Beta Responses to Strong 2 Clubs Opening

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When do we open 2♣?

When do we open 2♣? Only when we must. What makes us open 2♣? The strength of our hand. When we open the bidding at the 1st level, our partner will pass with less than 6 points. He is not allowed to pass a 2♣ opening. So, if we don't want partner to pass, we open 2♣.

We open 2♣ only when we must.

If we don't want partner to pass, this means we need less than 6 points from partner to have game, perhaps an ace or king could be enough - or even two queens. That is why the basic criterion for a 2♣ opening is called the two queens criterion.

We open 2♣ when all we need from partner to have game is two (any two) queens.

With hands that have game on their own, the above criterion has already been fulfilled, but if it isn't… If our hand does not pass the two queens test, we should try to find an excuse not to open 2♣, no matter how "beautiful" our hand seems to be. (A warning to those players who think it's so cool to open 2♣ that they will find just about any excuse to open 2♣.)

What is wrong with a 2♣ opening, why should we try to avoid it? A 2♣ opening is (1) a rough tool - it can describe certain hands in detail, but is useless with the rest, and (2) since we seldom use it, we are not skilled in using it or we forget how to use it properly (and the result is a disaster).

If two queens from partner should lead us to game, then we really have to be very strong to open 2♣. If we open a balanced hand with 20 to 22 points 2NT, then we will open 3NT with 23 points or ... Or we open 2♣ and bid 2NT over partner's response. This is also the only 2♣ opening we shall not try to avoid, but will be happy to bid. (Further on the "No-Trump" 2♣ opening will not be discussed, because the procedures are the same as with a 2NT opening.)

Every other strong hand presents - a problem. Let's say we have 22 points. If the hand is balanced, we shall open 2NT. But if it is a hand with 4441 distribution, we already have a problem. Such a hand is by definition too strong to be opened at the 1st level (which includes hands up to 21 points), and on the other hand is wrong for a 2♣ opening and then bidding 2NT.
But on the other side of things 22 points do comply with the "two queens criterion". Whether you open at the 1st or 2nd level with 22 points is entirely up to you, but you have to draw the line somewhere. If you disagree with the limit set below, you may raise it, but you still have to set it somewhere (because you can get a 4441 hand with 23 or more points).

We open 2♣ with every hand that has 22 or more HCP.

The definition for opening 2♣ has thus been exhausted. With every other hand with lesser points you <u>don't need</u> to open 2♣. It isn't forbidden, of course, because... Because the "two queens criterion" actually works (even if not always) with hands with much less than 22 points but with more <u>trick-taking power</u>. For example let's look at the following hand:

♠ AKxx
♥ AKQJxxx
♦ x
♣ x

This hand has "only" 17 HCP but we can count nine whole tricks. If partner has only the queen of spades... Let's admit that we shall "push" this hand to 4♥ without even listening to partner. Quite correct!
- Does this mean we open 2♣? We might, but shall we be able to find out about the queen of spades after opening 2♣? Well... - Would it then be better opening 1♥? And our heart sinks when all three players pass? This is hardly possible for there are still a big 23 points "out there". But anyway.
- Why not simply open 4♥ - we want to play it anyway? This isn't also wrong. "What if we have slam?" some will say. Slam is less likely (sort of a 3-percent possibility), but the question remains. It is correct to use the opening that enables us to investigate the possibility of having slam (or even more importantly, not having it). The opener of the above hand was unfortunate enough to have a partner (I was *partner* and my partner opened with 1♥) with this hand:

Opener	Responder
♠ AKxx	♠ Jx
♥ AKQJxxx	♥ x
♦ x	♦ KQJxx
♣ x	♣ KQJxx

The responder has a full 13 points and responded so strongly - no matter whether the opening bid was 1♥ or 2♣ - that in the end the responder couldn't resist bidding Blackwood - and arrived at an unmakeable 5♥ contract (even with the queen of spades in a favourable position).

A 1♥ opening obviously can't provide the vital "there is no slam" information - and that's why it is inappropriate for this hand. Could you get this information by opening 2♣, like you play it now? If you play "standard responses" the answer is surely no. What is then the solution? Perhaps in a little bit different 2♣ system. (If anyone out there argues he wouldn't open this hand 2♣ anyway, he could be right, but... - but does this mean a hand like this can never be bid to the appropriate level?)

Let's return to the "must" of opening 2♣ and its "roughness". Take this hand for example:

♠ KQJ
♥ AKx
♦ x
♣ KQJxxx

This hand has 19 points - even more than the hand mentioned before - and we can also count nine tricks. So, do we open 2♣? Never, ever!
The hand fails to comply with the (1) strength and (2) two queens criterion. It doesn't have 22 points, so we <u>don't need</u> to open 2♣. Two queens from partner are not enough for game, so we are <u>not forced</u> to open 2♣. We open this hand 1♣. If partner doesn't have 6 points to respond with any suit at the 1st level, then there is no chance for game. On the other hand if partner finds any response (anything, like 1♦) then we shall not stop short of game - most probably 3NT.
Let's take a look at what will (probably) happen if we open 2♣ (and "discover" one of the "down" sides of opening 2♣). Our partner's response to 2♣ is 2♦ and now we bid 3♣. We have bid our suit for the first time at the third level - like opening the bidding 3♣! What should partner bid after 3♣? (Make a wish.) If he bids 3♦ (being natural or perhaps a second negative), we shall be forced to bid 4♣ and that's that. Is 4♣ really where we want to finish with this hand?
The "down" side we have unveiled is that by opening 2♣ with a one-suiter we shall end up playing at least 3♥ or 3♠ when we have a major suit and 4♣ or 4♦ when we have a minor suit. This means we should have an appropriate number of tricks coming from our hand - to keep us from unnecessarily going down with such nice hands. The rule of tricks in a hand for a 2♣ opening is very rough and inflexible.

When we open 2♣ with less than 22 points our hand should guarantee 8½ tricks with a major or 9½ tricks with a minor suit.

The full 9 and 10 tricks have been reduced by half a trick taking into account statistical probability - saying that even a very weak partner somehow manages to conjure up "half" a trick for us. There is only one more exception when game is not reached after a 2♣ opening - when the opener bids 2NT after opening 2♣ his partner may pass with a total Yarborough.

After a 2♣ opening one can't stop below 2NT, 3♥/♠ or 4♣/♦.

With certain strong hands it is difficult to precisely evaluate the number of tricks - especially when it depends on the chosen trump (such "difficult" distributions are for example 6431 and 5431). It is better to evaluate such hands in "opposite units" - we count losers instead of winners.
Losers are - in short - <u>missing honours (A, K, Q) in the first three places</u> in every suit within the hand. We can have three losers in one suit at the most - the fourth and next cards are not losers, because they shall either be ruffed (in a suit contract) or promoted to winners. Three or more small cards count as three losers, a suit with one honour (Axx, Kxx, Qxx) counts as two losers and a suit with two honours (AKx, AQx, KQx) as one loser. The double Ax and Kx count as one loser, a double Qx as two and a singleton is always a loser unless it is an ace.

♠ AQJ10xx	♠ AQx
♥ ---	♥ ---
♦ KQJx	♦ KQJx
♣ AQx	♣ AQJ10xx

The above hands have both 3 losers, one in each of the suits. A hand with three losers is a "bombshell" for sure, but it isn't enough to open 2♣. To open 2♣ we also need to have a sufficient number of so-called fast tricks. **Fast** (also defensive) tricks <u>are in the first two places</u> in each suit and only five combinations offer a source of fast tricks: AK counts as 2, AQ counts as 1½, KQ as 1, A as 1 and Kx counts as half a fast trick. Now to the arithmetic.

We <u>may</u> open a hand 2♣ when the fast trick count <u>exceeds</u> the loser count.

According to this evaluation our two example hands have four fast tricks and three losers - and <u>are</u> suitable for a 2♣ opening. Don't cheat when doing the arithmetic - if the two numbers are the same we don't open 2♣ - there should be more "fast" tricks than losers.

But be aware! - there are still only two basic criteria for a 2♣ opening: 22 points or 9 and 10 tricks - the second hand is a minor version of the first (the "fast minus losers" arithmetic is the same), but I still wouldn't open it 2♣ - because it can't survive a 4♣ contract.

"Standard" responses to 2♣

The "standard" criterion for responding to a 2♣ opening is the responder's HCP strength - if he lacks sufficient points, he answers **negatively** and one of the available bids over 2♣ is reserved for this type of hand and every other bid is considered **positive.** The simplest way to do this is to respond 2♦ with less than 8 points and to bid something else, a suit or No Trump with 8 or more points, which in effect constitutes (at least) a game force.

If we try testing each of the aforementioned hands (the trick-taking bombshells) with a 2NT response (which would for example mean 8 to 10 points without a suit particularly worth bidding) we come to a conclusion that the opener doesn't gain much by hearing such a "point" response - because responder's points may be "good" cards like aces and kings or totally useless queens and jacks. (Which in the end again "condemns" him to Blackwood.)

The information about responder's point strength can be of value to opener only in case he himself has a "No-Trumpish" hand when he can add responder's points to his own and thus define the contract level. But even in this case the responder is in a better position for adding up points. (In case of a 2NT response will the opener now be bidding Stayman and transfers?!) It is worth mentioning that 2NT and 3NT are not the only "point responses" by responder, every other "positive" suit response is also a strength showing bid.

An important conclusion to this discussion is that we should allow a potentially "No-Trumpish" opener to be the first to bid NT.

Opener should be the first to bid No Trump, no matter what the responding bid.

Although "better" responses than standard have not yet been agreed on we can consider this rule even without them. With a balanced hand opener bids natural to any response (whatever you agree on). With 23 or 24 points he bids 2NT and with 25 to 27 3NT. When the 2♣ response is 2NT or higher (whatever the meaning) opener simply bids No Trump a level higher.
After opener's No Trump rebid responder finds himself in a favourable position to lead the bidding. Now he can fit his own points (even his jacks and queens) very accurately, reach the correct contract level and recognize the potential of his eventual long suits. He can also take advantage of every efficient No Trump opening mechanism (Stayman, Jacoby transfers etc.) besides using simple arithmetic.

The reader has perhaps already guessed that I'm not a fan of standard responses to 2♣ and that I'm going to present a different response system. I truly evaluate the standard response system as useless. If it functioned well (or at least satisfactory) in the times of 2♣ openings being truly "loaded with points" it simply doesn't work with hands strong in trick-taking potential.

We never respond to a 2♣ opening with "points". Ever.

But beware - if you agree with this statement (and decision) then you will have to deal with one of the basics of the standard system - **if there are no "points", there are also no negative responses.**

- **"Double negative" 2♥** (or perhaps double double negative?)

Some (systems) even use 2♥ as a negative. This response is "very" negative and means "Partner, I really have nothing, zero, nought." An idea? Well...
What would such a "zero" bid otherwise? Firstly 2♦ ("I have nothing") and then for instance 2NT after a 2♠ rebid (as a second negative - "I really have nothing") and would then pass 3♠ ("I told you I have nothing"). Well, by bidding 2♥ all three statements have been joined together in one bid - although a bit useless, because the statement shall be repeated again (this is why I call this bid double double negative).

"Double negative" 2♥ could be quite entertaining - if it wasn't also... let's say problematic (very very much). Let's assume the bidding has gone 2♣-2♥.
Have you worked out what to bid now with a hearts one-suiter? *Pass* at this point might be successful, but you would probably bid 3♥. Is responder allowed to pass this bid? Probably yes. What would opener's bid be if he was planning to jump bid hearts? Four hearts? Oh, oh, problems of the heart.

If you think this is the only problem with the "double negative", allow me to present something even worse. Again we start with 2♣-2♥ but now we present opener with a 1♠444 hand (same problems with other three-suiters, but this one is really the ugliest). The only bid available to opener is 2NT, but how will it end...
The inventors of the "double" of course have the answer: "Well, Ljubomir, we don't open strong three-suiters 2♣, we open 2♦!" Bravo, that's right - the double negative 2♥ causes major perturbation of your bidding system. Does everyone that uses it know this?

Responding aces to a 2♣ opening

It is a fact (shown also by our example hands) that responder's points aren't vital information for a strong 2♣ opener. Responder's points become important only when they can be reasonably placed by responder. For this it is necessary that **opener presents his hand first**. This finding - a very important one - opens various options for responder's first bid.

The simplest option is for opener not to be saying anything with his first bid, but automatically bids (as low as possible) 2♦ - and waits for the opener's rebid.

The automatic 2♦ bid is closely related to the so-called "waiting 2♦" response, where an automatic 2♦ can be ignored only with very special hands, such as good one-suiters or some other special feature (agreed by the partnership).

The described procedures arise from the fact that the opener should describe his hand first and they work out satisfactory in practice. But we should be aware of the fact that by doing this we have "translated" the 2♣ opening into standard strong openings (2♥, 2♠, 3♣ and 3♦ - hey! - instead of 2♣ and 2♦).

Do the described 2♦ responses have any drawbacks? Yes, two.
(1) The first drawback of the semi-and-automatic 2♦ is wasting a whole round of bidding by saying nothing - and the opener as mentioned before really starts the bidding with 2♥ or 2♠ (which is still acceptable) and 3♣ or 3♦ (which is awful and in practice causes many an awkward situation).

(2) The second drawback is "related" to the first. Since the responder's first bid isn't really saying that he has a weak hand (when he is weak), he will have to do this on his rebid. (Stating your weakness with your second bid is called a **second negative**.) After opener's rebids of 2♥ or 2♠ the response of 2NT is usually used to show weakness. After opener's minor rebids of 3♣ or 3♦ the choice of a negative bid becomes very limited - after a 3♣ rebid a 3♦ response is usually used as a second negative (and bidding a major means "something") but after a 3♦ rebid by opener no such system adequately points out the difference between positive and negative responses.

What else could the 2♣ opener "hear" from partner instead of the semi-and- 2♦ response? Let's start with the fact that opener is strong - he holds more than a half of the honour cards. With such strength he is only an inch away from game and even if partner has just a pair of aces, slam is not out of the question either.
Let's reverse our bidding procedure - if we explore our joint strength first and then try to find possibilities for slam when we open at the first level, we can test our slam possibilities first when opening 2♣. The reason for this lies in the opener's strength and "empty space" - when responder doesn't know yet what in his hand could be useful for opener. Responder should therefore show aces immediately as a response to 2♣ (with Blackwood, Gerber or somehow).

Showing aces - since responder can't have many - will not use up much bidding space. After hearing aces - not enough for slam - the opener will concentrate (and adjust every available tool) on exploring the only possibility left - game.

If the first response from responder on a 2♣ opening is meant to show aces, it should be agreed on how to do this. There are two basic possibilities - by showing the number of aces or by bidding the aces naturally.

First of all may I present "my own" simple "number" system. Responder bids to 2♣ like bidding "Gerber" (4♣) and afterwards the partnership bids naturally. (Try using "my" simple system on the presented problem hands - you will be able to "solve" more problems than when using standard bidding.) These are the responder's bids 2♣:

2♦	- no aces
2♥	- one ace
2♠	- two aces
2NT	- three aces (is this even possible?)

The other (widespread) system <u>points out</u> specific aces. Like this:

2♦	- no aces
2♥♠, 3♣♦	- one ace in the suit bid
2NT (or 3NT)	- two aces

The 3NT version instead of 2NT belongs to those who cannot "part" from bidding points -so they still have the 2NT bid to show a positive "No-Trumpish" responder's hand. Don't believe them - use 2NT.

Let's test both systems on our study case opening of ♠ AKxx ♥ AKQJxxx ♦ x ♣ x.
On 2♣ the responder (the one with 13 points) would bid 2♦ - "no aces" and the opener would - since slam is out of the question - end the bidding with 4♥. (Isn't that great? You will finish bidding 2♣-2♦-4♥ in ten seconds, whereas other players will use up five minutes for the bidding, breaking a sweat, wandering into 5♥ and then spend half the evening thinking about what went wrong.)

Although it doesn't seem to be possible to show aces any other way (except by step bidding or bidding the aces themselves), the imagination of inventors has no limits. The most entertaining system I've come across concentrates on responder's two aces. In this case special bids are made to show combinations of red, black, minor, major and "unmatching" aces thus using up every possible bid as far as 4NT. (I presumed this system to be a joke intended for "geeks" that won't use a convention unless it's complicated enough.)

Is the described system of ace showing the right answer to our problem? Yes - if you are thinking about the graded ace showing and if you are not interested in something even better. (The advantage of "my" ace showing responses is also that it can be explained in five minutes - to a class of beginner bridge students for example - and anyone can use it immediately without additional explanations - without memorizing points, "second negatives" and such junk).
The major drawback in the "pointing" system (already without the "improvements" for showing two aces) is wasting bidding space, because it consumes four bids just to say "I have one ace". How the bidding continues is just a matter of chance - if responder has the heart ace, the bidding resumes at 2♠, if he has the diamond ace, the bidding resumes at 3♥ (in the case when opener's suit is diamonds, he will be bidding his suit for the first time at 4♦ - crazy!). And because of these "random" responses the continuation of the bidding has to be analyzed for each one-ace bid at a time.

Let's test our new tools with a one-ace response on this opening ♠ AKxx ♥ AKQJxxx ♦ x ♣ x.
With "my" system responder bids one ace by bidding 2♥ and the opener finishes by bidding 4♥. Using the "pointing" system responder bids anything from 2♥ to 3♦ (what a waste) leading to the same result. It is important to come to a conclusion that the suit (when it's one ace) the ace is in is not that important to opener. (It would be important in case opener was void of that suit; or when he has a small doubleton in a side suit - which is almost forbidden for the opener to have.)

The 2♣ opener will frequently have three aces himself - in this case responder would be telling him where his ace is, which is already obvious to opener. Pointing out an ace is also useless when opener has a "No-Trumpish" hand, the only "use" (for instance by bidding 3♣ or 3♦) is not being able to naturally rebid 2NT. I've already made enough fun out of the "ridiculous" defining of two aces - if the 2♣ opener can't figure out which two aces are held by partner just by looking at his hand, then he will probably not be able to remember the meaning of every possible response available either.

Conclusions? There are two conclusions to be made.

(1) Showing aces when responding to a 2♣ opening is useful (more useful than responding "points").
(2) Graded responses are superior to responses pointing out aces (even though they are presently used less in practice).

Another remark (by me) about the second conclusion. Graded responses are in general so good... they should be forbidden. Experts know about the value of graded responses and this is why various expert bidding systems (like Precision) are full of graded responses (to all sorts).
The climax in this area that I have come across (and also used) is the eight grades of response in a Precision sequence 1♣-1♦-2♥ (this would be equivalent to a 2♣-2♦-2♥ in our system). Yes, there are eight possible responses to 2♥ (being a question "what do you have in hearts, partner") - the second grade for instance meaning "I have a single or void" and the eighth "I have four cards with two high honours". And now graded responses are being invented for quite ordinary openings like 1♥ and 1♠, showing support (yuck).
All right, let's not forbid every graded response, but they should be played only at bridge institutes and faculties. They should be forbidden at bridge clubs. So that during play we won't be glaring at "graders" with our mouths open and stupid expressions on our faces, wishing they would leave for the next table (and the naive will constantly be asking "and what does this mean?").

Of course there is one "graded" convention we should keep. Or even erect a monument in its honour. It is "Blackwood", well… and also "Gerber". These two conventions are inseparable from bridge, used even by beginners (there is no greater pleasure for a beginner than bidding Blackwood, "Wow, this is so good").

Responding controls to a 2♣ opening

Oh, yes, beginners already know Blackwood and they love it. When beginners cease to be beginners, they suddenly discover that "the good players" respond a little bit differently to 4NT. That for instance 5♣ means zero - or maybe four aces. They soon get over the "how will I know whether he has zero or four" crisis and then they find out that some respond to 4NT with "five" aces - the trump king becoming the fifth ace (Key Card Blackwood). But even this can be understood after a while. (And they go around asking "Do you play 1340 or 4013?")

But let's return to the 2♣ opening. By now we are convinced we shall reply aces. If there are four aces, no problem, but if we play Blackwood with five aces - and we wish to use this with a 2♣ opening - which king would be the "fifth" ace in the case of a 2♣ opening?
It's like this - to the 2♣ opener the "fifth" or "trump" or in fact every partner's king is important. But this elevates the number of aces or ace-kings if you wish to eight! Yes, there are truly four aces and four kings in a pack of cards, so that means altogether eight key cards, but by the nature of things at least half of the ace-kings are already in the hand of the

opener (holding more than half of all points). A opener with strong trick-taking potential practically can't have less than two aces and two kings, so in practice the responder "operates" with four key cards at the most.

Although it seems we are now even better off with four key cards compared to Blackwood's five, this is not quite true. If our response evaluates aces and kings as equals, our response won't be precise enough - an answer of *three* could for instance mean three kings or three aces.

In order to prevent this, we shall not evaluate aces and kings as equals. We solve this problem with so-called control points or **controls** in short. According to such an evaluation we evaluate each king one control point (1 control) and each ace 2 controls (just as if each ace was worth two kings, like this A=2k, K=1k; the unit - since it presents a king - shall be denoted with a small *k*).

If we return to the presumption that the 2♣ opener is "missing" two aces and two kings at the most, this adds up to six controls - just one (unit) more than with expanded Blackwood.
Let's become familiar with our new unit. Three controls could mean either three kings (1+1+1) or one ace and one king (2+1). Four controls are for instance either four kings (1+1+1+1) or one ace and two kings (2+1+1) or two aces (2+2). Although it may seem at first sight that such responses might be ambiguous, it looks like this only "in theory" when we aren't holding cards in our hands. In practice the player with the strong hand finds it easy to "read" the responses correctly. Some of the honour combinations with responder are also practically impossible (or at least almost incredible).
For instance a *4k* response practically can't be four kings. This would mean that opener has none - if he really didn't have any this would on the other hand mean he has four aces, because otherwise he can't hold enough "material" for a 2♣ opening - and again opener has it all figured out.
It is similar with a *3k* response where a three kings response possibility is most often eliminated by opener's hand. Sometimes you may perhaps actually be placed in a dilemma as opener - but don't forget (1) the bidding has only just started and there is still enough time to explore further and (2) you will be placed in a dilemma only when opener shows "a lot", when he is "slammish" and there other tools available other than responder's first bid to reach a slam. (Before I forget, if responder shows aces and kings with his first bid, what should he then show with 4NT "Blackwood"? Maybe queens? And then jacks to 5NT? Interesting, interesting.)

- <u>Defining graded responses</u>

We shall therefore show controls to a 2♣ opening. Definitively. Starting tomorrow. Now all we need to do is define the responses - how many controls are shown by responding 2♦, how many by responding 2♥ etc.

How are the responses defined by existent systems of this sort? Most use 2♦ to show zero or one control (0-1k). A 2♥ response shows two controls and so on. Quite clear, comprehensible and good. But rarely do systems stop at this (good) definition. Many systems combine controls and points (two diamonds showing "so-many" controls and "so-many" points...). "My" system does no such thing (because I care about you). When you and your partner stumble upon a 2♣ opening once in a while, you need to be able to recall these responses - and mine are easy - because there are only four, because they follow each other up the line, because they don't mix apples and pears and because... (and because - this is most important - it will get you a great score).

Will we also define a 2♦ response to show zero or one control (0-1k)? No, "my" 2♦ response will show between zero and two controls (0-2k)? The reason? There are several. The first is, I can't "invent" something that has already been invented (so I have to come up with something different). The other reasons are... More about them perhaps later on - when I figure them out.
But to be quite truthful I need to admit that my first response is not quite mine. In Precision the opener after opening 1♣ - when partner responds 1♥ or 1♠ - already asks about controls by bidding 1NT (can you imagine). Responder now shows zero to two controls by responding 2♣. In Precision the described 1NT bid is called *beta asking*, so I shall name "my" 2♣ responses *beta responses*.

I shall name the 2♦ response - due to tradition - as "negative", although it may even conceal an ace or two kings.
Now to my reasons for setting such a high "positive" threshold (three controls for a 2♥ bid).

(1) The 2♥ bid should be left available if possible, so that it can be bid by opener. With 1♠444 distribution he will always have problems with a 2♥ response, but it will be easier to handle if responder has shown three controls by bidding 2♥.
(2) An analysis of 26 hands shows that the "natural" boundary between "negative" and "positive" seems to be **three controls**. We can perceive that after a *three controls* response opener is almost always in a position to set the final contract by himself.
(3) The last reason is psychological. A 2♣ opening has such a strong impact on opener it makes him "look for slams". Reaching just a game contract seems to him a minor failure, and he rarely is able to stop short of game. Our 2♦ response is an important correction of the described influence on opener, it brings opener back to earth (knocking slammish ideas out of his mind), so he can concentrate on the basic goal of a bridge partnership in general - **<u>bidding a makeable game</u>**.

***Beta* Responses to strong 2♣ opening** **A and K are control cards , A=2k, K=1k (king units)**	
2♦ = 0-2k	**{∅, K, A, 2K}**
2♥ = 3k	**{3K, A+K}**
2♠ = 4k	**{2A, A+2K, 4K}**
2B = 5k	**{2A+K, A+3K}**
4♣, 4♦, 4♥= 6k, 7k, 8k	

• Six, seven or eight controls

What on earth do the 4♣, 4♦, 4♥ responses mean - I was promising the simplest system of responses in the world? If they bother you, you might as well forget them. This much- it is in theory possible to open 2♣ even with only 4 controls (for example with ♠ KQJx ♥ KQJ ♦ KQJ ♣ KQJ) and poor responder will have no bid with three or even four aces (God help him). So here are the responses that show 6, 7 and 8 controls. And why didn't I continue with 3♣, 3♦ and 3♥? Because I just wanted to be original - no, no, I left the bids at the third level available for "improvements" of your own.

Now let's take a closer look at each response separately. You can find the basis for the following discussion in the table below, showing 26 strong trick-taking hands which we have (presumably) opened 2♣.

The hands below have been opened by opener 2♣ and partner has responded by showing controls (A=2k, K=1k). The table illustrates the range of the hands, with *fit* there is a fit needed to be found, the fields with dotted lines point out a "slammish area" with 10 controls.				↓ Responder shows controls ↓							
				0,1k=	**2k=**		**3k=**		**4k=**		
Opener's hand↓ strength→	HCP	# controls	tricks /losers	**∅, K**	**A**	**2K**	**A+K**	**3K**	**2A**	**4K**	**A+2K**
1. **♠ KQJx ♥ AKQx ♦ x ♣ KQJx**	21	1A+3K=5	7 / 3	4fit	4fit		4f		6fit		
2. **♠ KQJT ♥ x ♦ KQJT ♣ AKQJ**	22	1A+3K=5	10 / 3	45fit	45fit		45fit		6fit		
3. **♠ AQJTxx ♥ - ♦ KQJx ♣ AQx**	19	2A+1K=5	8 / 3	4♠	4♠	4♠	4♠	6♠	6♠?		6♠
4. **♠ AKQxxxx ♥ Kx ♦ - ♣ AQx**	18	2A+2K=6	8+ / 2	4♠	4♠	6♠	6♠ ?		6♠		6♠
5. **♠ AKQTxx ♥ - ♦ KQJT ♣ Axx**	20	2A+2K=6	10 / 3	4♠	4♠	4♠+	6♠		6♠		6♠+
6. **♠ x ♥ AKQTxxx ♦ AKx ♣ xx**	16	2A+2K=6	9 / 4	4♥	4♥	4♥	4♥		4♥+		6♥?
7. **♠ AKxx ♥ AKQTxxx ♦ x ♣ x**	16	2A+2K=6	9 / 3	4♥	4♥	4♥	4♥		6♥?		6♥?
8. **♠ KQJ9x ♥ AKQTx ♦ Ax ♣ x**	19	2A+2K=6	8 / 3	4fit	4fit	4fit	4/6fit		6fit?		6♠fit
9. **♠ AQJT ♥ K ♦ KQxx ♣ AQJx**	22	2A+2K=6	6 / 4	-	4fit	4fit	4fit		6fit		6fit
10. **♠ KQJT ♥ AKxx ♦ AQTxx ♣ -**	19	2A+2K=6	9 / 3	-	-	4fit	4fit		4fit		6fit?
11. **♠ x ♥ AQJTxxx ♦ AQJx ♣ Ax**	21	3A+0K=6	9 / 4	4♥	4♥	4♥	4♥	4♥+		6♥	6♥
12. **♠ x ♥ AQJx ♦ AQJTxxx ♣ Ax**	21	3A+0K=6	9 / 4	?	?	?	6♦?	6♦?		6♦	6♦
13. **♠ AQJx ♥ AQJT ♦ AQJTx ♣ -**	21	3A+0K=6	9 / 3	45fit	45fit	45fit	6♦	6♦+		7♦	6♦
14. **♠ AKQT9xx ♥ AKx ♦ x ♣ Kx**	19	2A+3K=7	9 / 3	4♠	4♠		6♠		6♠+		
15. **♠ AKQxx ♥ AKxx ♦ KQx ♣ x**	21	2A+3K=7	8 / 3	-	4fit		4fit		6fit?		
16. **♠ A ♥ KJ ♦ KQJTxxx ♣ AKx**	21	2A+3K=7	9 / 4	?	5♦		6♦		6♦+		
17. **♠ x ♥ AKJTx ♦ KQJTx ♣ AK**	21	2A+3K=7	8 / 3	45fit	45fit		6fit		6fit?		
18. **♠ AKQJxx ♥ AQTx ♦ x ♣ Ax**	21	3A+1K=7	9 / 3	4♠	4♠	6♠	6♠	6NT?			7NT
19. **♠ AKxxxx ♥ AQJx ♦ AQx ♣ -**	20	3A+1K=7	8 / 3	4fit	4fit	4fit	4♠	6♠			6♠?
20. **♠ AKxxxx ♥ AKxx ♦ AQx ♣ -**	20	3A+2K=8	8 / 3	4f	4f	4f	4♠				6♠?
21. **♠ x ♥ AKx ♦ AKQTxxx ♣ Ax**	20	3A+2K=8	10 / 3	5♦	5♦	6♦	6♦				7NT
22. **♠ AQJTxx ♥ AQ ♦ Ax ♣ Axx**	21	4A+0K=8	8 / 5	4♠		4♠		6NT		7NT	
23. **♠ AKx ♥ AKQJxx ♦ x ♣ AKx**	24	3A+3K=9	10 / 3	4♥	4♥+		6♥NT				
24. **♠ - ♥ AKJx ♦ AKJx ♣ AKQxx**	25	3A+3K=9	9 / 2	5♣?	6♣?		6♣NT				
25. **♠ AKJx ♥ AKJTx ♦ AKx ♣ x**	23	3A+3K=9	8 / 4	4fit	3NT		6NT				
26. **♠ AQJTxx ♥ AKx ♦ Ax ♣ Ax**	22	4A+1K=9	9 / 4	4♠		6♠		6♠+			

• **Five** controls

Five controls (2NT response) opposite a 2♣ opening commits the partnership to **slam**. The table shows that a one-suiter appropriate for a 2♣ opening reaches slam already opposite 4 controls. That's interesting - slams seem to be more likely when opener holds less controls and responder more - 10 joint controls are more efficient when they are distributed 6:4 than when they are 7:3 or worse.

• **Four** controls

As can be seen from the example hands, a *4k* or 2♠ response is also "very slammish". We shall stop short of slam after a *4k* response only with a misfitting three-suiter hand with opener (or a No Trump minimum). In the case of one-suiters slam is almost secure - so we shall agree that in this case the partnership makes at least one **slam try** (you can't stop at 4♥ or 4♠, you need to go at least to 5♥ or 5♠, quite unusual, isn't it?).

Does responder have four kings? A *4k* response can show either four kings, one ace and two kings or two aces. In case only game is to be reached the opener won't even be particularly interested in the exact meaning of partner's controls. But in the case of slam ambition a dilemma may arise as to what exactly is in responder's hand. You should think about solving such dilemmas by yourself. (A slam oriented opener could jump in his dominant suit after a *4k* response - and by agreement thus be asking responder to show his first king up the line - this immediately solves any possible problems.)

After a 2♠ response it might be a good idea to consider what should opener bid with 444 three-suiters - with singletons in various suits. A good solution in this case is jumping in the singleton suit at the fourth level 4♣, 4♦, 4♥, 4♠ (or one suit lower than the singleton suit if you think it's a modern thing to do). Responder takes control of the bidding after such a jump. With a fit in any suit slam is guaranteed (the rule of 26!) and - beware - a 4NT bid is a signoff (it can't be Blackwood).

(Opener with 4441 distribution can on the other hand also bid 2NT after a 2♠ response. If partner transfers opener to his singleton, he **refuses the transfer** by bidding 3NT! After that responder wraps up the bidding.)

• **Three** controls

A *3k* (2♥) response can show either three kings or one ace and two kings. After this response it is of course necessary to reach **game** and very often this response very accurately defines any slam possibilities (it is of special importance when any slam possibility can be ruled out immediately).

The three controls response is also the response that is most often "mistreated" by (other) fans of graded responses to 2♣. The most common idea "lurking around" is that responder should show three kings by bidding the "restricted" 2NT. The idea behind this exception (quite reasonable at first glance) is that the opening lead in a No Trump contract would be coming towards one of the kings.

But on second thought we can't support such an "improvement". When opener is "No-Trumpish" (meaning at least 22 points - the partnership has at least 31 points) and the final contract in fact becomes No Trump, the "mousetraps" (like AQ10 or AJ10) are in opener's hand.
A 2NT response actually becomes harmful: (1) because it is better for opener to be declarer in No Trump and (2) because opener has been "robbed" of his natural 2NT rebid (he shall bid 3NT instead and thus elevate the bidding of Stayman, tranfers etc. a whole level higher).
If on the other hand opener holds a one-suiter, the final contract won't be No Trump anyway and opener shall again be declarer - and once again the only "gain" of the 2NT response results in unnecessarily "taking away" opener's 2♠ bid. Do I have you convinced?

As with a 2♠ (*4k*) response it is also worthwhile considering what should a three-suited opener bid after a 2♥ (*3k*) response. Jumping to the fourth level in his singleton would not be rational here - because the last "good" game could be 3NT. So I suggest only one jump bid - in case of a spade singleton 1♠444 you jump to 3♠ and in the case of any other three-suiter (4♠-441) you just simply bid spades 2♠ (Forget about opener's suit bid showing at least five cards. Should he start crying with a three-suiter?).

(Here also opener can rebid 2NT with 1♠444 after a 2♥ response. And if partner chooses to transfer him to spades, he **refuses the transfer** by bidding 3NT! After that responder wraps up the bidding. The advantage of such a procedure is that opener shall declare a No Trump contract.)

• "Free" responses: 3♣, 3♦, 3♥, 3♠, 3NT

Yeah, these responses are really free. Fill them up by yourself. You can find various "solutions" in various "systems". They are all rational - but none has convinced me enough to make me recommend it to you. Supposedly.

Some people would use the free responses for bidding good 6-card suits like: AKxxxx, AQxxxx or KQxxxx. A 3NT response would show a solid 6-card suit AKQxxx, in this case any suit.
The idea behind these first responses is that the suit bid may become trump whenever opener holds as little as a doubleton honour in this suit. You may do this - if responder has no points in his hand besides the suit bid - otherwise it is better to

wait for opener to rebid his highly probable 2NT.
I think that a AKxxxx suit is especially useless to bid by jumping. Opener shall never have Qx or Qxx in this suit (except when he is No-Trumpish). And the opener will most often make use of only the ace and king in responder's 6-card suit - and they can be shown very simply and very low by responding 2♥ (three controls).
The 3NT response with a solid responder's suit AKQxxx is especially Utopian. For such a suit it is impossible it could become trump - place such a suit opposite strong trick-taking opener's hands - opener has a void or singleton in the suit without exception. And what would you respond with "only" a 5-card "top" suit? The length doesn't matter - I would be satisfied if 3NT showed "only" AKQ in responder's hand. Or perhaps only AK - with any length.

However you decide to fill up the free responses, it is important for them to have an "upper limit" - responder is allowed to hold a suit or honour combination as defined but no more than that!
And if you can't think of any solutions for the free responses, then simply don't use them. (In this case use the 3♣, 3♦ and 3♥ responses for showing six, seven and eight controls. You won't be ever hearing these responses. So what, at least they are simple to remember.)

While we discussed free responses we have come back to confirm the basic facts about 2♣ openings - that opener should be the first to show his hand - so any deviation from this principle (even if responder shows a grand AKQ) proves to be a disturbance for opener and disrupts the natural course of the bidding. So my suggestion is - **stick with the four responses** - and that's that.

• <u>Blackwood, Gerber</u>

A "Blackwood" 4NT is superfluent after a 2♥, 2♠ or 2NT response because aces and kings have already been shown. After these responses a 4NT bid should be natural. When jump bid you may use it as a queen asking bid. Ah, that doesn't make sense. Or does it?

After a 2♦ response which may "conceal" one ace, Blackwood perhaps should be retained. Except if you haven't already figured out responder's cards by his natural bidding - but this is already too complicated to define.

What about responder's 4♣ bid when opener rebids a No-Trumpish hand? Is this Gerber? You should agree this with your partner - I only invented responses to 2♣.

• <u>Opener's void</u>

Did you know it's not a good idea to ask partner aces when you have a void? Too bad, partner has hurried up and shown aces already after our 2♣ opening. Is his ace where we have a void and as such not much use? This might interest us only when we are "slam oriented" (usually in a "grand" way).

Yes, they have invented *exclusive* Blackwood for a "void" opener - Blackwood that asks aces only <u>outside</u> opener's bid suit. Such Blackwood is bid by jumping to suits at the fifth level. In our system such high jumps aren't necessary, it's enough to jump to 4♣, 4♦, 4♥ or 4♠.

But if you think about it hard... In case of a 2♣ opening it might perhaps be more useful to use *inclusive* Blackwood - "what do you have in this suit, partner?". Well, then it's not Blackwood any more but an asking bid.
Let's define this: an opener's jump to 4♣, 4♦, 4♥, 4♠ is asking responder for a control in this suit. The responses are of course graded: the first bid shows no controls, the second bid shows the king, the third the ace and the fourth both the ace and king. Since you know (from responder's first response) how many controls he has altogether and how many controls he has in the suit asked, the difference gives you controls in other suits. (And beware, no one is saying opener should jump bid the suit where he is void, he may make an asking bid in any suit he chooses.)

Here are two example cases using the described "inventions".

AQJTxx	**K**	**AQJTxx**	**-**
-	**xxxxx**	**-**	**AKxxxx**
KQJx	**Axx**	**KQJx**	**xxx**
AQx	**Kxxx**	**AQx**	**Kxxx**

2♣ -	2♠ (4k)	2♣ -	2♠ (4k)
4♥? -	4♠ (0k in ♥)	4♥? -	5♦ (AK in ♥)
7♠		5♠ -	Pass (good luck)

After a 2♦ response

This chapter is actually totally redundant - after a 2♦ response you should bid on like you used to do before. Just so you have the whole system in one place, I shall give a short recapitulation.

(1) A No-Trumpish opener bids naturally after a 2♦ response, 2NT or 3NT (or higher). Big deal.

What about **one-suiters**? Well, naturally we bid our suit. And then we bid it again and partner passes.

What about **two-suiters**? And **three-suiters**? OK, if you want - but my explanations might irritate you. Let's say you open 2♣ with the following three hands and partner responds 2♦. What shall your next bid be?

♠ AKQJxx	♠ AQJx	♠ x
♥ AQJx	♥ AKQJxx	♥ AQJx
♦ x	♦ x	♦ Ax
♣ Ax	♣ Ax	♣ AKQJxx

I hope you get at least one point for your answers - all three correct answers are the same - that is 2♥. Aren't I mistaken - wouldn't we perhaps bid 2♠ with the first hand?

The answers:
(A) Would you like to find a major fit or do you want to boast (your solid suit)? How will you find a potential heart fit - now is the ideal chance for partner to show support. If there is no fit, there is still your spade suit waiting in reserve. Do you agree that opener doesn't even need to mention his solid suit - surely he can't expect partner to support it. We can bid what we like and at the end finish off the bidding with our solid suit. If you are going to bid 2♠ first and then 3♥ with the first hand, tell me what should partner respond with for instance ♠x ♥xxx?

(B) You got lucky with the second hand - the good heart suit is the first up the line. So partner has a chance to bid spades, which is in fact the only thing you want to hear from him.

(C) After the experience with the first hand it is now clear you should bid hearts first. Of course, now or never - after a 3♣ rebid partner shall never bid his ♥Kxxx, let alone ♥xxxx.

So two-suiters with 5-4 or 6-4 distribution should be bid like this:

(2) Opener bids <u>hearts</u> with a 5-4 or 6-4 major suit two-suiter.

(3) Opener bids his major with a 5-4 or 6-4 major-minor two-suiter.

Bidding spades therefore denies a 4-card heart suit. And bidding a minor denies a 4-card major. The truth we have exposed here is so cruel that most bridge books don't even dare mention it (at least I haven't seen it written down). So *urbi et orbi*:

Opener's major suit is always considered only as 4-card by responder.

What about 5-5 two-suiters? We truly bid the higher suit first.

(4) With a 5-5 two-suiter opener bids the higher suit first.

Bidding spades and rebidding hearts later therefore shows (at least) 5-5 in the suits bid. And in general a major shall practically always be bid first with such two-suiters - except of course with a clubs-diamonds two-suiter.

And so we have arrived to three-suiters, with 4441 or 5440 distribution. The recipe? The recipe is the same as with two-suiters, you simply bid up the line - the first two possible bids being hearts or spades.

(5) After 2♦ the opener with a 4441 or 5440 three-suiter bids the first available major.

Are you interested in the continuation? "And what does the responder bid next?" So how do we proceed after a 2♣-2♦-2♥ sequence?

Let's recall that the responder's 2♦ bid shows two kings or one ace at the most (or nothing but useless garbage). Since he will usually have garbage, garbage gets a whole four bids - which you should use in the order written below - well, you may exchange the 2NT and 3♥ bids sometimes if you feel like it. (You may also exchange the meaning of the 2NT and 3♥ bids - so that a 2NT bid shows 3-card heart support and 3♥ a totally useless hand. So you shall be handing over being declarer in a No Trump contract - if he chooses to do so - to the opener. But this is already very complicated - but it sounds reasonable.)

These are the responder's actions after opener bids hearts.

2♣ - 2♦

2♥ -	**4♥** = 4-card support, garbage otherwise	- zero (a K at the most)
	2♠ = 4-card spade, can be broke or "positive"	- zero or ?
	2NT = nothing useful	- zero
	3♥ = 3-card support, garbage otherwise	- zero
	3NT*= stoppers in two suits (one in **spades**!), 5+ HCP	- the princess awakes
	3♣♦ = natural, 2k or 5+ HCP, not denying 3-card supp.	- princess
	3♠4♣♦ (jumps) = 4-card support, 2 controls	- princess

* The required stoppers for a 3NT bid may be minimal like Jxxx, but one of them has to be spades.

A peculiarity of the 2♥ bid is that it's the only bid that enables opener bid 2NT in this sequence:

2♣ - 2♦
2♥ - 2♠
2NT = a 1♠444 three-suiter (maybe 1♠4-35) with minimum strength; non-forcing

The following examples show hands where the "first" opener's suit is hearts.

West		East	W - E	West		East	W - E
x AKxx KQJx AKQx	1.	Qxxx xxx Axx xxx	2♣ - 2♦ 2♥ - 2♠ (natur, 0-2k) 2NT(1444)-<u>3NT</u>	x AKxx KQJx AKQx	1a.	QJx xxx Axx xxxx	2♣ - 2♦ 2♥ - 3NT (♠+ stopper)
x AKJx AKxx AKxx	2.	xxx xxx QJxx QJx	2♣ - 2♦ 2♥ - 3♦ (6+,no ♠!) 5♦!	x AKJx AKxx AKxx	2a.	Jxx Qxx xxxx xxx	2♣ - 2♦ 2♥ - 3♥ (3c♥, "zero") Pass!
J KQJx AQJx AKJx	3.	Qxxxx Ax Kxxx Qx	2♣ - 2♥ (3k) 3♠(1♠444)- 6♦!	x AKJx AKxx AKxx	4.	AKxxxx xx xxx Qx	2♣ - 2♥ (3k) 3♠(1♠444)-3NT Pass
AKJx AKxx x AKxx	5.	xx Qxx KJxx Jxxx	2♣ - 2♦ 2♥ - 3♦ (can be ♥Jxx) 3NT	AKxx AKJx x AKxx	6.	QJx xxx Jxxx QJx	2♣ - 2♦ 2♥ - 3NT (♠+ stopper)
AKxx AKJx x AKxx	7.	QJxx xxx Jxx QJx	2♣ - 2♦ 2♥ - 2♠ 3♠ - 4♠	AQJT AKQx KQJx x	8.	K xxx xx QJTxxx	2♣ - 2♦ 2♥ - 3♣ (natur, 6+) 3NT
AKQxx KJxx AK AK	9.	x AQTxx xxxx xxx	2♣ - 2♦ 2♥ - 3♠ (supp, control) 5NT(GST)- 6♥ (2 honours) <u>7♥</u>	AKQJxx AQTx x Ax	10.	xxx Kxx Jxx KJxx	2♣ - 2♦ 2♥ - 3♣! (natur,6+) 3♠ - 4♥ (2. supp) 4♠ (can't find out)
Ax AKQTxx - KJx	11.	Kxxx xxx xxxx Qx	2♣ - 2♦ 2♥ - 2♠ (natur, 0-2k) 3♥ - 4♥	Ax AKQTxx - KJx	12.	Kxx xxx Kxxx Qxx	2♣ - 2♦ 2♥ - 3NT (♠+ stopper) 4♥
Ax AKQTxx - KJx	13.	Kxx xxxx xxxx Qx	2♣ - 2♦ 2♥ - 4♥ (supp, 0-1k) Pass	AQTx AKQJxx x Ax	14.	xxxx xxx KJx KJx	2♣ - 2♦ 2♥ - 2♠ (natur, 0-2k) 3♣ (c) - 3♦ (c) 4♥

The responder's procedure is the same after opener rebids spades as when he rebids hearts.

2♣ -	2♦		
2♠ -	**4♠** = 4-card support, garbage otherwise		- zero (a K at the most)
	2NT = nothing useful		- zero
	3♠ = 3-card support, garbage otherwise		- zero
	3NT = stoppers in two suits (one in **hearts**!), 5+ HCP		- the princess awakes
	3♣♦♥ = natural, 2k or 5+ HCP, not denying 3-card supp.		- princess
	4♣♦♥ (jumps) = 4-card support, 2 controls		- princess

Here you may also interchange the 2NT and 3♠ responses, both by priority and meaning.

The following examples show hands where the "first" opener's suit is spades.

West		**East**	**W - E**	**West**		**East**	**W - E**
AQJT **x** **KQJx** **AKQx**	**1.**	**-** **AKxxxx** **xxx** **xxxx**	2♣ - 2♥ (3k) 3NT	**AKxx** **x** **KQJx** **AKQx**	**2.**	**xxx** **Qxxx** **Axx** **xxx**	2♣ - 2♦ 2♠ - 3NT(♥+ stopper)
AQJT **x** **KQJx** **AKQx**	**3.**	**Kxx** **Kxxx** **xxxx** **xx**	2♣ - 2♦ 2♠ - 3♥ (natur,6+) 3NT - Pass	**AKJx** **x** **AKxx** **AKxx**	**4.**	**xxx** **Jxx** **QJxx** **QJx**	2♣ - 2♦ 2♠ - 3♦ (natur, 6+) 5♦
AQJT **x** **KQJx** **AKQx**	**5.**	**K** **QJTxxx** **xx** **xxx**	2♣ - 2♦ 2♠ - 3♥ (natur, 6+) 3NT - Pass	**AKxx** **x** **AKJx** **AKxx**	**6.**	**xx** **Qxxx** **Qxx** **xxxx**	2♣ - 2♦ 2♠ - 2NT (0-1k) Pass

Now let's forget about opener's two- and three-suiters (whether his heart bid represents a one-, two- or three-suiter is only known to him) and let's take a look at responder's point of view - he has only heard opener bid hearts (or spades or No Trump). We shall describe his continuations in a general manner.

(1) After opener's 2NT or 3NT rebids responder "takes control" of the bidding. His position enables precise bidding and setting the final contract - and considering potential "points" temporarily hidden by his negative response.

(2) Opener's 2♥ or 2♠ rebids may show only 4 cards in the suit bid (let's set this as a starting point), so it is necessary to bid with great precaution and rationality (the "mechanical second negative" 3♣ is for instance inappropriate).
A very weak responder may raise a major with only 3-card support (for this it would be ideal to have a singleton in a side suit). With 4-card support and no points he naturally bids game.
In case responder has no support he may only bid 2♠ (after a 2♥ rebid by opener) or 2NT. Bidding spades promises only four cards in spades and says nothing about strength - responder may be weak or strong. A 2NT bid denies all of the above - and also points. The 2NT bid becomes a sort of "second negative" after opener's major suit rebid.
What does a stronger "negative" responder bid? Every other bid except the ones already mentioned show constructive strength. Bidding a suit at the third level shows a "real" suit. (Hmm, may be demand this suit be 5-card? Probably not and why would we want it to be such anyway.) Jumping to the fourth level shows 4-card support and declares a control in the suit bid - "Go, go!".

(3) Opener's 3♣ or 3♦ rebids deny a 4-card major after 2♦ by responder, also denying 444 or 544 three-suiters and in principle show a 6-card suit (could be a 5-card suit in the case of a minor two-suiter 1345). The bidding about to follow can't be very "scientific". Responder shall try to show a stopper for 3NT rather than bidding a suit. But if he is really weak, he shall really have nothing to bid. After 3♣ he could be forced to bid 3♦ as a "second negative", whereas he has no such option after 3♦ (and will sometimes be forced to bid 3NT with no points - when he doesn't have a 5-card major).
It is a notorious fact that muscular minor hands don't belong in 2♣ openings. My suggestion? Bid them by opening 2♦ (you can construct a system yourself, it's not that difficult). Or you can open 2♣ with only specific minor hands (for instance with a solid suit or the opposite, a non-solid suit; if they are defined well they may even enable passing opener's 3♣ or 3♦ rebids). Open those hands that don't belong in 2♣ with 3♣ or 3♦. Or maybe 3NT?

The last pack of example hands is "for exercise". Try bidding using your favourite method - or use my *beta*. Sooner or later it becomes obvious that the first responses are just a "beginning of a story" - for a good ending you need some other sharp instrument in your toolbox (you shall have to define a *non forcing slam try* from opener's and responder's side; and there is also a *grand slam try*). The advantage of beta responses is that you immediately receive really useful information from partner and it helps you plan your goals and also the path you shall take to reach them.

Response: 2♦ = 0-2k, 2♥ = 3k, 2♠= 4k, 2B = 5k
Abbreviations: k = control, s = 4-card support, q = control (cue bid), ? = asking bid
NFST = non forcing slam try (5 in a major suit), GST = grand slam try (5NT)

West		East	W-E(bidding)	West		East	W - E (bidding)
AQJTxx AKx Ax Ax	1.	Kxxx x Qxxx xxxx	2♣ - 2♦ 2♠ - 4♠ (0-1k) Pass!	AQJTxx AKx Ax Ax	1a.	Kxxx x Qxxx Kxxx	2♣ - 2♦ 2♠ - 4♣ (q, s, 2k) 6♠
AKQJxx AQTx x Ax	2.	xxxx xxx KJx KJx	2♣ - 2♦ 2♥ - 2♠ (natur, 0-2k) 4♦(?)- 4♠ (K) Pass!	AKQJxx AQTx x Ax	2a.	xxxx Kxx KJx KJx	2♣ - (3k) 2♠ - 4♣ (q, s, 2k) 4♦ - 4♥ 6♠
AKx AKxx QJx KQT	3.	Qx QJxx Kxx Axxx	2♣ - 2♥ (3k) 2NT - 3♣ (Stayman) 3♥ - 6♥	AKx AKxx QJx KQT	3a.	Qx QJx Kxx Axxxx	2♣ - 2♥(3k) 2NT - 6NT
Ax AKQTxx - KJx	4.	Kxx xxxx xxxx Qx	2♣ - 2♦ 2♥ - 4♥ (supp, 0-1k) 4♠ (q) - 5♠ 6♥	Ax AKQTxx - KJx	4a.	Kxx xxxx Kxxx Qx	2♣ - 2♦ 2♥ - 4♦ (q, s, 2k) 4♥
AKJTxx x A AKQxx	5.	Qx Jxxx Qxxx xxx	2♣ - 2♦ 2♠ - 2NT (min) 3♣ - 4♣ 5♠(NFST)-6♠	AKJTxx x A AKQxx	5a.	Qx Kxxx KQxx xxx	2♣ - 2♦ 2♠ - 3NT (♥+ stopper) 5♠(?)-6♠
AKQxx KJxx AK AK	6.	x AQTxx xxxx xxx	2♣ - 2♦ 2♥ - 3♠ (q, s, 2k) 5NT (GST)- 6♥ (2 honours) 7♥	AKQxx KJxx AK AK	6a.	x Axxxx xxxx xxx	2♣ - 2♦ 2♥ - 3♠ (q, s, 2k) 5NT(GST)-6♦ (1 honour) 6♥
KQxx AKx AKQ Kxx	7.	Axx Qxxx Jxx Qxx	2♣ - 2♦ 3NT(24-25) - 6NT (alas, won't make)	KQxx AKx AKQ Kxx	7a.	Axx Qxxx Jxx QJx	2♣ - 2♦ 3NT(24-25)-6NT
KJxx AKxx AKQ Kx	8.	Axx Qxxxxx xx Axx	2♣ - 2♠ (4k) 2NT - 3♦ (transfer) 3♥ - 4♥ (6-card) 5NT (GST)-5♦ (1 honour) 7NT	KJxx AKxx AKQ Kx	8a.	Axx Qxxx xxxx Axx	2♣ - 2♠ (4k) 2NT - 3♣ (Stayman) 3♥ - 6♥
AKJ Kxxx AJx AKx	9.	Qxxxxx Ax xxx Qx	2♣ - 2♦ 2NT -3♥ 3♠ - 5♠ (2k, 6 tricks, NFST) 6♠	AKJ Kxxx AJx AKx	9a.	Qxxxxx Ax Kxx Qx	2♣ - 2♥ (3k) 2NT - 3♥ 3♠ - 5NT (7 tricks, GST) 7♠

Try with your favourite partner.

West Opener	West Opener	East Responder	East Responder
1. AQJTxx AKx Ax Ax	**1a.** AQJTxx AKx Ax Ax	**1.** Kxxx x Qxxx xxxx	**1a.** Kxxx x Qxxx Kxxx
2. AKQJxx AQTx x Ax	**2a.** AKQJxx AQTx x Ax	**2.** xxxx xxx KJx KJx	**2a.** xxxx Kxx KJx KJx
3. AKx AKxx QJx KQT	**3a.** AKx AKxx QJx KQT	**3.** Qx QJxx Kxx Axxx	**3a.** Qx QJx Kxx Axxxx
4. Ax AKQTxx - KJx	**4a.** Ax AKQTxx - KJx	**4.** Kxx xxxx xxxx Qx	**4a.** Kxx xxxx Kxxx Qx
5. AKJTxx x A AKQxx	**5a.** AKJTxx x A AKQxx	**5.** Qx Jxxx Qxxx xxx	**5a.** Qx Kxxx KQxx xxx
6. AKQxx KJxx AK AK	**6a.** AKQxx KJxx AK AK	**6.** x AQTxx xxxx xxx	**6a.** x Axxxx xxxx xxx
7. KQxx AKx AKQ Kxx	**7a.** KQxx AKx AKQ Kxx	**7.** Axx Qxxx Jxx Qxx	**7a.** Axx Qxxx Jxx QJx
8. KJxx AKxx AKQ Kx	**8a.** KJxx AKxx AKQ Kx	**8.** Axx Qxxxxx xx Axx	**8a.** Axx Qxxx xxxx Axx
9. AKJ Kxxx AJx AKx	**9a.** AKJ Kxxx AJx AKx	**9.** Qxxxxx Ax xxx Qx	**9a.** Qxxxxx Ax Kxx Qx