-3-3-2 (Also defined as "no voids, no singletons, and at most one doubleton"). Balanced hands are particularly suitable for notrump contracts.

Bid
A declaration of both level and denomination (suit or no trump) that generally indicates the number of tricks the bidder believes their partnership can win; certain bids can also be used as conventions.

Bid out of turn
A bid erroneously made when it was other player's turn to bid. Subject to penalty.

## Bidding

The first phase of the game, where players try to establish the final contract by making subsequent bids.

## Bidding system

The complete set of agreements and conventions assigned to every possible bid by a partnership.

Board

1) a device that keeps each player's cards separate for duplicate bridge.
2) see deal.

Board-a-Match
A form of scoring for team events, parallel to matchpoint scoring in pair games, in which every deal scores the same -+1 for a win, 0 for a tie, and -1 for a loss. Now less common than IMP/victory point scoring.

Book
The basic six tricks that must be taken by the declaring side. Since there is a total of 13 tricks, these six tricks below the half are always assumed and are never taken into account in scoring. Thus, a contract on level 1 denotes taking at least (6+1) tricks.

Bonus

In scoring, the additional points awarded for making a contract, for making a doubled contract, or for making doubled or redoubled overtricks. There are different bonus amounts at the partscore, Game, small slam, and grand slam levels. Bonus amounts may depend on the vulnerability, and whether or not the contract is doubled or redoubled. Bonus amounts are different in rubber bridge and duplicate. See Bridge scoring for details.
see also points for Honours.
Break
When the cards of a suit in the hands of the opponents are split evenly, or nearly evenly, so that neither opponent has a particularly large or small holding in that suit, then suit is said to break. The corollary is a "bad break" when the suit does not split evenly. See also distribution.

## C

Caddy
A non-playing person designated to move boards between tables during a tournament.
Call
Any bid, pass, double, or redouble in the bidding stage.

## Chicago

A form of bridge in which a rubber is completed every four deals, and the vulnerability is different in each of those deals. The scoring and sequence of dealer and vulnerability used in duplicate bridge are derived from those used in Chicago bridge. Chicago is said to have been devised by commuters who played bridge on daily train journeys, where the time available for play was limited by the length of the trip.

CHO
Centre Hand Opponent; a slang term for the partner.
Claim
A statement by declarer about how the remaining unplayed tricks will be won or lost. Normally the claiming player exposes their hand and describes the sequence of play for the remaining tricks and their disposition. This is usually done when the play of the rest of the hand is straightforward. See also concession.

Communication

1) The process of (or the ability to) move the lead between the two hands of a partnership, so as to lead each trick from the more advantageous hand.
2)The means to convey a message to the partner in bidding. The only legal means of communication is through bids themselves, rather than using hesitation or mannerism.

Competitive auction
A bidding sequence which involves both partnerships.
Concession
An admission by a player that he must lose some or all of the remaining tricks. (See claim.)

## Contract

1) The statement of the pair who has won the bidding that they will take at least the given number of tricks. The contract consists of two components: the level, stating the number of tricks to be taken (plus the book tricks), and the denomination, denoting the trump suit (or its absence). The last bid in the bidding phase denotes the final contract.
2) Short for Contract Bridge as opposed to other forms of bridge, such as Duplicate bridge or Auction bridge.

## Control

1) In play, declarer's ability to limit the number of tricks that opponents could cash (usually related with trump contracts).
2) A feature of a hand which prevents the opponents of taking any (or more than one) immediate tricks in a suit. Aces are always "1st-round" controls and Kings are "2ndround" controls; in trump contracts, voids are also 1st-round controls and singletons 2nd-round ones.

## Convention

An agreement on the meaning of particular (sequence of) bid(s) between two partners, where the meaning of the bid(s) is not necessarily (and most often is not) related to the length and strength of bid suits, that is, an agreement on an artificial call or play.

## Convention card

A form filled out by a partnership that shows all the bidding and play conventions being used. Usually used during tournaments.

Cover card

A card (honor or extra trump) which is known to compensate one of partner's losers; for example, a King in trumps is known to cover partner's trump loser.

## Crossruff

A playing technique in trump contracts where extra tricks are gained by taking ruffs in both hands alternately.

Cuebid

1) A bid of the opponents' suit in a competitive auction. Usually a conventional, forcing bid that shows strength or an unusual hand.
2) A bid that shows control in a suit (usually with an Ace or King, sometimes with a void) but does not indicate length or strength in the suit otherwise. Partnership agreements indicate when in an uncontested auction a bid is considered a cuebid. Usually used in exploring for a slam contract, or for showing stoppers needed for a notrump game.

## D

Deal
The set of particular 52 cards as dealt to each player, and the collectivity of bidding and play that occurred with it. Also called Board or Hand.

Dealer
The player who deals the cards and bids first. In duplicate bridge, cards are not literally dealt in every play, but the dealer is pre-defined for each board, and is marked on the physical boards.

Declarer
The person who plays the hand in the partnership that wins the contract; by the rules, the declarer is the first player in the partnership who had called the final denomination in the bidding stage. The other partner becomes the dummy.

Denomination
Component of a bid and contract denoting the trump suit or notrump. Thus, there are five denominations (see rank (2)).

Defenders
The pair who tries to defeat the contract. The opponents of the declarer and the dummy.

## Director

Referee (in duplicate bridge). The director enforces the rules, assigns penalties for violations, and oversees the progress of the game. The director is also responsible for the final scoring. At a tournament there may be several directors, reporting to a Head Director.

## Discard

To play a card that is neither of the suit led, nor trump (and therefore has no chance to win the trick). Also, the card so played.

## Distribution

1) The number of cards in each suit in a player's hand, usually expressed as a series of 4 numbers. A distribution of 4-6-2-1 means 4 spades, 6 hearts, 2 diamonds, and 1 club. Sometimes also called a "Hand pattern".
2) The number of cards in one suit as distributed in four (or two) hands, expressed as series of 4 (2) numbers.
3) The degree to which a player's hand consists of particularly long and short suits.

Distribution point
A measure of a hand's strength due to the length or shortness of suits.
Double
A call that increases penalties for opponents' failing to make a contract, but also increases the bonus for making it. A player can only double a contract bid by the opposition. Often used as a convention.

Doubleton
A suit containing exactly two cards (in a hand).
Duck
A play technique where a player deliberately does not immediately take a trick, but plays a small card instead.

Down
See Set.
Dummy

1) the partner of the declarer, whose hand is placed on the table and played solely by the declarer; dummy has minimal rights and must not interfere with further play of the hand (especially not by suggesting play to the declarer).
2) the dummy's hand as exposed on the table.

## Dummy reversal

A playing technique in trump contracts where extra tricks are gained by taking ruffs in the hand with longer trumps.

## Duplicate bridge

A form of bridge where every deal is played at several tables, by several pairs, unchanged, and the scores are ultimately compared against each other. At minimum, two tables (four pairs) are required for a duplicate bridge match. The hands of each deal are saved in metal or plastic containers called boards that are passed between tables.

## E

EBL
European Bridge League, the official organising body of bridge in Europe.
EBU
English Bridge Union, the official organising body of bridge in England.

## Endplay

A play which forces a particular opponent to win a trick, so that that opponent must later make a favorable lead. The player so forced to win is said to be "endplayed".

## Entry

A card that allows a player to win in one hand after leading from the other. Entries are vital to communication.

Extra values
Values (in form of high card points, shortage or cover cards) which are "above" the ones that a player has promised so far in the bidding.

$$
\mathbf{F}
$$

Face card

An Ace, King, Queen, or Jack. (Also honor)
False sacrifice
see Phantom sacrifice.
Falsecard
A card played with the intention of deceiving an opponent as to one's true holding. Also, the act of making such a play.

## Finesse

A playing technique where extra tricks are gained by using favorable lie of opponents' cards.

Follow suit
Every player is obliged to play the card of the same suit as the one that was first led to the trick, if in possession of one. Failure to follow suit constitutes a revoke.

Fit

1) A long suit (usually 8 cards or more) in two combined hands, that can be used as trumps.
2) General term for two hands that are productive together (i.e. have at least one 1 suit fit and no wasted values). Cf. misfit.

Forcing bid
A bid that requires the bidder's partner to make another bid -- that is the partner is not supposed to pass. Which bids are forcing is a matter of agreement between partners.

## G

## Game

A contract worth 100 points (or more) bid and made. The minimal games are $3 \mathrm{NT}, 4 \mathrm{H}, 4 \mathrm{~S}$ in majors, and 5C, 5D in minors. The game can also be achieved by making a doubled or redoubled contract, e.g. 2 spades doubled is initially worth $2 \times(2 \times 30)=120$ points. The pair bidding and making the game is awarded a high bonus.

Game try
A bid of a side suit which invites the partner to bid a game if he has extra values as well as cover cards in that suit.

## Goulash

A style of dealing, usually in rubber and chicago games, where the cards are not thoroughly shuffled between deals and are dealt in groups. It results in "wild" card distributions.

## Grand slam

A contract to win all thirteen tricks in the hand. Making a grand slam scores significant bonus points.

## H

Hand
13 cards belonging to one player; sometimes also used as a synonym for entire deal.

## High card points (HCP)

Method for evaluation of hand's strength, where every face card is assigned a numeric value.

Hono(u)r
A face card (Ace, King, Queen or Jack); usually also includes the ten.
Hono(u)rs
A rubber bridge scoring bonus. If a player has 4 of the top 5 cards in the bid suit a bonus of 100 points is scored. If declarer has all 5 of the top cards or all 4 Aces in a NT contract then a bonus of 150 points is scored.

## Holding

1) The cards in a particular player's hand at a particular point in play - often at the start of play.
2) The cards of a specific suit in a particular player's hand.

## Holdup

A type of ducking play used for the purpose of cutting opponents' communication in the suit. In a holdup, a player delays taking a trick until opponents' entries are reduced.

IMP
International Match Points - a method of overall scoring in duplicate bridge where every result is subtracted from a datum (average or median) score and converted to so-called IMPs using a table defined by WBF.

Individual
A form of duplicate in which players compete as individuals, not as partnerships or teams. Players change partners at each round of play (typically two to four deals).

Insult
In rubber games the bonus for making a doubled or redoubled contract is sometimes referred to as the "insult" or as being "for the insult".

Invitation
A bid which requires the partner to bid on if he has extra values.
Irregularity
In club or tournament duplicate play, any illegal or suspect action. To avoid dispute, the director is called to rule on the situation and assign the proper penalty, if any.

## J

Jump shift
A bid of a new suit at a level higher than the lowest level at which that suit could be legally bid. For example, $1 \mathrm{H}-2 \mathrm{~S}$ is a jump shift, while $1 \mathrm{~S}-2 \mathrm{H}$ is not. In older versions of Standard American bidding a jump shift shows a strong hand, while in newer versions and other systems it may show either a strong or a weak hand, depending on partnership agreement and the bidding sequence involved.

## K

Knockout
A tournament form, usually in team games where only the winning team from each round advances. The losing team is removed from play. In a double knockout a team is removed from play only after losing two matches.

Kibitzer
A person who watches a bridge match.

## L

Lead

1) Playing the first card to a trick, thus dictating the suit which others must play if able (see follow suit).
2) The card so led.
3) The hand which is next entitled to lead to a trick is said to be "on lead" or to "have the lead", often shortened to simply "the lead".
4) See opening lead.

Lead out of turn
Playing a card when it was another player's turn to lead
Level
In bidding, the component of a bid or contract (the other being denomination) which indicates how many odd tricks are to be made. Since six book tricks are not taken into account, there is total 13 (available tricks) - 6 (book tricks) $=7$ levels. Thus, e.g. contracts on level 4 indicate taking of $6+4=10$ tricks.

Light
(Adj.) to enter the auction with sub-standard values (e.g. open light, overcall light). This is usually a part of tactics or general style.

Lightner double
A penalty double, usually in slam contract, requesting the partner to choose an unusual opening lead.

LHO
Left-hand opponent
Long suit
A holding of 6 or more cards in one suit. Also called long-suited.

Loser
a card which, presumably, has to be given up to the opponents rather than to be won as a trick. See also cover card.

Losing trick count
a method of hand evaluation based on counting losers rather than high-card points .

## M

## Major suit

hearts and spades; in contract bridge a trick with a major suit trumps is scored as 30 points, and game requires a bid 4 odd tricks.

Match

1) the encounter between two teams at two tables, each team sitting North-South in one table and East-West at the other.
2) see round.

Matchpoints
A type of overall scoring in duplicate bridge where every board carries the same weight, the best pair on every board receiving a top (100\%) and the worst the bottom ( $0 \%$ matchpoints). In matchpoint scoring only the number of pairs that a pair beats or ties matter, not by how much other pairs may be beaten.

## Minor suit

clubs and diamonds; in contract bridge a trick with a minor suit trumps is scored as 20 points, and game requires a bid of 5 odd tricks.

Misfit
Two hands that don't have a common long suit (a fit), esp. when both are unbalanced. For example, a red two-suiter opposite a black two-suiter constitutes a misfit.

N
Natural

A call or play that has an "obvious" meaning, particularly a suit bid that suggests length or strength in the suit named, a no trump bid that suggests a balanced hand, a double that suggests the ability to defeat the contract, or a pass that suggest weakness. See Artificial.

Negative double
A conventional call used by responder in a competitive auction to denote support for the unbid suits, and a lack of cards in the suit doubled. It often but not always indicates a relatively weak hand.

No trump
When a hand is played without a trump suit, or a proposal to play without trumps
Non-vulnerable
The state of vulnerability where both bonuses and penalties are lower; in other words, less is at stake for a pair which is non-vulnerable.

## 0

Odd trick
The number of tricks above 6 (the book) that are to be taken in the contract. See also level.

Opener
The player who makes the opening bid.
Opening bid
The first bid (i.e. non-pass) in the auction.

## Opening lead

The first card led by defenders in the play stage. Unlike other leads, the dummy is not uncovered yet at the time of lead, so the opening lead is made "blindly", and often has a crucial impact to the outcome of the deal.

Opening leader
The defender who makes the opening lead. It is always the declarer's LHO
Overbid

1) A bid overstating one's strength.
2) Ending up in a too high, usually unmakeable, contract.

Overcall
A bid made by the opposing partnership (the side that does not include the opener) in a competitive auction. Generally, it shows a 5 card suit and could show less strength than is needed to make an opening bid. The term is particularly used for the first such bid in an auction.

Overruff
To ruff with a higher trump than was previously played in the same trick.
Overtrick
Every trick taken by the declaring side over the number of tricks required by their bid contract.

## P

Pair
Two players who play together.
Pairs game or Pairs event
A form of duplicate bridge in which each pair or partnership competes separately, as opposed to team and individual events. Pair events are normally scored by Matchpoints.

Partnership

1) see pair
2) A pair who play together for an extended period.

Partscore or Partial Contract
A contract below the level that earns a game bonus.
Pass
A call indicating that player declines to bid for that turn. The bidding ends after three successive passes. A hand is called "passed out" if the bidding sequence begins with four consecutive passes.

Penalty

1) A score subtracted (added to the opposing side) for the failure to fulfill the contract.
2) A penalty to a pair or team assigned by director, for disobeying game rules (infraction) (e.g. a revoke). It can be expressed in terms of tricks, matchpoints or IMPs, or imposed by barring certain actions to the offender or the offending player's partner.

Phantom sacrifice or False sacrifice
when a player makes a sacrifice bid against a contract that the opponents could not, or were very unlikely to have made, thus converting a probable positive score into a certain negative score.

Play
The second stage of a deal, when cards are played. In the play, the declarer tries to take at least as many tricks as his or her side promised by the level of the contract, while defenders try to prevent this (that is, to set the contract) or failing that, to limit the number of overtricks the declarer takes.

## Point count

A numeric value placed on the strength of a hand, used as a guideline in bidding.

## Preempt

A bid whose primary function is to take up bidding space from the opponents.

## Principle of restricted choice

It is physically impossible to explain this principal to a non-mathematician who does not play Bridge.

## Psychic bid

A call that "grossly misstates high card strength or distribution". Psychic bids (often called simply "psyches") are legal except when they are made by agreement (and such agreement is not presented to the opponents by means of an alert), and so are less likely to confuse the bidder's partner than the opponents.

## Q

## Quick tricks

A method of hand evaluation.

## R

Raise
A bid of partner's suit at a higher level. For example, $1 \mathrm{~S}-2 \mathrm{~S}$ is called a single raise; $1 \mathrm{~S}-3 \mathrm{~S}$ is called a double raise.

Rank

1) The strength of an individual card; Aces have the highest rank, followed by K, Q, J, 10,... down to deuce (2)
2) The order of denominations in the bidding. Notrump is highest-ranked denomination, followed by spades (S), hearts (H), diamonds (D) and clubs. (C)

Redouble
A call that essentially doubles the penalties and bonuses of a previous double; a player can only redouble a contract bid by their side which has been doubled by the opposition.

Relay
A bid requesting that the relay bidder's partner make a specific agreed-upon bid.
Revoke
Failing to follow suit (as required) when a player is able to do so.
RHO
Right-hand opponent
Round

1) In bidding, the sequence of four consecutive bids, usually starting from the dealer.
2) In duplicate bridge, a set of (usually 2-4) boards which one pair plays against another in pairs games.

Rubber

1) In Rubber bridge, the set of deals ending when one pair first wins two games (there is an extra score for winning the rubber)
2) the act of so winning the second game, also called "making the rubber".

Rubber bridge

A form of bridge scoring used in "home parties" and by four players playing only amongst themselves (as opposed to duplicate bridge). There is commonly a wager on the result, which is not usual in duplicate.

Ruff
The play of a trump when another suit is led. A ruff is allowed only when the player cannot follow suit (of course, only in trump contracts.)

## Ruff and discard (Also ruff and sluff/slough)

A play in which a player leads a suit in which both opponents are void, so that one can ruff while the other discards (or sluffs). Forcing a Ruff-and-Sluff is one purpose of an endplay.

## S

Sacrifice
(Usually deliberate) bidding of a contract known to be unmakeable, with the intent that the cost of penalty (even if doubled) will be smaller than the value of opponent's score.

## Safety play

A play whereby the declarer maximizes the chances for fulfilling the contract (or achieving a certain score) by avoiding a play which might achieve slightly higher score, but at a greater risk if the arrangement of the cards is unfavorable.

## Score

The numerical value assigned to one pair or another as the outcome of each deal. The score is awarded to the pair who successfully fulfilled a contract, or to their opponents if the contract was not made (see penalty). If the contract is made, the score is calculated by summing up points for bid tricks, bonuses, and points for overtricks. Otherwise, it is calculated by summing up penalties for undertricks (which significantly increase if the contract was doubled or redoubled). The other pair, actually, receives a "minus score" that is, their score is the negative of their opponents' score.

Set

1) to defeat a contract.
2) the number of tricks by which a contract is defeated ("a two-trick set").

Signal

1) a special system of agreed meanings to cards played by defenders in order to communicate their holdings to each other.
2) A particular play with such a meaning.

Singleton
A holding of exactly one card in a suit.
Slam
Bidding for and taking twelve tricks is a "small slam" -- that is, any bid of 6. Bidding for and taking all thirteen -- thus any bid of 7 is a "grand slam"

## Squeeze

A playing technique whereby the defender(s) are forced to discard a vital card.
Slough
See Discard. Pronounced 'sluff'.
Stopper
A high card (normally, an honor) whose primary function is to prevent the opponents from running a suit in a notrump contract. (See also control).

Strain
See Denomination.
Strong Two bid
An agreement whereby an opening bid of two of a suit indicates a strong hand and a strong holding in that suit.

Suit
a sign on the cards indicating the "class" which the cards belongs to. There are four suits: spades (S), hearts (H), diamonds (D) and clubs. (C). In bridge, suits are ranked, but only for bidding and scoring purposes. (See also denomination, major suit, and minor suit).

Swing
A (huge) difference in compared scores on a board from two tables in team match.
Swiss teams

A team tournament in which teams play other teams with a similar previous record of wins and losses. It typically consists of a series of relatively short ( 6 to 8 board) matches.

## System

see Bidding system.

## T



4 KQJ8742


+ 976
4084
In the above layout, North's hand is a two-suiter with a singleton spade and a doubleton club, while his partner holds a long suit in spades and a void in hearts. The two hands have a fit in diamonds.

Table

1) A table where bridge is played;
2) see dummy
3) the number of groups of four players in play at a bridge event is described as the number of tables.

Table talk

1) Illegally conveyed information between partners, for example by means of talking, gestures, or facial expressions.
2) Extraneous discussion during play, discouraged because it might convey information or distract a player

## Takeout double

A conventional call used in a competitive auction to indicate support for the unbid suits and a hand of opening strength or more. It usually implies shortness in the suit doubled. This is usually a forcing call and asks the doubler's partner to bid a suit.

## Team

A group of 4-6 players (but only 4 playing simultaneously, as 2 pairs against 2 pairs of another team) who compete as an entity in certain forms of duplicate bridge.

Throw-in
see Endplay.
Transfer
A type bid that directs partner to make another bid in a series, usually as part of a convention. Also spoken as a call as in 'transfer' as an alternative to saying 'alert'.

Treatment
The specific meaning of a natural call or play according to a partnership agreement.
Trials
A form of pairs duplicate game, usually of high competition level, played as round-robin tournament with small number of pairs (typically 16) playing relatively long matches (typically 16-32 boards). Usually scored in IMPs with conversion to Victory points.

## Trick

A set of 4 cards played by each player in turn, during play stage.

## Trumps

A suit, determined by the declaring side during bidding, which if played, wins a trick regardless of rank of other played cards.

Two suiter

A hand containing two long suits (see diagram), usually each containing 4 or more cards, with at least 10 cards between the two suits.

## U

Unbalanced
Any hand that is not balanced, but particularly hands with relatively extreme distribution.
Underbid
A bid whereby the bidder has understated the value of his cards, by an error or by taking a "pessimistic view", or because the only other choice is an overbid (which may indicate a flaw in the bidding system in use).

Undertrick
Every trick that the declarer ended up short of making the contracted level at the end of the play.

## V

Victory points (VP)
The points which represent the total score of a single match in duplicate team games and trials. The most common scale is WBF 25:5 scale, where $15: 15$ presents a tie, 25:5 an absolute win and 25:0 the most extreme result. (The scale depends on IMP difference achieved and number of boards played.)

Void
A holding of zero cards in a particular suit (in a hand).
Vulnerability
The state assigned to each pair in advance (in duplicate bridge, vulnerability is indicated on boards, in rubber bridge, it is determined in other ways). Vulnerability affects the scoring, i.e. both size of bonuses for making contracts and penalties. In duplicate bridge, boards are designed so that every pair is vulnerable on approximately $50 \%$, and nonvulnerable on other $50 \%$ of deals. Vulnerability affects bidding tactics, as the ratios between potential scores available for both pairs change.

Vulnerable

The state of vulnerability where both bonuses and penalties are higher; in other words, more is at stake for a pair which is vulnerable. In rubber bridge a pair is vulnerable when they have won one game towards a rubber.

## W

Wasted value
A honor or other hand feature which does not present an asset in two combined hands. For example, a doubleton queen opposite honorless length, KJ opposite a singleton, or two singletons in the same suit.

Weak two bid
An opening bid of two of a suit indicating a weak hand, but a long suit. This is a form of preempt.

WBF
World Bridge Federation, the worldwide governing body of the game.

## Y

Yarborough
A hand with all cards less than 10 , ie. only 2-9. A very bad hand.

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