

# J-Moscito

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*Inspired by:* Honeymoon Moscito by Peter Buchen, Moscito 2001 and 2002 as described by Richard Willey, and discussions with Kurt Häggblom.

## 1 Introduction

J-Moscito is a variation of Moscito (Major Oriented Strong Club:ito), originally invented by Paul Marston and Stephen Burgess. The system uses light, limited and major-oriented constructive openings. All strong hands with 15 or more hcpts are opened with 1♣. The openings 1♦-2♣ then all show 9-14 hcpts, and are also well limited in terms of distribution. Another important property of the system is that it is relay based, that is using one bid (usually the cheapest one) as a strong asking bid, thus freeing other bids for other purposes. It is possible to use about the same relay system after the limited openings as after the 1♣ opening, which makes it more motivating to learn. The relay system enables accurate description of distribution and controls (= Aces, Kings and optionally Queens) in most situations.

As mentioned above, J-Moscito is inspired by other Moscito systems. It is more accurate than Honeymoon, and hopefully a bit simpler than the 2001 version; it is at least intended to be something in between these. The shape relay responses are basically natural *transfer* bids, thus increasing the possibility to get the relayer, the hand undisclosed for the opponents, as declarer. The limited major opening bids are also transfer bids, asking for partner to complete the transfer if he/she wants to know more about opener's hand.

The goal with the relays is to describe the shape of one hand under 3NT, including 5+ card suits, 4 card suits, 3 card suits, voids, singeltons or lack of these. It is seldom possible to describe shortness in two suits (the opponents are rarely silent in these cases anyway), and it is not always possible to make distinction between 2 and 3 cards in a suit. Furthermore, the number and the location of Aces, Kings and Queens are also possible to describe with higher bids.

A special feature with J-Moscito is that hands are initially divided into three groups based on distribution, which each are described somewhat differently

1. NT-hands, which are shown with NT bids. This includes all 4333, 4432 and 5332 hands, also those with a 5 card major.
2. Three suiters (4441 and 5440 distributions, denoted *marmics*), which all are shown by initially showing the 5-card major or the cheaper 4-card major. If responder relays, opener uses bids above the one defined as "natural" bids to show a three-suiter.
3. All other distributions, which are shown with natural *transfers*, similar to the Honeymoon relay responses. The big difference to Honeymoon is that after showing/denying three card suits one start showing shortness instead of two card suits.

As in Moscito 2001, one always show the longer of two 4+ majors first. The 1♠ opening, showing 4+♦, may include a longer club. The 2♣ opening shows 6+♣, possibly including a four card side suit.

The newest feature is the semi-forcing 1NT response to major showing openings and forcing 1NT response to 1♠ opening. This is introduced to cope with hands with little strength and no length in opening suit, when passing can lead to disasters. Although this was not common in the earlier versions, the opener rarely wants to pass the natural 1NT response anyway, as he already has denied a balanced distribution.

All other pdf-documents which are referred to are located on the same sub-directory as this document, that is <http://www.abo.fi/~jboling/bridge>.

Notation and Abbreviations	
M/OM	Major/Other Major
GF	Game Forcing
GIR	Game Interest Relay
4432	hand distribution, any 4432 or sometimes exactly 4♠, 4♥, 3♦ and 2♣
55+	A two suiter with two 5+ suits
Marmic	A three suiter, a hand with 4441 or 5440 distribution
CAB	Control Asking Bid

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## 2 Opening Bids

The J-Moscito opening bids are given below, including frequencies obtained with Hans van Staveren's dealer program<sup>1</sup>. Note that 1♣ is the most common opening! The openings above 2♣ are free for any preferred preemptive conventions, the ones included fit well into a Major Oriented system.

J-Moscito Opening Bids, 1st and 2nd seat			relay	frequency
1♣	15+	Any shape		13.7 %
1♦	9-14	4+Hearts, shorter or equal spades, longer m possible	1♥	9.5 %
1♥	9-14	4+Spades, shorter hearts, longer m possible	1♠	8.6 %
1♠	9-14	4+♦ 5♣ + 4♦ and 6+♦ + 4M possible	2♣	4.7 %
1NT	11-14	Balanced, 4333, 4432 or 5332 distributions, 5 card M possible !		13.4%
2♣	9-14	6+♣, at most 4-card side suit	2♦	2.4%
2♦	5-10	Ekren, Majors 4-4, 5-4 or 5-5	2NT	3.2 %
2♥	5-10	5+ Hearts	2NT	4.6 %
2♠	5-10	5+ Spades	2NT	4.6 %
2NT		Weak preempt in a minor 7+ (or 6+) suit		0.54 (3.3) %
3♣/♦		Preempt promising 2 of 3 top honors 7+ (or 6+ suit)		0.22 (0.93) %
3♥/♠		4-3-2 preempts		
3NT		Minor suit preempt, denies 2 of top 3 honors	4♦	
4♣/♦		Namyats	4♦/4♥	
4♥/♠		4-3-2 preempts		
4NT		8+ minor, 9+ tricks, not many losers, too slam-oriented for 3NT	5♦	

Transfer openings in 3rd and 4th seats would often lead to trouble, and relay bidding is also highly unlikely against a passed hand. Thus, relays are only on after a 1♣ opening, and other openings are quite natural.

J-Moscito Opening Bids, 3rd and 4th seat			relay
1♣	17+	Any shape	
1♦	11-16	4+Diamonds	
1♥	11-16	4+Hearts	
1♠	11-16	4+Spades	
1NT	13-16	Balanced, 4333, 4432 or 5332 distributions, 5 card M possible !	
2♣	11-16	5+♣ and 4 M, or 6+♣	2♦
2♦	0-12	Ekren, Majors 4-4, 5-4 or 5-5	
2♥	0-12	5+ Hearts	
2♠	0-12	5+ Spades	
2NT	0-12	Weak preempt in a minor	
3♣/♦		4-3-2 preempts	
3♥/♠		4-3-2 preempts	
3NT		Minor suit preempt	
4♣/♦		Namyats	
4♥/♠		4-3-2 preempts	
4NT		8+ minor, 9+ tricks, not many losers, too slam-oriented for 3NT	

With these openings you can open with (and describe upon relay) all 55+ hands, all 44, 54 and 64 major hands, with 5 hcp and up. It seems that the system using these preemptive conventions cover most of hands with good offensive strength.

One straightforward way to eliminate a set of conventions by using 2♦ as a weak 2, and use the same conventions as after the 2M openings.

## 3 Hand evaluation

This section is about 1st and 2nd seat openings and responses to these, in 3rd and 4th seat you are naturally, and especially when using J-Moscito, allowed to improvise much more.

<sup>1</sup>All frequencies in this document are based on random deals, and assuming north being opener and south being responder.

Based on strength, hands are divided into three groups: strong hands (shown with  $1\clubsuit$ ), limited opening hands ( $1\diamond-2\clubsuit$ ), and sub-opening hands ( $2\diamond-$ ). At the moment, hand evaluation is done based on hcp ( $A=4, K=3, D=2, J=1$ ) and the opening table, with the following adjustments based on shape:

1. If you hold a 4333 shape, reduce one point
2. If you hold 10 or more cards in two suits, add one point
3. As mentioned earlier, do not open with a 4441 holding with less than 11 hcpt !

I practice, rule 1. concerns 4333 hands with 11 and 15 hcp respectively, whether to pass with 11 or open 1NT with 15. I think that passing with 11 especially is ok, while you might want't to count your controls or c13 (see below) when deciding to open  $1\clubsuit$  with 15 or not.

In Moscito 2001 the following point count (denoted c13) is used for hand evaluation: Ace=3, King=2, Queen=1, Jack=0.5, and 10=0.25. An opening should not contain less than 6 c13-points, and an  $1\clubsuit$  opening should not contain less than 9 c13-points. This can be kept in mind, but in J-Moscito two other types of point counts play a more important role:

- AKQ-controls, A=3, K=2, Q=1
- AK-controls, A=2, K=1

After a limited opening or any response to  $1\clubsuit$  relayer can ask for number of AKQ or AK controls. In these cases the cheapest response promise the minimal number of controls (the base level) associated with the promised hcpts, see section 5.2 for more details. The most important are limited openings, which promise 5 AKQ controls and 2 AK controls, and positive responses (9+ hcpts) to  $1\clubsuit$  which *guarantee* 6 AKQ and 3 AK controls (unless if using the rule of 10-cards in two suits, when the base level is reduced one step). It is possible to hold less controls than the base level after a limited opening, but it is unlikely. With QJ in all suits (12 hcp, 4 AKQ controls, c13=6, 0 AK controls) you should open (most likely 1NT), and hope that partner is satisfied with a game. But you must initially make a negative response to  $1\clubsuit$  with this holding, it serves no purpose to lie about controls after a  $1\clubsuit$  opening. Note also that if you add a King, you sum up to 15 hcp, but to only 8 c13. So you should not open  $1\clubsuit$  with this holding. Queens and Jacks are a bit overvalued in the hcp-count.

At the moment suit quality is not taken into account in the selection of opening bid. After determination of hand strength the distribution does say which bid you should start with. With AKQJx in a major and 332 in the other suits, you should start with a NT-bid. Otherwise you must show a less balanced distribution (6322 or 5422), which of course can be fine in some case. With xxxx in a major and AKQJx in a minor you should start with a bid showing the major, you will otherwise have to tell partner that you have a 6-card minor. Naturally these small lies might not be that bad in a limited opening, when the lead directional aspect is quite important. After a  $1\clubsuit$  opening there is no reason for lying about distribution.

## 4 Responses to limited/strong openings

In this section, the initial responses to the limited or strong openings ( $1\clubsuit-2\clubsuit$ ) are described. The responses to  $1\clubsuit$  are relay responses directly, which are closer described in Section 5. Recall that all suit openings deny standard NT distributions.

### 4.1 Responses to $1\diamond/1\heartsuit$ , showing majors

Below a table with the different possible responses to  $1\diamond$  and  $1\heartsuit$ , and their corresponding likelihoods. The reason for two numbers are due to the fact that opener on average has more cards in a minor than in the other major. Thus responder on average has more cards in the other major than in a minor, meaning that the likelihood for responder having a shortness in a major is smaller than a shortness in a minor. And the other way around for length.

Responses to 1♦/♥		1♦	1♥
1♥/♠	12+hcpts (or 11+ with a fit) Game Interest Relay (=GIR)	29.4 %	29.7 %
1♠	Natural, round forcing, (after 1♦, implies often short ♥)	17.2 %	-
1NT	Semi-forcing, catch the rest bid, 0–11 hcpts	18.2 %	31.5 %
2 in new suit	Natural NF, 5+ suit, 8–11 hcpts	3.5 %	5.3/6.3%
2♠	6+ suit (after 1♦), 0–7 hcpt	2.0 %	-
2NT	demands 3♣ by opener, one of the following		
	a) mini-splinter in other Major, 3♣-3M	1.1 %	1.0 %
	b) sign off in a minor, 0–7 hcpts, 3♣-pass/3♦	2*1.7 %	2*1.7 %
	c) void-splinter, 12+ hcpts, 3♣-3OM/4♣/4♦	0.4%	0.4 %
3♣/♦	8–11 hcpts mini-splinter	1.3 %	1.3 %
1-raise	7–11 hcpts 3+ constructive raise	18.1 %	18.1 %
2-raise	Preemptive raise with 4+fit	7.5 %	7.2 %
3-raise	to play	-	-
3OM/4♣/4♦	splinter with 12–15 hcpts	0.7/0.8%	0.6/0.8%
3NT	3-card support, 15–16 hcpts, 4333 like distribution	-	-
pass	0–7 hcpts, 5+ cards in opening suit	2.8 %	6.2 %

The splinter responses should be limited as suggested, as in these cases we have enough strength for a slam only if our partner has no wasted values in our short suit. So why not tell him this directly?

The void splinter alternative after 2NT response is new, and responders 4M is the only negative bid here (others showing 10+ hcpts in the other three suits). I have not introduced any upper limit on the void-splinter, on going bids after openers sign-off must show exceptional values. With a void and less than 12 hcpts, consider using game-forcing splinters, mini-splinters and direct jump to game.

The relay responses and follow-ups are discussed under a separate section, as well as the semi-forcing 1NT response.

There are a few special situations which are not that uncommon, which need some clarifications:

1♦-1♠-? : 1NT = 4♥, longer minor (or ♠-marmic), 2♣/♦ = 5+♥, 4+suit 2♥ = 6+♥, 2♠ = 4+♠, 2NT-3♠ = same as one level lower but super-maximum.

1♦-2♣/♦-? : 2NT = 4M, 4+ other minor (could be ♣/♦-marmic), 3NT = 4M, super-maximum

As can be seen, NT-rebids by opener deny additional length in opening suit, and show 4+ in a minor (usually 5+, but it can be a 4441). Other bids are natural.

#### 4.1.1 The semi-forcing 1NT response

The 1NT response is of course inspired by 2-over-1 systems, and is given with similar hands, but serves here a slightly different purpose. The main idea is to eliminate the possibility that responder must pass the opening bid, without having any length in the opening suit, as opener does not have to have any length either. This means that fourth seat opponents can quite often pass out the hand with length in opening suit. Combined with that opener rarely passes the natural 1NT opening, as he cannot have a balanced hand.

So the 1NT response is mainly intended as a signal stating that a game is highly unlikely, and that a low-level contract is sought. It denies fit in openers major (might contain 3 card support with 0–6 hcp), and a weak hand with 5+ cards in the opening suit (which is shown by passing), and a semi-weak hand with 6+suit (which can be shown with a sign off bid, see table above), and a semi-positive hand with a 5+ suit (shown with a 2-over-1). So it usually asks for minor preference or extra length in openers major. Lets summarize openers options in a table:

Openers rebids after semi-forcing 1NT					
		after 1♦-1NT		after 1♥-1NT	
pass		4522	5.4	minimum semi-balanced	0
2♣		3+ ♣	28.0	4+ ♣	26.9
2♦		3+ ♦	28.8	4+ ♦	23.5
2♥		6+ ♥	31.8	4+ ♥, 5+♠	18.0
2♠		55+ in majors	6.4	6+ ♠	31.6
	pass	weak preference 0-9 hcpts			
	2NT	10-11 hcpts, logically 2♥			
	3♣	6+suit, 0-7 hcpts			
	3♦	6+suit, 0-7 hcpts			
	3♥	weak preference 0-9 hcpts			
	3♠	10-11 hcpts, 2-3 card support			

Opener has to rebid a 3-card minor only with a 4531 or 4513 distribution, and only after 1♦ opening. The only distribution which opener has to pass with is the 4522. It should be safe, as if responder has less points than 6 hcpts, the opponents must have a game. And if responder has the normal 1NT response with 6-11 hcpts (which is most likely), 1NT is probably the right contract. This is most likely so also if both hands are maximal, as you have a misfit, 25 hcpts are then rarely enough for 3NT. After all other rebids, responder may show maximum (10-11 hcpts) by a raising or bidding 2NT, but he should avoid it unless he sees a fit. Corrections to openers major and bids in new suits are always weak. Usually responder passes, if he can see a 7+card fit. The meaning of the 2♠ response is quite special, as you open 1♦ with 5-5 in majors. I do not think you should bid a 4-card spade suit in any case, you are fast on the three level without fit, and you have also informed the opps about it. And you never have the strength for a reverse after a J-Moscito opening anyway.

#### 4.1.2 Passed hand responses

Opener uses almost natural openings in 3rd and 4th hand, as responder has denied opening strength. Thus, the only conventional bids used are the mini-splinters (2NT = other major)

## 4.2 Responses to 1♠/2♣, showing minors

Apart from earlier versions 4-card major suits are not denied when opening 1♠ or 2♣. Actually there are three types of hands which are opened with 1♠ and 2♣:

1. Singlesuited unbalanced hands (6322 most balanced), with a 6+ minor.
2. Hands with a 6+ minor and a 4 card major
3. Two-suited hands with both minors (54 or better)

The two first hands with a 6+ minor are opened with 1♠ if the minor is diamonds, and with 2♣ if it is clubs. Two suited hands with minors are opened 1♠. This means that 1♠ promise 4+♦, minors at least 54 (♣ can be longer) or 6+♦.

Relaying does not work that good if responder has a strong 55+ (not including opening suit), with such a distribution you should go through 2NT. And the responses 1NT and 2♦ can also be used as special bids, which solves a couple of problems, but of course introduces new complexity.

Responses to 1♠			likelihoods
pass		0-7 hcpts, 5+♠	7.1
1NT		0-11 hcpts or GF splinter, asks for ♣-length	19.6
	2♣	4+♣	
	2♦	0-3♣, 6+♦	
2♣		12+ hcpts GIR	30.6
2♦		8-11 hcp, asks for 4-card majors	13.6
	pass	no 4M, 6+♦, 9-12 hcp	29.1
	2♥	4♥, 6+♦	6.3
	2♠	4♠, 6+♦	6.3
	2NT	no 4M, 4+♣, 9-12 hcp	35.1
	3♣	4+♣, 13-14 hcp	12.6
	3♦	6+♦, 13-14 hcp	10.4
2♥		8-11 hcpts 5+ ♥	9.2
2♠		8-11 hcpts 5+ ♠	10.1
2NT		Bid your better minor, preemptive raise with 4+♦ or minors 44+, or a 55+ GF	7.3
	pass	preemptive raise	weak
	3♦	preemptive raise with 4+♦, apparently less than 4♣	
	3♥	55+ in ♥+♠, GF	5.7
	3♠	55+ in ♣+♠, GF	3.1
	3NT	55+ in ♣+♥, GF	3.1
3♣		8-11 hcpts, 5+♣	1.7
3♦		4+♦, 8-11 hcpts	2.7
3♥/♠		7+suits, sets trumps, GF, 4M by opener most negative	2*0.6

Responses to 2♣		
2♦		12+ hcpts GIR
2♥/♠		8-11 hcpts 5+ suits
2NT		transfer to 3♣, responders bids mean
	pass	preemptive raise
	3♦	55+ in ♦+♥, GF
	3♥	55+ in ♥+♠, GF
	3♠	55+ in ♦+♠, GF
3♣		8-11 hcpts 3+ support
3♦		8-11 hcpts 5+ suit
3♥/♠		7+suits, sets trumps, GF, 4M by opener most negative

Compared with the earlier version it is now always possible to stop at the 2-level in both minors and ♥ (you may still pass with ♠). Furthermore I have also introduced 2♦ as a weak invitational major ask, so you may look for two-level major contracts and occasionally find a fit-based game. Note that opener rarely has 4-card majors, only in about 12 % of the cases responder asks with 2♦, and you usually wind up in 2NT or 3m. The main reason for using 2♦ is that you may sign off in ♦ via 1NT, thus freeing 2♦ for other purposes.

The 1NT response to 1♠ is now a similar catch the rest bid as after 1♦/♥ openings, but openers options are more limited, he should bid 2♣ with 4+♣, and 2♦ with 6+♦. Responder may basically have four different hand types

1. Weak sign off hand in a minor or hearts (you may pass with spades), 87% likelihood.
2. Balanced weak invitation without 4-card majors (standard 1NT response, opener can't unfortunately pass), 11.1 %
3. Support in ♦ and a shortness, GF strength, 0.4+0.4+0.08%
4. 6+♣ and a shortness in ♦, GF strength, 0.6%

The last two also denies 4-card majors, and thus 0-1 cards in ♦ and 0-3 in majors implies 6+♣. Similarly the club splinter becomes extremely rare (once every 140000 deal!!), as it requires at least 6-card support to the openers known four cards! Responders options are given in the table below, changes due to openers 2♦ response are given in parenthesis.

Responders rebids after 1♠-1NT-2♣(or 2♦)	
pass	3+♣, 0-7 hcp (pass on 2♦ doesn't say anything about ♣)
2♦	3+♦, 0-7 hcp (you may not get excited and raise to 3♦ if opener rebids 2♦!)
2♥	5+♥, 0-7 hcp
2♠	balanced, no 4M, 2+♦, 8-9 hcp)
2NT	balanced, no 4M, 2+♦, 10-11 hcp
3♣	6+♦, 0-1♣, 14+hcp, 3♦ most negative, 3NT second most
3♦	6+♣, 0-1♦, 14+hcp, 3NT most negative
3♥	4+♦, 0-1♥, 14+hcp, 3NT most negative
3♠	4+♦, 0-1♠, 14+hcp, 3NT most negative

Note that responders 2♠ and 2NT rebids always guarantees a 8-card minor fit, to which opener may escape to when judged a better spot than 2NT. But there will unfortunately be hands where you would have liked to stay in 1NT.

#### 4.2.1 Passed hand responses

Opener uses almost natural openings in 3rd and 4th hand, and responder has denied opening strength. The only conventional and forcing bid is 2♦ after the 2♣ opening. The responses to 2♦ are 2♥/♠ = 4 card suit, 2NT = 6+ in ♣, maximum, 3C = 6+ in ♣, minimum, 3♦/♥/♠ = 6-4, maximum, 3NT = 6+ solid ♣.

### 4.3 Responses to 1♣

Responses to 1♣ are either negative (0-8 hcpts), shapely semi-positive (5-8 hcpts) or positive (9+ hcpts). All positive responses are GF. In the current version 2♣-2♥ are used for positive minor hands, and 2♠ and up are semi-positives.

Responses to 1♣			frequency
1♦	0-8	1st Negative	56.2 %
1♥	9+	4+Spades (longer minors possible)	8.6 %
1♠	9+	4+Hearts (shorter Spades, longer minors possible)	7.7 %
1NT	9+	Balanced, standard 4333, 4432 or 5332, 5M possible !	18.6%
2♣	9+	minors at least 5-4 (No 4 M)	2.4%
2♦	9+	6+♣ (No 4 M)	1.25%
2♥	9+	6+♦ (No 4 M)	1.25%
2♠	5-8	5+ ♣ and 5+ another suit	1.15 %
2NT	5-8	The remaining 55+ two-suiters	1.15 %
3-Any	5-8	7+ suit, 5+hcpts in suit, invitational values	0.41%
3NT		Undefined at the moment	
4♣/♦		Namyats-like, 7+ suit, 3/4 top honors	

It is possible that two-suited semi-positives should promise a major (2♠ = ♥+other, 2NT = ♠+minor), as 4M is the most likely contract in these situations. Another useful alternative could be 2♠ = major+minor, 2NT = majors or minors. This might allow opener to always select a major when responder has one, responses to 1♣-2♠: 2NT = GF relay, 3♣ = pass or correct to 3♦, 3♦ = bid your major, 3♥ pass or correct to 3♠, 3♠ = pass or correct to 4♥. Responses to 1♣-2NT: 3♣/♦ = minor preference, 3♥ = relay (3♠=majors, 3NT=minors). Suit quality has not been taken into account in the frequencies, in practice at least single-suiters should promise good suits. A good rule for the 3-level responses could be that it should promise at least 5 hcpts in the suit, which would in practice exclude 56% of the hands. Thus if opener has Qx or better the suit would run at worst after a successful finesse. If responder has AKxxxx the suit might run against xx of course, while with AKJxxxx responder should probably make a positive response, and (if required) describe it as AKQxxxx. Note also that if responder has at least 5 hcpts in his long suit, that he at most has a King on the side. With suits with less than 5 hcpts, start with 1♦. The responses 4♣/♦ should promise very good suits, 3 out of top 4 honors, as opener may even have a void, and it is difficult to retreat to another suit for opener. This version of semipositives were suggested in Honeymoon Moscito



Semi-Positive Responses to 1♣ from Honeymoon Moscito			frequency
2♥	5-8	55+ Hearts + other	1.15 %
2♠	5-8	55+ Spades + minor	0.77 %
2NT	5-8	55+ Both minors	0.38 %
3-Any	5-8	7+ suit	0.42%

In the latest version of Moscito 2001 (from October 2002), another version is suggested:

Moscito 2002 version of 1♣-2♥+			frequency
2♥/♠	5-8	singlesuiter	-
2NT	5-8	two-suiter not including ♣ (same as my version)	- %
3♣/♦	5-8	singlesuiter	-%
3♥/♠	5-8	two-suiter M+♣	- %

Good things are the ability to pass or invite on 2M, less good thing is the inability to show 55+ in the minors. But the latter should actually not be that important. Actually the only reason for not introducing it in J-Moscito is that the 2♥ response is reserved, which is needed for positive hands in the current J-M version.

#### 4.3.1 Bidding after a negative response

After 1♣-1♦ relayer's bids are as follows:

1♥ = Strong relay 19+hcpts with 1♠ = 0-5 2nd negative

Other responses are 6-8 and GF

1NT = 15-18 NT distribution, Joppe NT is used

1♠/2♣/♦/♥ = 15-18 5+ suits, non-forcing.

2♠ - 3♠ = same as after 1♣ opening, two-suiters may be GF, one-suiters passable. 3NT = to play, possibly with a solid minor

Responses to 1♣-1♦-1♥		
1♠	0-5	2nd Negative, others are GF
1NT	6-8	NT distribution (+ all 4441:s)
2♣	6-8	4+♦(nothing about Majors !)
2♦	6-8	4+♥
2♥	6-8	54+ with ♠+♣
2♠	6-8	6+♣
2NT	6-8	A 5440, 3♣ asks for void, 3♦ asks for 5 card major
3♣	6-8	7+♠, none of the others, too bad suit for semi-positive bid
3♦	6-8	7222 or 6223
3♥	6-8	6133
3♠	6-8	6313
3NT	6-8	6331

Two completely new features are introduced, description of 4441:s and 5440:s is done different. The 4441-distributions are included in the 1NT response. The responses 3♣-3♠ to the 1NT-2♣ relay are actually undefined, so these bids can identify the short suit, in steps from above. I had in earlier versions more complicated versions for this, using other undefined responses. I also thought about including 5440:s in the 1NT response, but it is much simpler and hopefully enough accurate to show them through 2NT.

Note that opener may thus no longer assume 2-cards in all suits after the 1NT response. This should not be too bad as the risk for competition at this stage is low, as both opps have had earlier chances for interference. One must also keep in mind the 4441-distribution when considering bidding like 1♣-1♦-1♥-1NT-3NT.

All 5440-distributions are shown with 2NT, and openers relay asks for void, which responder shows in steps from above. The 5-card suit cannot be described this way, if one prefer to emphasis the long suit one can describe it as 5431 or 6430. Unfortunately this bid will be highly unusual, about once every 10000 deals, but it allows description of all 4+ suits after 1♣-1♦-1♥. And furthermore all three-suiters are described with special bids in all relay sequences, which should make it easier to remember these two conventions also.

Note that there are also some 5431:s which can no longer be fully described, worst cases are 1♣-1♦-1♥-2♣-2♦-2NT and 1♣-1♦-1♥-2♦-2♥-2NT (54 in minors and majors resp.), as there is only 4 steps available (5 would be ok). This mean that the four steps are 3♦=canape, 3♥=5422, 3♠/NT=shortness. The loss of showing 3-card

suits and 55+ (should be shown with semi-positive bid anyway) is not too big, but there is not enough space for telling canape and shortness below 3NT. Actually 3♥ in ...-2NT-3♣-3♦-3♥ should be a control relay and not a shape relay, as it is not listed as an exception to the rule that relays from 3♥ and up are for controls. It can be added to the exception list, but it does not remove the problem that there is only one bid (3NT) available for describing shortness. One could allow use of 4♣ as shape response, but this would then be an exception to the rule that shape relays should not pass 3NT. One would have to use openers 4♥ as to play, and only allow AKQ-ask (4♦) after the 4♣ shape response. Another alternative would be to lie about distribution, which would mean that the distribution 3145 would have to be described as 3154 or 2245, and the distribution 5431 would have to be described as 4531 or 5422. This concerns two of the possible 24 5431:s, and similarly 1/12 of the 6421:s and 1/12 of the 6430:s, all together about 1.6 % of all second-positive hands, corresponding to about 1 of every 7000 deal (the fact that opener must have 19+ hcpts makes it more rare).

One possible solution to the 5431-problem mentioned above is to include the 5422:s to the 1NT response. As can be seen in the table above, the 6331-convention is used also after one negative response. A 7-card suit of too bad quality for a direct semi-positive bid is always shown by bidding the long suit and upon relay bidding 3♣ (or by bidding 3♣ directly, as with ♠ as long suit)! The 3♦-relay asks then for short suit after this. Note that the 7222-distribution is excluded from the 3♣-bid, thus first step (=3♥) shows highest suit short. The 7222 distribution falls naturally under the 3♦ (=no shortness) bid.

The responses to a relay after one negative response and one positive response becomes like this:

Responses to 1♣-1♦-1♥-2♣-2♦		
2♥	6-8	4+♠
2♠	6-8	4+♥
2NT	6-8	4+♣
3♣	6-8	7+♦, none of the others, too bad suit for a semi-positive bid
3♦	6-8	2272, 2362 or 2263
3♥	6-8	1363
3♠	6-8	3163
3NT	6-8	3361

Similarly, after 1♣-1♦-1♥-2♦-2♥ and 1♣-1♦-1♥-2♠-2NT the responses 3♣-3NT has the same meaning (♥ and ♣ respectively being the long suit).

After 2nd Negative relay's bids are:

1NT = 19-22 NT distribution, Joppe NT is used

2♣= Strong relay 23+hcpts with 2♦ = 0-2 3rd negative, others natural !

Other bids are 19-22, natural and non-forcing.

Responses to 1♣-1♦-1♥-1♠-2♣		
2♦	0-2	3rd negative, others GF
2♥	3-5	5+♥
2♠	3-5	5+♠
2NT	3-5	NT distributions excluding 5 card M and including 4441 (3♣ is Baron)
3♣	3-5	5+♣
3♦	3-5	5+♦

I found that relays suffer from lack of space in this case, and all suits have been bid (good rule of memory, by the way), so why not use natural techniques. This is actually a similar case as after weak twos, when jump shifts are often used as Control Asking Bids (CABs). The hand with a lot of points ask the weaker well limited hand for the right feature which might make a slam possible. There are other similar situations when one could use CABs, so this should probably be systemized. A response scale which I have used (but not invented) : lowest NT = guarded King, 1st step = no control, 2nd step = singleton, 3rd step = Ace, 4th step = void.

After 3rd Negative, relayer may GF with the super strong relay 2♥ and responder is forced to describe his hand, even with a Yarborough. Other bids are natural and virtually GF.

Responses on 1♣-1♦-1♥-1♠-2♣-2♦-2♥		
2♠	0-2	5+♠
2NT	0-2	NT distributions including 4441 (3♣ is Baron)
3♣	0-2	5+♣
3♦	0-2	5+♦
3♥	0-2	5+♥

The table is completely natural as can be seen, the level is too high for relays. Again, one can use jump shifts as CABs, although one probably should use a reduced response scale: 1st step = 2 or more cards, 2nd step = singleton, 3rd step = void. One could also use the relay bid as a shortness ask, as this is by far the most useful feature in a hand with 0-2 hcpts ! As earlier, first bid denies, the following bids show in steps from above.

#### 4.3.2 Passed Hand Responses to 1♣

The 1♣ opening in 3rd seat now shows 17+ hcpts as responder has denied 10 or more hcpts. The responses are then:

1♦ = 0-6 1st negative (and corresp. HCP adjustment for later bids)

1♥ + = 7-9 GF (1NT = 7-10 hcp)

The control base counts (see section 5.2) are 3 and 1 respectively for 7-9 hcpts (same as 6-8), and 1 and 0 for 4-6.

#### 4.4 Responses to 1NT

Three versions of NT-responses are suggested:

1. Joppe-NT (found in nt\_sys.pdf, as all other used NT-related conventions) when GF is not already established, in all cases when opener shows NT-distribution on the 1-level (i.e. 1NT, 1♣-1♦-1NT, 1♣-1♦-1♥-1♠-1NT).
2. When NT distribution is revealed at the 2 level (i.e. 1♣-1♦-1♥-1♠-2♣-2NT, 1♣-1♦-1♥-1♠-2♣-2♦-2NT, or 1♣-1♦-1♥-1♠-2♣-2♦-2♥-2NT) Baron 3♣ (also described in nt\_sys.pdf) is used.
3. When GF is established (i.e. 1♣-1NT and 1♣-1♦-1♥-1NT, when responder show NT-distribution on the 1 level after a 1♣ opening) 2♣ is used as GF-relay (description also found in nt\_sys.pdf).

For the other responses after game forcing 1NT is it easiest to use Joppe-NT for the other responses. This unfortunately makes the weaker hand declarer, but description of the unbalanced hand should anyway be preferred, and it is better that the unknown hand becomes declarer. The alternative meanings for the bids 2♠-3♠ are in this case clearly better than the original meanings. This means that 2♠ and 2NT are minor oriented asking bids and 3-level bids are showing a 5431-like distribution with shortness in bid suit, 5+ in a minor, at least 3 in the unbid major(s).

Relay bids above those defined in the 1 NT-systems are control relays, see section 5.2 for definition of control relays. The highest possible bid defined as a shape relay is 3♦, but it is also the lowest possible control relay. That is, all relays above 3♦ are control relays, and all relays below 3♦ are always shape relays. The meaning of 3♦ relay depends on the situation, in the GF 1NT version above does control relays start after you have described your exact shape. In Joppe-NT it is not always possible to describe your exact shape, for example in 1NT-2♣-2♥-2NT-3♣-3♦ the last bid is a control relay, as it is not defined as a shape relay. After other responses to 1NT but 2♣ I do not have used control relays (although it is possible), as they are not as efficient when the distribution is not known. Responder may choose to relay, or describe his own hand using more standard techniques such as Jacoby transfers.

After Baron 3♣ it is probably not beneficial to use any control relays, standard natural techniques (standard cue bids or CABs, RKCB for sure). And you may of course use Puppet Stayman after the 2NTs as well.

## 5 Relays

I have here first tried to compile a set of general rules used in relay auctions, under sections 5.1 and 5.2. After that I have given examples of using these rules in different situations, under sections 5.4 and 5.5. This might not be the smartest way to present it, as the rules presented might sound strange at first, as they mainly focusing

on a number of exceptions. You probably need to check the examples given later to see how the that J-M relay bidding is not too difficult to learn. For now, I will start with the list of rules which apply in all relay auctions:

1. Relayer initiates and continues relays by bidding the lowest available bid (which is usually the same as completing the transfer). There are a few exceptions, 3NT is always to play, 1NT is natural and non forcing unless GF is not already established, and 1♣ initiates relays immediately.
2. Relayer may break-out of relays by bidding anything other than the relay. A break-out is a natural bid and tends to deny slam interest. Note also that break-outs to 4NT and 5NT are to play. Reverse relays are, if used, exceptions to this rule. Reverse relays *may* be used after a positive response to 1♣, when you are short in responders first suit. Reverse relays are further described under section 5.6.
3. All relay auctions are GF (even after a break-out) with two exceptions:
  - (a) After 1♣ Opening: Openers break-out after a negative response.
  - (b) Other Openings: Responders break-out after only one relay (which shows invitational strength).
4. There are two types of relays: shape relays and control relays. The last shape relay allowed is 3♦, with two exceptions occurring only with two-suited hands: 1) when 3♦ shows a unspecified void when 3♥ ask for location of the void. 2) When 3♦ shows a 3-card suit, and 3♥ asks for the last card (i.e. separate between 5431 and 6430). All other relay bids 3♥ and higher, up to 6♠, are control relays.

## 5.1 Shape Responses

Above a set of rules is given, in priority order. If your hand fits under rule number 1, follow that rule, if not, check rule number 2, and so on.

1. If you have a balanced hand (4432, 5332, 4333), show it by bidding NT. How to continue after that has been discussed under section 4.4.
2. With an unbalanced hand, you start showing your 4+ suits. Suits are showed using transfers, but there is redundancy in the use of ♠ and NT, and some exceptions dictated by various considerations (see e.g. the openings, 1♠=4+♦, 2♣=6+♣). You start with the cheaper suits, even if you have other longer suits. If you 4-cards in one of the two cheapest suits, you start by showing it. If you have both, you start with the longer or the cheaper. In the opening bids and positive responses to 1♣ this means that majors are prioritized, after negative responses to 1♣ it means that other suits. In opening bids you also start with a 6-card suit in front of a 4-card suit.
3. If you have a three-suiter, you start with a major (according rule 1) and after after relay by responder you show the short suit in steps from above, that is OM-♦-♣. The bids used for this are 2♠-3♣ after initially showing the cheaper major, and 2NT-3♦ otherwise. This rule is not obeyed after negative responses.
4. If you have a second 4+ suit, you start by showing a major (according to rule 1.) and use the following three rules (given in priority order) to show length in the remaining three suits.
  - (a) The first three steps shows the remaining three suits.
  - (b) Avoid bidding the suit you have.
  - (c) Use transfer when possible.

If you have a minor (the two most expensive suits, which are the minors in openings or positive responses to 1♣) two-suiter, you show it with the bid after the two steps showing the majors (the two cheapest suits). The opening bids does not follow this, the 1♦ opening includes both minor two-suiters and ♦-single-suiters.

5. If you have single-suited hand, if it is one of the two most expensive suits (minors in openings and pos. resp to 1♣) you showing it direct as 6+. If it a cheap suit you start by showing your suit as 4+, and after responder relay you obey the following rules:
  - (a) If you have a 6331-distributions, you show it with direct jumps above the marmic steps. You need three steps, where you identify the short suit in steps in descending order, using the bids 3♦-3♠ or 3♥-3NT depending on if one started with the cheaper major or not. This convention can also be used after one negative response to 1♣, see the tables in section 4.3.1.

- (b) Otherwise you show a 6+ single-suiter, by raising your own bid. After the limited openings this also shows non minimum.
  - (c) Only after limited major openings the next step (2M) shows a 6+ single-suiter with minimal strength. This allows stopping in 2M, when found necessary.
6. After identifying all your 4+ suits you describe the rest of your hand in steps, using the following order:
- (a) Show that your second suit is 5+ and your first suit is only 4 cards (a canape).
  - (b) Show that you have a 55+
  - (c) Show your 3-card suits in steps in descending order
  - (d) Show an unspecified void
  - (e) Show a hand without shortness
  - (f) Show your shortness in steps in descending order

Some examples that illustrate these rules:

<b>Responses after showing 6+ in one suit and denying 4 cards in other suits</b>	
2♥	3 card highest suit
2♠	3 card middle suit
2NT	3 card lowest suit
3♣	an unspecified void
3♦	corresponding 7222 (or sometimes a 6322)
3♥	1 or 0-1 in highest suit
3♠	1 or 0-1 in middle suit
3NT	1 or 0-1 in lowest suit

<b>Responses after showing 6+ in one suit and exactly 3 cards in another suit</b>	
2NT	3 card highest suit
3♣	3 card lowest suit
3♦	an unspecified void
3♥	corresponding 6322
3♠	1 or 0-1 in the highest suit
3NT	1 or 0-1 in the lowest suit

<b>Responses after showing 4+ in two suits</b>	
2♥	canape
2♠	55+
2NT	3 cards in highest suit
2♣	3 cards in lowest suit
3♦	an unspecified void
3♥	corresponding 5422
3♠	1 or 0-1 in the highest suit
3NT	1 or 0-1 in the lowest suit

Note the symmetry, for example in the last table that after showing canape and a relay bid, the following bids show the same as the direct bids, except that the two long suits exchange places. Similarly, when showing a void and a relay bid, the same bids which as direct bids show singleton in a suit, now show a void in the same suit.

There are unfortunately situations when bids drop out due to lack of space, and then one prioritize as follows (concerns the bids 2NT to 3NT):

- (a) No shortness bid + shortness bids
- (b) 4+ suits or 55+ bid (only one of these is possible at a time)
- (c) 3 card suits (lower suits drop out first)

(d) any void

There are also situations where these bids start at a lower level, when there will be undefined bids. For example  $1\heartsuit-1\spadesuit-2\clubsuit-?$ , when  $2\heartsuit$  show canape, and all other bids are also one step lower ( $3\spadesuit$  being the last defined bid). One could also let lower bids be undefined (e.g.  $2\heartsuit$  in the example above), which would give the bids  $3\heartsuit-3\text{NT}$  always the same meaning, which could be easier to remember.

7. After second and third negative after  $1\clubsuit$ -opening, and a relay by opener ( $2\clubsuit$  and  $2\heartsuit$  respectively) switch to natural bidding. As a rule of memory, after bidding all suits on 1-level ( $1\clubsuit-1\heartsuit-1\spadesuit$ ,  $1\spadesuit = 2\text{nd}$  negative), transfer relays are off. These situations are uncommon, and the lack of space would require introduction of new relay-rules. In these situations opener may use CABs, as suggested above, and further described under the section on weak twos.

## 5.2 Control Responses

Shape responses will always finish somewhere in the range  $3\heartsuit$  to  $3\text{NT}$ . Relayer's further relays are control relays. There are two control relays based on what relayer feels he needs to know:

1. 1st step = AKQ-ask (using A=3,K=2,Q=1)
2. 2nd step = AK-ask (using A=2,K=1)

Naturally, one can exclusively use one type of controls, if this is preferred. However, in all cases one must remember that  $3\text{NT}$  by relayer always is to play (under the assumption that responder has less than 15 hcpt, c.f. section 5.3). For example, if the last shape response is  $3\spadesuit$ ,  $4\clubsuit$  is a AKQ-ask and  $4\heartsuit$  is a AK-ask. If the bidding started with  $1\clubsuit$ , responder replies according to the following table:

Control responses after a $1\clubsuit$ opening					
HCPs	0-2	3-5	6-8	9+	15+
AKQ	0	1	3	6	9
AK	0	0	1	3	4

Thus, if responder is known to hold 9+ hcpts and relayer asks for AKQ controls, the first step shows 6, the 2nd-step shows 7, the 3rd-step 8, etc.

Originally the base levels were 0-2-4-6-9 and 0-1-2-3-4, respectively, which would have been easier to remember. A good rule of memory is that holding one Ace, one King and one Queen (=9hcp) sums up to both base levels for a positive response to  $1\clubsuit$ . After this it is easy to deduce the original base levels, and then subtract one for each limited hand. This concerns also a limited opening (9-14 hcpt), the base level is 5 for the AKQ and 2 for the AK controls. A hand with 9 hcpt almost always reach these lower base levels, while a positive response to  $1\clubsuit$  explicitly promise 6 AKQ- and 3 AK-controls. A hand with four queens and four jacks and nothing else is problematic, as one cannot give a 9+ positive response to  $1\clubsuit$  with such a hand. It is too little slam-oriented for this purpose, and if  $1\clubsuit$  opener has almost all relevant Aces and Kings, he will most certainly ask for AKQ-controls even if you start with a negative response! And in all other cases you simply do not stop below game.

Relayer often uses the AKQ ask just to check on responders hand strength. A good rule is: Total hcpts = 1.5 times AKQ count (a bit pessimistic, jacks are not taken into account).

**NOTE:** If relay responder show ten or more cards in two suits and 9+ or 15+ hcpts, subtract one point from the AKQ-base counts ( $6 \leftarrow 5$  for 9+ hands and  $9 \leftarrow 8$  for 15+ hands). This is a quite good rule, as you often feel like bidding positively when having a good distribution.

Having obtained the number of controls, later relays request their location by *denial cues*. That is, each bid deny a control in a specific suit. The control denied always matches relayer's control ask (i.e. AKQ or AK). Any bids skipped infer that a control is held in that suit. Suits are placed in length order, starting with higher suits if equal length is shown, see the examples.

Relayer may continue requesting denial cues to locate second and third controls held in a given suit. If responder has denied a control in a suit, then that suit of course drops out of later cycles. The last possible denial cue relay is  $6\spadesuit$ . All bids from  $6\text{NT}$  and up are to play.

### 5.3 Zooming

Sometimes, after getting responder's shape, relay will attempt to sign-off in game without checking for controls. Over all openings other than 1♣ this will not present a problem, because relay-responder cannot have more than 14 hcpts. However, a positive response to a 1♣ opening shows 9+ hcpts and is unlimited. Relay's sign off in game (without checking for controls) is based on the assumption that responder is limited to 9–14 hcpts. If responder has in fact more than 14 hcpts, he must not Pass the sign-off. Responder must then *zoom*, that is bid on. His bids are based on the assumption that relay's sign-off is an AK-control ask. Since responder has 15+ hcpts the first step shows 4 controls. Similarly does relay responses above 3NT show the distribution that 3NT would show, and 15+ hcpt, and 4+ AK controls. This allows the relay to pass on a 3NT response, as it denies 15 hcpt. It is of course possible to use AKQ-controls as well, choose your favorite!

### 5.4 Responses to major relays

Let us now put up the responses to relays on bids showing majors in a table. Relay responder has already denied NT-distribution, so he may have a single-suiter (6+), a two-suiter (54+), or a three-suiter. The first three bids show a two-suiter, identifying the side suit, the following one or two bids show a single-suiter (after a limited opening also separating between a min and max opening), and the following three bids show a three suiter identifying the short suit. And the following three bids show a 6331, also identifying short suit.

Responses to 1♦-1♥	
1♠	4+♣ (Spades are not bid directly)
1NT	4+♠ and 5+♥
2♣	4+♦
2♦	6+♥, non-minimum
2♥	6+♥, minimum (raise)
2♠	♠-Marmic (2♠ when cheaper major)
2NT	♦-Marmic
3♣	♣-Marmic
3♦	1633 (jump rebid)
3♥	3613
3♠	3631 (3♠ when cheaper major)

A Marmic-showing bid specifies 12 of 13 cards, the location of the last card can be found by relaying, upon which the last card is shown from above in steps. Note that 5440 and 5404 are shown with an initial 1♥ bid (cf. the following table)! That is, the last card cannot be a ♠ in a ♦ and ♣ Marmic opened with 1♦.

Responses to 1♥-1♠	
1NT	4+♣
2♣	4+♦
2♦	4+♥ and 5+♠
2♥	6+♠, non-minimum
2♠	6+♠, minimum (raise)
2NT	♥-Marmic (2NT when more expensive major)
3♣	5404 (with 4414, you open 1♦)
3♦	5440
3♥	6133 (jump rebid)
3♠	6313
3NT	6331 (3NT when more expensive major)

If your partner has opened 1♣, hearts and spades exchange roles, as spades can be shown at a lower level in this case ! Otherwise, the tables are very similar.

Responses to 1♣-1♥-1♠	
1NT	4+♣
2♣	4+♦
2♦	4+♥ and 5+♠
2♥	6+♠ (rebid)
2♠	♥-Marmic (2♠ when cheaper major)
2NT	♦-Marmic
3♣	♣-Marmic
3♦	6133 (jump rebid -1)
3♥	6313
3♠	6331 (3 ♠ when cheaper major)

Responses to 1♣-1♠-1NT	
2♣	4+♦
2♦	4+♣ ("♥-bid" replaces suit not included in the first three steps)
2♥	4+♠ and 5+♥
2♠	6+♥ (rebid)
2NT	♠-Marmic (2NT when more expensive major)
3♣	4504
3♦	4540
3♥	1633 (jump rebid -1)
3♠	3613
3NT	3631 (3NT when more expensive major)

If four cards are denied in all suits but the opening suit (which then is known to be 6+), one starts to show/deny three card suits and then shortness.

Responses to 1♦-1♥-2♦-2♥(=6+♥)	
2♠	3♠
2NT	3♦
3♣	3♣
3♦	2722
3♥	0-1♠, 7+♥
3♠	0-1♦, 2♠, 7+♥
3NT	0-1♣ 2821 or 2920

Three card suits are always shown from above. Note that three card suits are now prioritized before voids, and shortness/no shortness bids has highest priority. Here the case with least bidding space.

Responses to 1♣-1♠-1NT-2♠-2NT (=6+♥)	
3♣	3♠
3♦	2722, 2632 or 2623
3♥	0-1♠, 7+♥, if the 6331 convention was used
3♠	0-1♦, 2♠, 7+♥
3NT	0-1♣, 2♠, 2-3♦, 7+♥

After showing an exactly three card suit (and indirectly a 6+ or sometimes a 5+ suit after a minor opening) another three card suit and shortness are shown/denied using the same logic:

Responses to 1♦-1♥-2♦-2♥-2♠-2NT	
3♣	3♦ (always 3730, if 6331-rule was used)
3♦	3♣ (always 3703, if 6331-rule was used)
3♥	3622
3♠	0-1♦, 7+♥ if 6331-rule was used
3NT	0-1♣, 3721 or 3820 (if 3631 is excluded)

#### 5.4.1 Relay responses after showing two 4+ suits

After learning about that responder has two 4+ suits, the responder cannot have 4 cards in any of the remaining suits. Thus, responder's next task is to inform relay about three things: a) The length of the two long suits (54,



45, or 55+) b) three card side suits c) shortness in the other two suits. These features are shown in steps. This is done in that order, and when there is too little space, the rules for prioritizing features are a) no shortness + shortness bids (highest priority) b) canape bid, c) 55+ bids d) three card suits (lower suits drop out first) e) void-bid. Some examples:

Responses to 1♠-1♥-1♣-2♣(=4+♥+4+♣)	
2♦	4♥and 5+♣
2♥	55+
2♠	3♠
2NT	3♦
3♣	an unspecified void
3♦	2524
3♥	1♠, 1624 or 1714
3♠	1♦, exactly 2416

Note here that 1♦-1♥-1♠-1NT is natural and invitational, probably a misfit, and not a relay! Note also that the void-bid is the same as raise of relay (=fifth step), but it is never higher than 3♦. With 2♥ as relay after showing two 4+ suits, the void bid drop out.

After the canape bid and a relay, the bids show exactly the same distribution in the other suits, but the long suits exchange length. Similarly, after showing a void and a relay bid from relayer, the same bids which earlier showed a singleton now show a void in the same suit. Note also that if at most one card is unrevealed (after 2♠and 2NT), the last card is shown in steps in descending order. Furthermore, the number of cards in two suits are almost always known, so only two relay responses are needed. An example:

1♦-1♥-1♠-2♣-2♠-2NT-?

3♣= 3604

3♦= 3514

After the 55+ response, the same scheme as with 54-hands is used:

The 55+ scheme	
Responses to 1♦-1♥-1♠-2♣-2♥-2♠(=5+♥+5+♣)	
2NT	3♠= 3505
3♣	3♦= 0535
3♦	an unspecified void
3♥	1615 or 1516, possibly including 0-1, 1-0 and 0-0 in short suits
3♠	1♠= 1525
3NT	1♦= 2515

The only discrepancy with 54-scheme is that the no-shortness bid is replaced with a equal-length bid (or both-short bid), when the former is not possible. A drawback the suggested 55+ scheme is that you never learn which suit is longer, hopefully 5 cards is enough in one of the suits. The likelihoods for the possible 55+ distributions are (not taking into account suit order): 5521 = 56.5 % (23.25% for 5521 and 5512 resp.), 5530 = 15.9 %, 6511 = 12.6 %, 6520 = 11.6 %, 7510 = 1.9 %, 6610 = 1.3 %, 7600 = 0.1 %, 8500 = 0.055 %. As you can see from the above percentages, the 6511 is the only distribution where you have two short suits occurring with a reasonable frequency.

The tables above showed the "lowest" 4+-4+, how about the others ? Lets try the most space consuming 4-4:

Responses to 1♣-1♠-1NT-2♦-2♥ (=4+♥+4+♣)	
2♠	4♥ and 5+♣
2NT	55+
3♣	3♠
3♦	3♦(3♥ asks for last card)
3♥	2524
3♠	0-1♠, 1624, 1714, 0724, 0814 or 0904
3NT	0-1♦, 2614 or 2704

Here we lose the ability to show voids, which introduces some inaccuracy, as indicated in the table. Voids may still be indirectly shown by showing the location of the last card.

You also loose the possibility to show a void after the 55+ response, if you follow the priority rules strictly. It would however be most logical to introduce an exception here, as a 3-card suit logically also means a void in the fourth suit, thus actually making a void more common than a three card suit!

Responses to 1♣-1♠-1NT-2♦-2♥-2NT-3♣(=5+♥+5+♣)	
3♦	3♠, 3505, or just a void, 3♥ asking which
3♥	usually 1516 or 1615, possibly including 0-1, 1-0 and 0-0 in ♠-♦
3♠	0-1♠, 1525, 0535, 0526 or 0625 (voids avoided if 3♦ shows them)
3NT	0-1♦, 2515, 3505, 2506 or 2605 (voids avoided if 3♦ shows them)

The responses after showing other 4-4 holdings are not any higher. Note that after a positive response to a 1♣ opening does 1NT not have to be natural and non-forcing when GF already is established ! In the following a list of all major-minor combinations are given:

1♦-1♥-1♠ = 4+♥ and 4+♣

1♦-1♥-2♣ = 4+♥ and 4+♦

(1♣-)1♥-1♠-1NT = 4+♠ and 4+♣

(1♣-)1♥-1♠-2♣ = 4+♠ and 4+♦

1♣-1♠-1NT-2♣ = 4+♥ and 4+♦

1♣-1♠-1NT-2♦ = 4+♥ and 4+♣(Note this exception!)

When showing both majors it is known that the suit shown first is longer or of equal length, at least 5 cards, and a canape is impossible. Thus the first step shows 5-5 or better.

Responses to 1♦-1♥-1NT-2♣(=5+♥+4+♠)	
2♦	5+♠, 55+ scheme apply, others show exactly 4 ♠
2♥	3♦
2♠	3♣
2NT	an unspecified void
3♣	4522
3♦	1♦ = 4612 or 4711
3♥	1♣ = 4621

If the suits are shown in a uneconomical order it means that it is known that one suit is longer, and 5+ in the shorter suit implies 6+ in the longer suit. Then it is no longer possible to have three card suits, and these steps fall out from the 55+ scheme. Some other small modifications occur also:

Responses to 1♥-1♠-2♦-2♥(=5+♠+4+♥)	
2♠	5+♥ and 6+♠, modified 55+ scheme apply, others show exactly 4 ♥
2NT	3♦
3♣	3♣
3♦	an unspecified void
3♥	5422
3♠	1♦
3NT	1♣

Modified 55+ scheme	
Responses to 1♥-1♠-2♦-2♥-2♠-2NT (=6+♠+5+♥)	
3♣	7501, 7510 or 8500, void is shown from above
3♦	6511
3♥	0♦ = 6502
3♠	0♣ = 6520

This is bit nonstandard, but what else could it be when we have at most two cards in two suits?

#### 5.4.2 Invitational bids

A relay response to a limited bid does only promise invitational strength or better. Invitational strength is shown by relaying only once, and breaking out by bidding something else than the second relay. These break outs are all natural bids, but it might be good to review relayers options. The following concerns situations where relay responder shows a two-suiter, that is 1♦-1♥-1♠...2♣ and 1♥-1♠-1NT...2♦ when opener hasn't said anything about strength.

Invitational bids after one relay	
First bid	GF relay, with 1♦-1♥-1♠-2♣ as only exception
Lowest NT	No fit for major(s), invitation to 3NT
Raise of Major	3 card support
Jump raise of Major	4+ support
Raise of minor	4+ support
New suit	5+ suit
Jump in new suit	Good 6+ suit
jump to 2NT	same as 1NT, but stronger (available only after 1♦-1♥-1♠)
3NT	to play (misfit, e.g. a 5422, about 15–17 hcpts)

## 5.5 Responses to minor relays

In the current version it is possible to hold a 4-card major after a minor opening. The most common distribution after the 1♠ opening is 54+ in the minors, which also needs most space for resolving. Thus this must be shown with the first step, 2♦, which deviates from standard J-M relays. Furthermore, I have introduced minimum bids also after minor openings, which makes the 2NT-3♦ responses a bit non-standard.

Responses to 1♠-2♣ (= 4+♦)	
2♦	Minors at least 54, ♣ can be longer (which is shown with canape or 55+ response)
2♥	4♠, 6+♦, relay resp. according 55+ scheme
2♠	4♥, 6+♦, relay resp. according 55+ scheme
2NT	6+♦, minimum, with shortness, 3♣ asks which
3♣	6+♦, minimum, denies shortness, 3♦ sign off, 3♥=AKQ ask, 3♠=AK ask
3♦	6+♦, maximum, denies shortness, 3♥=AKQ ask, 3♠=AK ask
3♥	6+♦, 0-1 ♠
3♠	6+♦, 0-1 ♥
3NT	6+♦, 0-1 ♣

The logic behind the 2NT-3♦ responses are:

- you don't need more shape relays after the 3♣ and 3♦ responses
  - you can't ask both for shortness and sign off in opener's minor, unless you show minimum with shortness with 2NT.
  - as an additional benefit, the likelihood for 3NT being the right final contract is higher after the 3-in-other-minor response than the 2NT response, the former making relayer declarer, the latter not.
- And the non-standard 2NT-3♦ responses are fortunately also useful after the 2♣ opening.

Responses to 2♣-2♦ (= 6+♣)	
2♥	4♠, 6+♣, relay resp. according 55-scheme
2♠	4♥, 6+♣, relay resp. according 55-scheme
2NT	6+♣, minimum, <b>with shortness</b> , 3♦ asks which
3♣	6+♣, minimum, <b>denies shortness</b> , 3♦=AKQ ask, 3♥=AK ask
3♦	6+♣, maximum, denies shortness, 3♥=AKQ ask, 3♠=AK ask
3♥	6+♣, 0-1 ♠, maximum
3♠	6+♣, 0-1 ♥, maximum
3NT	6+♣, 0-1 ♦, maximum

As indicated in the tables, one may relay after the 2M responses, showing 64 or better, using the same responses as after showing 55+:

Responses to 1♠-2♣-2♥-2♠ (and 2♣-2♦-2♥-2♠)	
2NT	4360 (4306)
3♣	4063 (4036)
3♦	void in a suit, 7+♦(7+♣), 3♥ relays for location
3♥	4171 (4117)
3♠	4162 (4126)
3NT	4261 (4216)

Again after the 2♠ response and 2NT relay the void-bid would drop out. Meaning that you would have to show a 0472 as a 1462, which could be avoided by using 3♦ as showing an unspecified void. That is prioritizing void bids over 3-card bids, when showing a 55+ or a 64+, contrary to the 54+ case.

One might also argue for using the bids 3♥ and 3♠ as natural forcing (looking for a 3-card support) after the 3♣ and 3♦ responses (showing a hand without shortness, also informing about strength), instead of using them as control relays. Not at all impossible, it is possible to use 4♣ and 4♦ as control asking bids instead, but it would introduce a new convention into the system. It would be a good and useful one, when remembered.

After a 1♣ there is three bids available for positive minor-hands, and the bids are best used for showing a two-suiter, ♣-singlesuiter and ♦-singlesuiter respectively. This convention is also used after 1♣-1♦, see under section 4.3.1.

Responses to 1♣-2♣-2♦ (=minors 54+)	
2♥	4♦, 5+♣(♦ base-suit, this is a canape-bid)
2♠	5+♦, 5+♣, 55+ scheme apply
2NT	3♠, 5+♦, 4♣
3♣	3♥, 5+♦, 4♣
3♦	an unspecified void, 7+♦
3♥	2254
3♠	1♠, 6+♦, 4♣
3NT	2164

The 2♦ response to 1♣ now shows a ♣-singlesuiter:

Responses to 1♣-2♦-2♥ (= 6+♣)	
2♠	3♠
2NT	3♥
3♣	3♣
3♦	2227
3♥	0-1♠, 8+♣
3♠	0-1♥, 8+♣, 2♠
3NT	0-1♦, 2218 or 2209

And the 2♥ response to 1♣ shows a ♦-singlesuiter:

Responses to 1♣-2♥-2♠ (= 6+♦)	
2NT	3♠
3♣	3♥
3♦	2272 or 2263
3♥	0-1♠, 7+♦ (3 cards are denied in M, 4 in ♣)
3♠	0-1♥, 7+♦, 2♠
3NT	0-1♣, 2281 or 2290

## 5.6 Reverse relays

After a 1♣ opening and a positive response, you normally continue the relay sequence for gathering as much information about responders hand as possible. But when opener is short (0-1 cards) in responders first suit, it can be very difficult to evaluate the chances for slam. Does responder have xxxx or KJxx in his suit? Opener can't decide this below 3NT (which could be the last resort), while responder knows it simply by looking at his cards. Reverse relays are suggested in these situations in Moscito 2001. This means that the 1♣ opener starts to describe his hand (bids above the first step) instead of asking about responders (which he does with the first bid). This promises always 0-1 cards in responders suit. An example hand (from Richard Willeys Moscito 2001 documentation), first with normal relays:

Hand		Auction	
Opener	Responder	Opener	Responder
♠ —	♠ Qxxxxx	1♣	1♥ (=4+♠)
♥ Axxx	♥ KQJ	1♠	3♠ (=6331)
♦ KQJxxx	♦ Axx	4♦	4♠ (=4 AK controls)
♣ Axx	♣ K	4NT	5♣ (=no control in ♠)
		5♦	6♣ (= controls in ♥+♦+♣, no 2nd ♥control.
		7♦	(6♦ is a relay, hope that ♥-losers will disappear somewhere)

Use of the new 6331-convention makes it now clear that responder has 3♦, but still opener will not be comfortable passing 3NT. The responder may almost zoom if opener signs off in 3NT, as he has 4 AK controls and almost 15 hcpts. Even if opener relays for AK-controls (AKQ-controls works even worse), he will not confident that he has reached the right contract.

### 5.6.1 Natural reverse relays

Reverse relays based on J-Moscito-principles tend to get messy, and I actually think that you can manage using natural techniques, so that should be a good alternative. A natural reverse relay is a bid by the 1♣ opener other than the relay. It shows length in the bid suit and shortness in partners suit, and the bidding continues naturally! It is as simple as that, and you can add a couple of agreements to handle a couple of things:

1. A NT-bid shows 4441
2. A cue bid by 1♣ opener in responders suit shows a void

Let us try the example hand:

Hand		Auction	
Opener	Responder	Opener	Responder
♠ —	♠ Qxxxxx	1♣	1♥
♥ Axxx	♥ KQJ	2♦(5+♦, 0-1♠)	3♦(=♦suits me fine)
♦ KQJxxx	♦ Axx	3♥(=cue)	4♣(=cue)
♣ Axx	♣ K	4♠(=void)	4NT (=RKCB)
		5♣(=three aces)	5♥(any ♦ Queen?)
		5NT (=queen, no side Kings)	7♦

I'm at the moment satisfied with natural reverse relays, and recommend use of them instead of any more advanced relays.

## 6 Interference by opponents

This is a very important issue especially in relay based systems, if you do not have clearly agreements, opponents tend to get a lot of easy points by simply interfering at every possible occasion. There are a few quite different situations (x representing interference bid, sometimes the level is included, eg. 2x):

1. 1♣ - (x) - ?
2. 1♣ - (x) - pass - (pass/raise) - ?
3. 1♣ - 1♦ - (x) - ?
4. 1♣ - positive - (x) - ?
5. 1♣ - positive - (x) - pass - ?
6. 1NT - (x) - ?
7. 1NT - 2♣- (x) ?
8. 1NT - 2♦/♥- (x) ?
9. 1NT - 2♠/2NT - (x) ?
10. limited (=1♦/♥/♠/2♣) - (x) - ?
11. limited - relay - (x) - ?

One could of course continue this list, but these should cover the most common situations. If the second opponent is given the opportunity to raise, it is treated as the interference would have been on the higher level. The situations in 6. – 9. are quite different, opener is limited and responder can be weak, so pass is a very likely option unless you see a fit. In the other cases, double is more or less penalty oriented, showing length and/or values in opponents suit(s). If we are in a relay sequence, all remaining features are shown as before, except that the first relay step is pass, and 4+ suits are shown from above without caring who becomes declarer, and

that length in the opponents suit is shown with Double (and the suit drops out from the other responses), and that Marmic responses drop out (a x-marmic could be a problem, must be shown as a 5431, pass will anyway be the first bid). If the interference is in front of the relayer (as in 4.), pass is the relay bid, and relay responder shows his hand as the interference would have been in front of him/her (except that pass drops out, as it is no longer an option).

One must also treat natural and artificial bids differently. If an artificial bid show several suits, all known suits drop out from length showing bids (4+ or 3) and are moved to the Double. The Double means in the case of two-suiters that at least one of the opponents suits can be doubled. If an artificial bid show nothing but denying good 1- or 2-suiters (as 1♠ in Larsson) one lose the ability to use any suit as "enemy" suit. Usually these bids are on the one level, when all enemy-suits are ignored anyway. If someone uses interference bids above 1♠ which do not show any particular suit, we resort to natural techniques (preferably double all that moves). If a bid can have multiple meanings, the following two rules are obeyed:

1. If the bid shows a one-suiter or a two- (or a three-)suiter, assume that it is the one suiter (which is simpler to cope with), and bid accordingly.
2. If the bid shows a two-suiter with one combination or the other two, assume that it is the combination containing bid suit (or if the bid is NT, the combination including ♣). That is, the combination including the cheapest suit is assumed.

As a general rule, if the interference situation is at a high level or otherwise seem undefined or impossible, we resort to natural techniques. Double should be penalty oriented if it is known that we are in a GF-situation. Negative doubles are only used after direct interference over limited suit-openings, and up to 3♦.

In all interference situations one have to start with figuring out what a pass do mean. It can be minimum, 19+, or four cards in the highest free suit, the last one being the one most difficult and the most important to remember.

## 6.1 Interference over 1♣

### 6.1.1 1♣ - (x)

A 1♣ opener is most of the cases minimal (15–18 hcpt with 82.5 % likelihood, not taking into account the interference bid), and has a NT-distribution (47.6 % likelihood, combined 39.3 %). If we also include 5422, 6322 and 7222 distributions, the likelihoods become 64.3 % and 53.1 % respectively. And as I am myself found of using the Rubensohl convention (see nt.sys.pdf) after interference on the 1NT opening, I thought it might be ok to reuse this conventions for the interference bids 2♣-2♠ over 1♣ opening also. Responder assumes that opener is balanced (at least 2 cards in all suits) and has 15–18 hcpts. If opener is very far from this, he should inform responder about it. I see a number of different potentially problematic situations:

1. Responder doubles, and opener has a singleton or a void in the suit: Opener may then bid his long suit or bid 2NT to show a 4441 or 5440 (the 2NT should show a bit of extras also)
2. Responder has more than 18 hcpts, and responder makes a passable bid or bids 2NT (which asks for 3♣, which responder may pass on): Both cases responder may not pass or bid 3♣, all other bids promise 18+ and are otherwise natural. Cue-bid is, however, the only game-forcing bid.
3. Responder makes a transfer bid, showing invitational values and 5+ in a suit (and expects an at least 2-card support): Cue-bid with extra strenght, bid 3NT with a misfit (you also do it with 2-cards and not too much extras), jump to game without a fit and a own 6+ suit and minimum (1♣-(2m)-3♥-4♥ should actually show support in ♠ and a control in ♥ and deny controls in the minors, but as opener as well might bid 4♠ directly in this case, 4♥ should probably be used as own suit without support)

If opponents interfere at a lower level than 1NT, it is probably less awarding to aim at penalties, and no larger damage has been done, so the following guidelines are obeyed:

Pass = 0–4 or penalty oriented (opener should be able to see the latter)

Double = 5–8 (any shape)

Other = 9+ natural *transfers* and GF. The interference suit should probably not drop out from the length responses, as responder can well have four small cards (and opps might psyche). With excessive power and/or length in interference suit, you pass. Opener should always double in balancing position without length in the interference suit. A common situation is 1♣-(1M)-?, so for the sake of clarity:

Responses to 1♣-(1♠)-?	
pass	0-4 hcpt or penalty oriented, opener should be able to decide the latter
double	5-8 hcpt, any shape
1NT	balanced, 9+ hcpt
2♣	4+♦, 9+ hcpt
2♦	4+♥, 9+ hcpt
2♥	54+ in ♠+♣, 9+ hcpt
2♠	6+♣, 9+ hcpt
2NT	6+♠, 3♥, 9+ hcpt
3♣	6+♠, 3♦, 9+ hcpt
3♦	7222 or 6223, 9+ hcpt
3♥	0-1♥, 7+♠, 9+ hcpt
3♠	0-1♦, 7+♠, 2♥9+ hcpt
3NT	0-1,♣, 8221 or 9220 9+ hcpt

As you can see, you may not bid 3NT without an 8-card stopper, an slightly unfortunate side-effect of the new relay-system... If the interference bid is 1♥ the 1♠ bid shows 4+♣, 2♣=4+♦, 2♦=54+ in ♥+♠, 2♥=6+♠, 2♠ and higher=6+♥ (3NT again promises an 8- or 9-card stopper!). If the interference bid is 1♦ we can use exactly the same positive bids as without the interference.

The interference bid 1NT is usually some kind of two-suiter, and should thus be treated as one, double showing length in the presumed suits, 2♣=54+ in free suits, 2♦=6+ in one of the free suits, 2♥+=6+ in the other of the free suits.

Similarly, if the bids 2♣-2♥ also show two-suiters one can use similar relay responses, instead of using Rubensohl. 2♠ and higher bids eats up too much space for relays, you must switch to natural techniques. Note that this is relevant in Rubensohl also, where it is assumed that the interference bid is a natural one. But it is possible to use Rubensohl in most cases, so by default Rubensohl is always used after the 2♣-2♠ interference. When opponents show several suits, you may always show interest in doubling one of the suits by doubling, and bid a natural bid (or pass) if opps escape to a suit you do not wish to double.

If opponents double the 1♣ opening, the bids are:

Redouble = penalty oriented, length and values in promised suit(s)

Pass = 0-4

1♦ = 5-8 (any shape)

Other = same as if without interference. Here, no bidding space has been lost, so it should be an unnecessary complication to exclude promised suit(s).

If the opponents interfere at a higher level than 2♠ the following guidelines apply (2NT = minors can be treated with Rubensohlish conventions, see nt\_sys.pdf):

pass = 0-8 hcpts

double = for penalties (at least invitational strength, if the bidding continues)

suit bid = 5+ suit, 2-3 AK controls, more game oriented hands

cue bid = slam oriented hand, 4+ AK controls

3NT is natural, with stopper, less than 4 AK controls.

jump to suit games = one-suited hands, no features on the side

### 6.1.2 1♣ - (x) - pass - (pass/raise) - ?

There are three somewhat different situations:

a) 1♣-(1x)-pass-(pass)-?

b) 1♣-(x)-pass-(pass)-? (x ≥ 1NT)

c) 1♣-(x)-pass-(raise)-?

In a), it is possible that responder is hoping for a double, as he can't penalty-double him/herself. So the almost only option is a double. With length in the interference suit, it might be quite unlikely that responder does also have length, so it should be ok to pass, at least if the opponents looks reliable ! Other bids should be as in b) and c).

In b) and c) responder has had the chance to double for penalties (except in some cases in c, but a raise by LHO should make this alternative quite unlikely, and opener is probably looking at a void in these cases, and he will find the red card). The responders bids are as follows:

pass = balanced minimum, traditional 1NT opener  
 double = negative up to 3♦, the higher the level the more penalty oriented it is  
 suit = one-suiter, non forcing  
 jump in suit = one-suiter, GF  
 NT-bid = two-suiter with the lowest suits, 3NT to play  
 cue = two-suiter with highest + another suit. When the interference is above 3♦, cue is the only forcing bid, and hence it does not say anything about distribution.

### 6.1.3 1♣ - 1♦ - (x) - ?

If  $x \leq 2♠$  pass is the 19+ relay, double/redouble is penalty oriented, and all other bids are natural and nonforcing (Joppe is used after 1NT, Baron after 2NT). In the case of higher level interference ( $x > 2♠$ ) pass shows a minimum, and cue-bid as only forcing. Double is now more co-operative, more take-out than penalty. Of course, the the higher the level the more penalty oriented the double becomes (extreme-point is reached at 7NT...)

### 6.1.4 1♣ - positive - (x) - ?

The bids are as follows:

pass = relay

double = penalty oriented

cue bid = asks for a stopper, primary for 3NT, but could be interested in a slam in responders suit

3NT = to play if responder has < 15 hcpts, promises a stopper

game in responders suit = minimum, to play if responder has a minimum

other bids = extreme unbalanced hands without a fit and without defensive values. Suit bids are natural and not transfers, NT-bids (excluding 3NT) show a extreme two-suiter in the unbid suits, asks for preference from responder.

## 6.2 Interference over 1NT

In the case of direct interference (1NT-(x)-?) the Rubensohl convention is used if  $2♣ \leq x \leq 2♠$ . If 2NT shows both minors, one can still use Rubensohl as suggested in nt\_sys.pdf. In the case of higher level interference one lose the ability to make to-play and invitational bids, and all bids are natural and forcing. Double is very penalty oriented in all cases.

If the interference comes after responders  $2♣/\diamond/\heartsuit/\spadesuit$ /NT, assume that responder has the weakest alternative, and act accordingly.

When playing weak 1NT, opponents tend to (and should) double frequently, and thus an escape system is also useful. My favourite is DONT-escapes (similar to DONT-defense), which allows playing 1NT doubled when both hands are balanced (which is quite common, as openers hand is it for sure). DONT and other escape methods are discussed in nt\_sys.pdf.

## 6.3 Interference over limited openings

The ACBL has recommended that the following defence should be used against transfer openings (showing a major, but also applicable to the 1♠ opening)

- double = 13-15 hcpts balanced hand or a big hand without 3+ in unbid major. If the doubler makes a second double, it shows 19+ balanced. If advancer doubles, it is for takeout.

- completion of transfer = take-out double of suit shown

- Others: normal system, as if the suit was opened without transfer.

No special conventions are needed for direct interference, double is negative and 8+ (unlimited), cue is a strong relay, 1-level bids are natural and round forcing, new suits on the 2-level are natural, limited and non forcing. New suits on the three level are natural and game forcing.

If opponents interfere in fourth seat the situation is quite different. Consider the following situation, x being the interference bid:

transfer bid (=1D/H/S/2C) - relay - (x) - ?

We have lost valuable bidding space, but gained two extra bids, double and pass. In the cases of x being a bid between 2♣ and 2♠, the meaning of openers bids are



1. dbl = 3+ cards in x-suit, penalty-oriented, optional with only 3 cards (consider other bids especially with xxx or Axx)
2. pass = 1st relay response
3. step 1 = 2nd relay response and so on, 3NT last step

The relay responses are as follows

1. 4+ in a suit, starting from highest possible suit (excluding x-suit, opening suit and already denied suits)
2. exactly 3 in a suit, from above (excluding x and 4+ suits)
3. an unspecified void
4. no shortness (= 7222)
5. specific singleton

If there is not enough space we drop out bids in normal order, that is a) void and b) 3 card suits. That is, we use the same logic as usual, but x-suit drops out (length in x is shown with dbl) and 4+ suits are shown from above without caring about who becomes declarer.

Examples:

Opener: xx QJxxxx AKx xx

Relayer: AQT Axx xxxx AQx

Bidding: 1♦ - 1♥ - (2♣) - ?

Meanings: dbl = 3+♣, pass = 4+♠, 2♦ = 4+♦, 2♥ = 3♠, 2♠ = 3♦, 2NT = void, 3♣ = 2227, 3♦/3♥/3♠ = 1 card ♠/♦/♣.

Right bid is 2♠, 2NT is a relay, upon which 3♣ = a void, 3♦ = 2632 (right bid this time), 3♥/♠ = 1 ♠/♣. Relayer might even find the optimal contract of 3NT (all finesses probably fail, 9 tricks !).

Opener: Axx x KJTx Qxxxx

Relayer: xx AQT Axx AKJxx

Bidding: 1♠ - 2♣ - (2♠) - ?

Meanings: dbl = 3+♠, pass = 4♥, 6+♦, 2NT = 4+♣, 3♣ = 3♣ 3♥, 3♦ = 6+♦ and minimum, 3♥/3♠/3NT = 0-1 card ♠/♥/♣, 6+♦

Both 2NT and double are possible options for North in this case. With Axx in spades one should probably bid 2NT and show 4+♣ (KJx in spades would probably make double the right choice). The largest impact of the interference is in this case that the most likely minors 54+ is shown with 2NT instead of 2♦. Actually it would be much better to show this with a pass, but this would need a separate agreement.

Note also that there is no minimum bids after interference, so it might be difficult to not wind up in game. But if we don't have a fit, the opponents does not either have a fit, so we hopefully find the red card in these cases. Naturally we never let the opps play undoubled after a GIR.

There are a few special situations:

1. If the interference is at a low level, for example the extreme case 1D-1H-(1S), one might consider using original bids (pass replacing interference bid). There will be bids which very rarely will be used. In the above mentioned case, 1NT would show 4+ in spades.
2. If the interference bid is 1NT or 2NT, or some other artificial bid (1NT and 2NT can't be natural, as we have already promised the majority of the points). This should not be common, but some kind of Michaels seems possible. If two suits are shown one should drop out both suits from the relay steps. Double shows penalty-interest in at least one of the suits. For example, 1♦-1♥-(1NT=minors)-dbl-(2♦)-pass-(pass)-2♥= long ♣ but not long enough ♦. Openers pass naturally denies urge to double 2♦.
3. If the interference bid is 3♣ or higher, when it is no longer possible to show all possible 4+ suits and all possible short suits. Thus we resort to natural techniques in this case.

## 7 Preemptive bids

All opening bids from 2♦ and higher are free for any preemptive type of bids (e.g. strong 2NT is not needed). The bids suggested opening table has some advantages:

- The Ekren 2♦ opening includes 44 in majors and 9-10 hcpts
- The 2♥/♠ openings include 5332 and 9-10 hcpts.

One can't pass with such powerhouses, can one? It is also thought that the 2♥/♠ openings can be used with little restrictions, almost any distribution with 5+ in M may be ok. Furthermore, if one do not want to use the Ekren one can use 2♦ as an undisciplined weak two also.

### 7.1 Ekren 2♦

The Ekren 2♦-convention show 4-4, 5-4 or 5-5 in the majors. The responses are:

Responses to Ekren 2♦	
pass	4+♦, only 4♦ implies 2245
2,3,4 ♥/♠	to play
2NT	relay, at least invitational strength
3♣	6+♣, to play
3♦	to play in better Major
3 NT	to play

A quite common scenario after the pass is 2♦-pass-(dbl)-?, when pass = 2+♦ 2♥/♠ = 5 cards, rdbl = 5-5, 2NT=4414, 3♣ = 4405 (pass does almost always include a few clubs). Redouble in 2♦-pass-(dbl)-pass-(pass)-rdbl must show exactly a 2245-distribution. Another common situation is 2♦-(dbl)-?, when redouble asks for opener to bid his longer major, and the meaning of all other bids are unchanged.

Responses to 2♦-2NT	
3♣	minimum, 3♦asks, same responses as below
3♦	5-5
3♥	5♥and 4♠, 3♠ask for shortness, 3NT = 4522, 4m = shortness
3♠	5♠and 4♥, 4♣ask for shortness, responses two steps up
3 NT	4-4 and maximum (9-10 hcpt)
Responses to 2♦-2NT-3♣-3♦	
3♥	5♥ and 4♠, 3♠asks as above
3♠	5♠ and 4♥, 4♣asks as above
3 NT	4-4

Note that the hcpt-range is 2 steps higher if you hold only 4-4 in majors (i.e. 7-10), and 1 step lower if you hold a 5-5. The following is suggested by Chris Ryall:

Responses to 2♦-2NT according to Chris Ryall	
3♣	minimum (5-6 hcpt) with a 5 card M, 3♦asks which one
3♦	4-4 minimum (7-8 hcpt)
3♥	5♥and 4♠, maximum (7-8 hcpt)
3♠	5♠and 4♥, maximum (7-8 hcpt)
3 NT	4-4 and maximum (9-10 hcpt)
4♣/♦	5-5, maximum (6-7 hcpt), splinter
4♥	5-5 minimum (4-5 hcpt)
Responses to 2♦-2NT-3♣-3♦	
3♥	5♥ and 4♠
3♠	5♠ and 4♥

The hcpt ranges are as they would be in J-Moscito, as with 4-4 you need 11pt for a one level opening, with 5-4 9 hcpts is enough, and with 5-5 8 hcpts is quite enough.

### 7.2 Undisciplined 2♥/♠

The bids 2♥/♠ show 5-6 cards in opened suit, and they can be used with little restrictions. One may of course use any favorite conventions in connection with these openings. A simple and working approach is to use new suits as natural and forcing and 2NT as invitational or better Ogust-like relay.

Responses to 2♥/♠-2NT, simple version	
3♣	minimum, bad suit
3♦	minimum, good suit
3♥	maximum, bad suit
3♠	maximum, good suit
3NT	5332 distribution, 9–10 hcpt
4♣	5+♣
4♦	5+♦
4♥	majors 6-4

The last three responses (and hand types) can of course be removed from the convention (if considered too undisciplined). The meaning of 3♦ and 3♥ responses are sometimes interchanged, the meanings above should be better. Note also that a AKQxxx suit is impossible in J-Moscito, as such a suit is enough for a 1-level opening, and thus the original meaning of 3NT (showing such a suit) is obsolete.

In this simple system the number of cards in the opening suit is only taken into account when deciding if the suit is good or bad. The following suits are on the limit of being good, remove the Tens and they are bad:

AQTxx

KJTxxx

It is also possible to distinguish between 5 and 6 cards in opening suit, see for instance

<http://www.kentfeiler.com/bridge/system/catofcX.htm>. The whole package of conventions suggested in this document is very nice, and not too difficult to remember. The responses can be summarized as

Responses to 2♥/♠ according to Kent Feiler	
New Suit	Stopper/length-asking bid
2NT	Invitational or better raise (2+ support). Asks for suit length, suit quality, and hand quality
Jump Shift	Control Asking Bid (CAB)
Raises/games	To play

I have also made a shortened description of these conventions in my EHAA-version, which is described in ehaap.pdf.

### 7.3 The minor preempts 2NT/3♣/3♦

The idea with using 2NT as a preempt in either minor is that the direct 3-level bids than can promise 2 out of 3 top honors. This way partner can much easier decide whether 3NT is playable or not. After 2NT 3♣, 4♣, 4♦ and 5♣ are pass or correct bids, 3M is natural and forcing, and 3♦ is a forcing relay.

Responses to 2NT-3♦	
3♥	♣-suit
3♠	♦-suit

After this all bids in new suits are CABs.

## 8 Example Bidding Sequences

x	Axx	1♣	1♠	Heart suit; shorter spades; 9+ GF
QJxx	AKxx	1NT	2♣	Diamond suit, denies other 4-suits
AKJxx	xxxxx	2♦	2♥	5+ diamonds, 4 hearts
Axx	x	2♠	2NT	3 Spades
		3♣	3♥	1 club, last card shown from above
		4♣	4♠	5-controls (AK-ask; A=2,K=1)
		4NT	5♣	No ♦ control
		5♦	5NT	♥ and ♠ control;no ♣ control
		6♣	6♥	2nd ♥ control,no 2nd ♠ control
		7♦/♥	Pass	Must have AK-Hearts; A-Spades

If the hands would be exchanged, only the first two bids would be exchanged: 1♦-1♥-2♣-... Does this sound familiar: "If you wouldn't have opened with your lousy hand, I could have opened with my super-precision-strong-opening..." Using Moscito, it does not matter that much, same system and almost same bidding sequences are used in most cases!

Jx	KQ10x	1♣	1NT	NT-distribution 9+ GF
Qxx	Axx	2♣	2♥	4+ Spades
AKQx	10xxx	2♠	3♣	4 Diamonds 4 Spades
AQ10x	K9	3♦	3♥	3 hearts (from above in steps), 4342
		3♠	4♦	8 AKQ-points (3NT is 6 AKQ points)
		4♥	4NT	♠ control; no ♦ control
		5♣	5NT	♥, ♣ and 2nd Spade control; no 2nd Heart control
		6♦	Pass	♠ AQ+♥ K or ♠ KQ+♥ A, ♣K for sure

An exchange of hands would lose some precision, the auction would go: 1NT-2♣-2♠(=4+♠)-3♣-3♦(=4♦)-3♥=(AKQ ask)-identical sequence but one step lower (apart from the final contract).

In the following a possible source of errors (♥+♣-two-suiters after 1♣) is illustrated.

x	xxx	1♣	1♠	4+ ♥, 9+ GF
KQx	AJxx	1NT	2♦	4+ ♣ ("♥-bid" = impossible suit)
AQJxxx	K	2♥	2♠	4 ♥, 5+ ♣
Axx	KTxxx	2NT	3♣	3 ♠ (from above in steps)
		3♦	3♥	last card in ♦, 3415
		3♠	4♣	7 AKQ controls, 7 missing
		4♦	4NT	♣+♥control, no ♠ control
		6♦	pass	AKQ in spades + ♣Q missing

Note how nicely 6♣ is avoided.

The following is quite different:

Txxx	A9x	1♦	1♥	4+ ♥
AJxx	KQ	2NT	4♣	♦-marmic, 4♣is break-out, natural and invitational
K	J9x	5♣	pass	
AJxx	Qxxxx	pass		

If we remove a point from relayer, his/her first bid should be 2♣, which should be raised to 3 by opener, possibly followed by 3NT/5♣ by responder. If a point is also removed from opener the bidding would probably stop in 2♣ (unless opps bid ♦, which they probably would).

Next one is from the Composite Club advertisement, and illustrates slam bidding after one negative response to 1♣:

AQJTx	Kxx	1♣	1♦	negative, 0-8 hcpt
Axx	KQxxxx	1♥	2♦	1♥= 19+, 2♦ = 4+♥, less than 4 ♦, 6-8 hcpt
Axx	xx	2♥	3♣	3♠, 6+♥
Ax	xx	3♦	3♥	3622 exactly
		3♠	4♦	5 AKQ controls
		4♥	5♣	♥ and ♠ control, no ♦ control
		5♦	5♥	no ♣ control
		7NT	pass	The last control must be in ♥, 14 tricks !

A slam-technique challenge as reported by Kari Koistinen in Bridgelehti 2/02:

Ax	KTxx	1♣	1♠	4+♥, 9+hcpt
Jx	AKQTx	1NT	2♥	4+♠, 5+♥
AQT	xxx	2♠	3♣	3♦, exactly 4♠ (2NT = 55+, canape impossible)
AKQxxx	x	3♦	3♠	1♣, last card shown in steps from above
		4♣	4♠	8 AKQ-controls
		4NT	5♦	♥+♠ control, no ♦ control
		5♥	5♠	no ♣ control
		5NT	6♦	2nd ♥ control, no 2nd ♠ control
		7♥	pass	AKQ in ♥ + K in ♠ is the only possible control-combination

Note that this illustrates a weakness in J-Moscito: After a 1♣ opening does the responder with 4+♠ and a longer ♥ (and 9+ strength) always bid both majors first !

Earlier the 6331 distributions with 6 in a major were a significant weak spot, which has now been remedied by the 6331-convention:

KQx	x	1♣	1♠	4+♥, 9+hcpt
KJxx	AQxxxx	1NT	3♥	1633 exactly
AQx	KJx	3♠	4♥	9 AKQ-controls
Jxx	Axx	pass		

The length in the minors would without the 6331-convention be known to be 1-3, and opener wouldn't be sure that there were enough losers in the minors so that the slam is out of the question.

## 9 Quiz

What does the following bidding sequences mean ?

- 1♣-1♦-1♥-1♠-1NT-2♣-2♦-2♥-2♠
- 1♦-1♥-1♠-1NT-2♣-2♦-3♣
- 1♠-2♣-2♦-2♥-2♠-2NT-3♣-3♦-3♠-4♣-4NT
- 1♣-2♦-2♥-2NT-3♣-3♦-3♥-3♠-4♣-4♠-4NT-5♥-5♠-5NT
- 1♣-1NT-2♣-2♦-2♥-3♠-4♣-4♥-4♠-5NT
- 1♥-1♠-1NT-2♣-2♦-2♥-3♥-3♠-4♣-4♦-4NT-5♣-5♦-5♥-5♠-6♦

## 9.1 Answers

1.  $1\clubsuit-1\diamond-1\heartsuit-1\spadesuit-1NT-2\clubsuit-2\diamond-2\heartsuit-2\spadesuit$  (can't continue any further): Responder has 0-3 hcpts (the second negative  $1\spadesuit$  show 0-5, and  $2\heartsuit$  is a sign off) with at least 4-4 in majors. Opener has 19-22 and a balanced distribution without a 4 card major, and he prefer  $\spadesuit$  to  $\heartsuit$ .
2.  $1\diamond-1\heartsuit-1\spadesuit-1NT-2\clubsuit-2\diamond-3\clubsuit$ : Opener shows  $4+\heartsuit$ ,  $1\heartsuit$ =relay,  $1\spadesuit$ = $4+\clubsuit$ ,  $1NT$ =misfit break-out,  $2\clubsuit$ = $5+\clubsuit$ ,  $2\diamond$ = probably 4252,  $3\clubsuit$ = $6+\clubsuit$ . All bids after a relay break-out are natural (including the break-out itself)
3.  $1\spadesuit-2\clubsuit-2\diamond-2\heartsuit-2\spadesuit-2NT-3\clubsuit-3\diamond-3\heartsuit-3NT-4\clubsuit-4NT$ : Opener shows  $4+$  in  $\diamond$ ,  $54+$  in  $\diamond+\clubsuit$ ,  $4\diamond$  and  $5+\clubsuit$ ,  $3\spadesuit$ ,  $1\heartsuit$ , 6 AKQ controls,  $\clubsuit + \diamond + \spadesuit$  control but no  $\heartsuit$  control.
4.  $1\clubsuit-2\diamond-2\heartsuit-2NT-3\clubsuit-3\diamond-3\spadesuit-3NT-4\clubsuit-4\spadesuit-4NT-5\heartsuit-5\spadesuit-5NT$ : Responder shows  $9+$ hcpts and  $6+\clubsuit$ ,  $3\heartsuit$ ,  $3\diamond$   $7\clubsuit$  and thus  $0\spadesuit$ , 8 AKQ controls, controls in  $\clubsuit$  and  $\heartsuit$  but not in  $\diamond$ , no 2nd control in  $\clubsuit$ .
5.  $1\clubsuit-1NT-2\clubsuit-2\diamond-2\heartsuit-3\spadesuit-4\clubsuit-4\heartsuit-4\spadesuit-5NT$ : Responder shows  $9+$ hcpts and NT-distribution,  $4+\heartsuit$ , 2533 exactly, 7 AKQ-controls, controls in  $\heartsuit+\diamond+\clubsuit+\spadesuit$ +2nd control in  $\heartsuit$  and no 2nd control in  $\diamond$
6.  $1\heartsuit-1\spadesuit-1NT-2\clubsuit-2\diamond-2\heartsuit-3\heartsuit-3\spadesuit-4\clubsuit-4\diamond-4NT-5\clubsuit-5\diamond-5\heartsuit-5\spadesuit-6\diamond$ : Opener has  $4+\spadesuit$ ,  $4+\clubsuit$ ,  $5+\clubsuit$  and  $4\spadesuit$ , 4126 exactly, 6 AKQ controls, control in  $\clubsuit$  and  $\spadesuit$  but not in  $\diamond$ , no control in  $\heartsuit$ , no 2nd  $\clubsuit$  control, no 2nd  $\spadesuit$  control (Ace in  $\clubsuit$  and  $\spadesuit$  resp.)

## 10 Checkup list for a new partnership

Although J-Moscito is supposed to be a well defined system, there are a number of issues that can be alternatively treated, here is a list of such things:

1. Use of AK-, AKQ-controls or both?
2. Base levels for control responses (5 or 6 after pos. resp to  $1\clubsuit$ ), adjustments for 10 cards in longest suits?
3. Reverse relays on or off? Natural reverse relays makes life easy, I strongly recommend them.
4. 6331-convention on or off?
5. Prioritize voids higher than 3 card suits after showing 55+ or 64+, or not (the latter being the case after showing 54+)?
6. Alternatives in Joppe-NT for  $2\spadesuit-3\spadesuit$ ? After  $1\clubsuit-1NT$ ? 4441 allowed in  $1\clubsuit-1\diamond-1\heartsuit-1NT$ ?
7. Control Asking Bids (CABs) on or off (in situations where ordinary relays are off, due to the bidding level)?
8.  $2\diamond$  natural undisciplined or Ekren? Or any other convention?
9. Feilers system or simple system after undisciplined twos?
10. Ryalls system or traditional system after Ekren?
11. Which semi-positive two-suiter bids after  $1\clubsuit$ ?