## J-Moscito

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Last Revised: April 25, 2003, updates are found on http://www.abo.fi/~jboling/bridge/j_moscito.pdf 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 $1 \boldsymbol{\&}$. The openings $1 \diamond-2 \boldsymbol{\infty}$ then all show $9-14 \mathrm{hcpts}$, 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 the only forcing response. 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 not as complicated as the 2001 version, but something in between. The shape relay responses are basically natural transfer bids, thus increasing the possibility to get the relayer 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 openers hand. This serves the same purpose as the shape relays, the declares hand becomes unknown in most cases. Furthermore, all other bids are invitational or passable.
The goal with the relays is to describe the shape of one hand under 3 NT , 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, 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 longer (or if equal in length, the cheaper) major. On the first relay the short suit is shown in steps from above, starting with $2 \boldsymbol{d}$ or 2 NT (depending on if it was the cheaper major or not). Due to the limited playing strength of 4441 hands, it is recommended that 11 hcpts are needed for opening with such a hand, as with NT-hands.
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. And that some other space-saving conventions are also used. For example you never show $5+$ in a suit by bidding (or actually transferring to) the suit again (as it would only reveal the location of only one card), this is always done indirectly by denying length in the other suits.

As in Moscito 2001, one always show the longer of two $4+$ majors first. The $1 \boldsymbol{1}$ opening, showing $4+\diamond$, may include a longer club (but $6-4: \mathrm{s}$ in $\boldsymbol{\phi}-\diamond$ may now be opened with $2 \boldsymbol{\phi}$ ). The $2 \boldsymbol{\phi}$ opening then shows $6+\boldsymbol{\infty}$, possibly including a four card side suit.
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, sometimes any 4432, sometimes exactly 4ゅ, 40, $3 \triangleleft$ and 2ゅ. |
| 55+ | Two-suiter with two 5+ suits |
| Marmic | three suiter, 4411 or 5440 distributions |
| 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. Note that $1 \boldsymbol{\%}$ is the most common opening! The openings above $2 \boldsymbol{\%}$ are free for any preferred preemptive conventions, the ones preferred by the author are also included.

| J-Moscito Opening Bids, 1st and 2nd seat |  |  | relay | frequency |
| :---: | :---: | :---: | :---: | :---: |
| 1\% | 15+ | Any shape |  | 13.7 \% |
| $1 \diamond$ | 9-14 | $4+$ Hearts, shorter or equal spades, longer m possible | 10 | $9.5 \%$ |
| 10 | 9-14 | $4+$ Spades, shorter hearts, longer m possible | $1 /$ | 8.6 \% |
| 14 | 9-14 | $4+\diamond 5 \boldsymbol{6}+4 \diamond$ and $6+\diamond+4 \mathrm{M}$ possible | 24 | 4.7 \% |
| 1NT | 11-14 | Balanced, standard 4333, 4432 or 5332, 5 card M possible! |  | 13.4\% |
| 2\% | 9-14 | $6+\boldsymbol{¢}$, at most 4-card side suit | $2 \diamond$ | 2.4\% |
| $2 \diamond$ | 5-10 | Ekren, Majors 4-4, 5-4 or 5-5 | 2NT | 3.2 \% |
| 20 | 5-10 | 5+ Hearts | 2NT | 4.6 \% |
| 2 | 5-10 | $5+$ Spades | 2NT | 4.6 \% |
| 2NT |  | Weak preempt in a minor |  | 0.54 \% |
| $3 \boldsymbol{4} / \diamond$ |  | Preempt promising 2 of 3 top honors |  | 0.22 \% |
| $30 / \sim$ |  | 4-3-2 preempts |  |  |
| 3NT |  | Minor suit preempt | $4 \diamond$ |  |
| $4 \boldsymbol{\%} / \diamond$ |  | Namyats | $4 \diamond / 4 \bigcirc$ |  |
| 40/巾 |  | 4-3-2 preempts |  |  |
| 4NT |  | $8+$ minor, $9+$ tricks, not many losers, too slammish for 3NT | $5 \diamond$ |  |

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

| J-Moscito Opening Bids, 3rd and 4th seat |  |  | relay |
| :---: | :---: | :---: | :---: |
| 1\% | 17+ | Any shape |  |
| $1 \diamond$ | 11-16 | 4+Diamonds |  |
| 10 | 11-16 | 4+Hearts |  |
| 14 | 11-16 | 4+Spades |  |
| 1 NT | 13-16 | Balanced, standard 4333, 4432 or 5332, 5 card M possible! |  |
| $2 \%$ | 11-16 | $5+\boldsymbol{\%}$ and 4 M , or $6+\boldsymbol{\%}$ | $2 \diamond$ |
| $2 \diamond$ | 0-12 | Ekren, Majors 4-4, 5-4 or 5-5 |  |
| 20 | 0-12 | 5+ Hearts |  |
| 2 | 0-12 | $5+$ Spades |  |
| 2NT | 0-12 | Weak preempt in a minor |  |
| $3 \mathbf{0} / \diamond$ |  | 4-3-2 preempts |  |
| $30 / 4$ |  | 4-3-2 preempts |  |
| 3NT |  | Minor suit preempt |  |
| $4 \boldsymbol{\%} / \diamond$ |  | Namyats |  |
| 40/ |  | 4-3-2 preempts |  |
| 4NT |  | $8+$ minor, $9+$ tricks, not many losers, too slammish 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.
But obviously one may eliminate a set of conventions by using $2 \diamond$ as a weak 2 , and use the same conventions as after the 2 M 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 allowed to improvise much more.
Based on strength, hands are divided into three groups: strong hands (shown with 1\&), limited opening hands $(1 \diamond-2 \boldsymbol{s})$, and sub-opening hands $(2 \diamond-)$. At the moment, hand evaluation is done based on hcp ( $\mathrm{A}=4, \mathrm{~K}=3, \mathrm{D}=2, \mathrm{~J}=1$ ) 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!

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 $1 \boldsymbol{\%}$ 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, $\mathrm{A}=3, \mathrm{~K}=2, \mathrm{Q}=1$
- AK-controls, $\mathrm{A}=2, \mathrm{~K}=1$

After a limited opening or any response to $1 \boldsymbol{\$}$ 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 ( $9+\mathrm{hcpts}$ ) to $1 \boldsymbol{\%}$ which guarantee 6 AKQ and 3 AK controls. It is possible to hold less controls than the base level after a limited opening, but it is unlikely. With QJ in all suits ( $12 \mathrm{hcp}, 4 \mathrm{AKQ}$ controls, c13=6, 0 AK controls) you should open (most likely 1 NT ), and hope that partner is satisfied with a game. But you must initially make a negative response to $1 \boldsymbol{1} \boldsymbol{\%}$ with this holding, it serves no purpose to lie about controls after a $1 \%$ opening. Note also that if you add a King, you sum up to 15 hcp, but to only 8 c 13 . So you should not open 1\& with this holding. Queens and Jacks are 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 $1 \boldsymbol{\%}$ opening you should not lie about distribution.

## 4 Responses to limited/strong openings

In this section, the initial responses to the limited or strong openings (1中-2中) are described. In some cases one use relay responses directly, which follow the rules presented under the next section. Recall that all suit openings deny standard NT distributions.

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

Below a table with the different possible responses to $1 \diamond$ and $1 \checkmark$, 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 $1 \diamond / \bigcirc$ |  | $1 \diamond$ | 10 |
| :---: | :---: | :---: | :---: |
| 10/ | $12+$ hcpts (or 11+ with a fit) Game Interest Relay (=GIR) | 29.5 \% | 29.7 \% |
| 1/ | Natural, round forcing, (after $1 \diamond$, implies often short $\odot$ ) | 16.2 \% | - |
| 1NT | Natural NF, 6-11 hcpts | 11.2 \% | 27.8 \% |
| 2 in new suit | Natural NF, 5+ suit, 8-11 hcpts | 3.4 \% | 5.3/6.2\% |
| 2^ | $6+$ suit (after $1 \diamond$ ), 0-6 hcpt | 1.5 \% | - |
| 2 NT | a) mini-splinter in other Major, 30-3M | 1.1 \% | 1.0 \% |
|  | b) sign off in a minor, 0-6 hcpts, 3 ¢-pass $/ 3 \diamond$ | $2^{*} 1.3 \%$ | $2^{*} 1.3 \%$ |
| $3 \boldsymbol{\%} / \diamond$ | 8-11 hcpts mini-splinter | 1.3 \% | 1.3 \% |
| 1-raise | $7-11$ hcpts $3+$ constructive raise | 18.3 \% | 18.1 \% |
| 2-raise | Preemptive raise with $4+$ fit | 7.5 \% | 7.3 \% |
| 3-raise | to play | - |  |
| $3 \mathrm{OM} / 4 \boldsymbol{4} / 4 \diamond$ | splinter with 12-15 hcpts | 0.7/0.8\% | 0.6/0.8\% |
| pass | $0-5(6)$ hcpts, $65 / 73 \%$ likelihood for $4+$ cards in opening suit | 11.5 \% | 13.1 \% |

Passing a transfer bid without length in transfer suit might be a problem of course. I have now introduced sign-off bids in all suits (you have to pass on a 10 opening with hearts), and also improved on the accuracy of the mini-splinters (earlier all went through 2 NT ). The current 2 NT response demands a $3 \boldsymbol{\%}$ by opener, on which responder passes or corrects to $3 \diamond$ with a sign off hand, or bids 3 M with a mini-splinter in the other major. The sequence $1 \Omega-2$ NT- $3 \boldsymbol{\rho}-3 \bigcirc$ could of course be assigned some meaning also, support + void in hearts maybe ?
The splinter responses should be limited as suggested, as in theses 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 relay responses and follow-ups are discussed under a separate section.
There are a few special situations which are not that uncommon, which need some clarifications:
$1 \diamond-1 \boldsymbol{\uparrow}-?: 1 \mathrm{NT}=4 \diamond$, longer minor (possibly $\boldsymbol{\uparrow}$-marmic), $2 \boldsymbol{\downarrow} / \diamond=5+\odot, 4+$ suit $2 \circlearrowleft=6+\odot, 2 \boldsymbol{\phi}=4+\boldsymbol{\uparrow}, 2 \mathrm{NT}-$ $3 \boldsymbol{\phi}=$ same as one level lower but super-maximum.
$1 \diamond / \varrho-1$ NT-? : 2 in suit $=$ as above, $2 \mathrm{NT}=4 \mathrm{M}$, longer minor or marmic, maximum, 3 in suit $=$ as above
$1 \diamond-2 \boldsymbol{\phi} / \diamond-?: 2 \mathrm{NT}=4 \mathrm{M}, 4+$ other minor (could be $\boldsymbol{\phi} / \diamond$-marmic), $3 \mathrm{NT}=4 \mathrm{M}$, 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 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 side suits not denied when opening 14 or $2 \boldsymbol{q}$. Actually there are three types of hands which are opened with $1 \boldsymbol{\phi}$ and $2 \boldsymbol{\&}$ :

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 and better)

The two first hands with a $6+$ minor are opened with $1 \boldsymbol{\phi}$ if the minor is diamonds, and with $2 \boldsymbol{\phi}$ if it is clubs. Two suited hands with minors are opened $1 \boldsymbol{\uparrow}$. This means that $1 \boldsymbol{\uparrow}$ promise $4+\diamond$, minors at least $54(\boldsymbol{\phi}$ can be longer) or $6+\diamond$.
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.

| Responses to 14 |  |  |
| :---: | :---: | :---: |
| 1NT |  | 6-11 hcpts, natural NF |
| $2 \%$ |  | 12+ hcpts GIR |
| $2 \diamond$ |  | $4-7$ hcpts, $3+\diamond$, to play |
| $2 \mathrm{~N} / \mathrm{A}$ |  | $8-11 \mathrm{hcpts} 5+$ suits |
| 2NT | pass | Bid your better minor, to play or a $55+$ weak |
|  | $3 \diamond / \mathrm{NT}$ | $55+$ in $\boldsymbol{6}+\bigcirc, \mathrm{GF}$ |
|  | 30 | $55+$ in $\bigcirc+\boldsymbol{¢}, \mathrm{GF}$ |
|  | $3 \boldsymbol{N}$ | $55+$ in $\boldsymbol{\phi}+\boldsymbol{\phi}, \mathrm{GF}$ |
| $3 \%$ |  | $8-11 \mathrm{hcpts}, 5+\boldsymbol{\%}$, |
| $3 \diamond$ |  | $4+\diamond, 8-11 \mathrm{hcpts}$ |
| $30 / \uparrow$ |  | $7+$ suits, sets trumps, GF |


| Responses to 2\% |  |  |
| :---: | :---: | :---: |
| $2 \diamond$ |  | 12+ hcpts GIR |
| $20 / \sim$ |  | 8-11 hcpts $5+$ suits |
| 2NT | pass | transfer to $3 \boldsymbol{\$}$, responders bids mean preemptive raise |
|  | $3 \diamond$ | $55+$ in $\diamond+\bigcirc$, GF |
|  | 30 | $55+$ in $\bigcirc+\boldsymbol{\oplus}, \mathrm{GF}$ |
|  | 3 ¢ | $55+$ in $\diamond+\boldsymbol{巾}$, GF |
| $3 \%$ |  | 8-11 hcpts 3+ support |
| $3 \diamond$ |  | 8-11 hcpts $5+$ suit |
| $3 \bigcirc / \square$ |  | $7+$ suits, sets trumps, GF |

Compared with the earlier version it is now always possible to stop at the 2-level in both minors. I have also introduced a response showing a minimum and a $6+$ opening suit, as after major openings.

### 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 bid used is $2 \diamond$ after the $2 \boldsymbol{\phi}$ opening. The responses to $2 \diamond$ are $2 \circlearrowleft / \boldsymbol{\phi}=4$ card suit, $2 \mathrm{NT}=$ $6+$ in $\boldsymbol{\AA}$, maximum, $3 \mathrm{C}=6+$ in $\boldsymbol{\AA}$, minimum, $3 \diamond / \odot / \boldsymbol{\wedge}=6-4$, maximum, $3 \mathrm{NT}=6+\operatorname{solid} \boldsymbol{\varphi}$.

### 4.3 Responses to $1 \%$

Responses to $1 \boldsymbol{\$}$ are either negative ( $0-8 \mathrm{hcpts}$ ), shapely semi-positive ( $5-8 \mathrm{hcpts}$ ) or positive ( $9+\mathrm{hcpts}$ ). All positive responses are GF. In the current version $2 \mathbf{\$}-2 \bigcirc$ are used for positive minor hands, and $2 \boldsymbol{\$}$ and up are semipositives.

| Responses to 1\% |  |  | frequency |
| :---: | :---: | :---: | :---: |
| $1 \diamond$ | 0-8 | 1st Negative | 56.2 \% |
| 10 | 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\% |
| $2 \diamond$ | 9+ | 6+\% (No 4 M) | 1.25\% |
| 20 | 9+ | $6+\diamond$ (No 4 M $)$ | 1.25\% |
| 2¢ | 5-8 | $5+\boldsymbol{\%}$ and 5+ another suit | 1.15 \% |
| 2NT | 5-8 | The remaining 55+ two-suiters | 1.15 \% |
| 3-Any | 5-8 | $7+$ suit, $5+$ hpcts in suit, invitational values | 0.41\% |
| 3NT |  | Undefined at the moment |  |
| $4 \% / \diamond$ |  | Namyats-like, $7+$ suit, $3 / 4$ top honors |  |

It is possible that two-suited semi-positives should promise a major ( $\boldsymbol{\boldsymbol { \wedge }}=\Omega+$ other, $2 \mathrm{NT}=\boldsymbol{\phi}+$ minor $)$, as 4 M is the most likely contract in these situations. Another useful alternative could be $2 \boldsymbol{\uparrow}=$ major + minor, 2 NT $=$ majors or minors. This might allow opener to always select a major when responder has one, responses to $1 \boldsymbol{\infty}-2 \mathrm{~N}: 2 \mathrm{NT}=\mathrm{GF}$ relay, $3 \boldsymbol{\%}=$ pass or correct to $3 \diamond, 3 \diamond=$ bid your major, $3 \circlearrowleft$ pass or correct to $3 \boldsymbol{\uparrow}, 3 \boldsymbol{\$}=$ pass or correct to $4 \checkmark$. Responses to $1 \boldsymbol{\&}-2 \mathrm{NT}: 3 \boldsymbol{\phi} / \diamond=$ minor preference, $3 \circlearrowleft=$ relay.
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 AKxxxxx the suit might run against xx of course, while with AKJxxxx responder should probably make a positive response, and describe it (on demand) 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 $1 \diamond$. The responses $4 \boldsymbol{\phi} / \diamond$ 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 |
| :---: | :--- | :--- | :--- |
| $2 \boldsymbol{5}$ | $5-8$ | $55+$ 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 $\bigcirc+$ |  |  | frequency |
| :---: | :---: | :---: | :---: |
| 20/ | 5-8 | singlesuiter | - |
| 2NT | 5-8 | two-suiter not including ¢ (same as my version) | - \% |
| $3 \boldsymbol{\%} / \diamond$ | 5-8 | singlesuiter | -\% |
| $30 / \sim$ | 5-8 | two-suiter M+\% | - \% |

Good things are the ability to pass or invite on 2 M , less good thing is the inability to show $55+$ in the minors. But the latter should actually not be that important. And $2 \Omega$ is also used up, compared with my version.

### 4.3.1 Bidding after a negative response

After $1 \boldsymbol{\$}-1 \diamond$ relayer's bids are as follows:
$10=$ Strong relay $19+$ hcpts with $1 \boldsymbol{\uparrow}=0-52$ nd negative
Other responses are 6-8 natural transfers and GF
$1 \mathrm{NT}=15-18$ NT distribution, Joppe NT is used
$1 \boldsymbol{\uparrow} / 2 \boldsymbol{\$} / \diamond / \bigcirc=15-185+$ suits, non-forcing.
$2 \boldsymbol{\uparrow}-3 \boldsymbol{\uparrow}=$ same as after 1中 opening, two-suiters may be GF, one-suiters passable. $3 \mathrm{NT}=$ to play, possibly with a solid minor

| Responses to 1\%-1 $\diamond-1 \checkmark$ |  |  |
| :---: | :---: | :---: |
| 1/ | 0-5 | 2nd Negative, others are GF |
| 1NT | 6-8 | NT distribution (+ all 4441:s) |
| 2\% | 6-8 | $4+\diamond$ (nothing about Majors !) |
| $2 \diamond$ | 6-8 | $4+8$ |
| 20 | 6-8 | $54+$ with $\mathbf{p}_{+\infty}$ |
| 2- | 6-8 | 6+\% |
| 2NT | 6-8 | A 5440, 3¢asks for void |
| 3\% | 6-8 | $7+\boldsymbol{巾}$, none of the others, too bad suit for semi-positive bid |
| $3 \diamond$ | 6-8 | 7222 or 6223 |
| 30 | 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 different from direct responses to 1\%. The 4441-distributions are included in the 1NT response, see section 4.4. Note that opener may thus no longer assume 2-cards in all suits. 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 $1 \boldsymbol{\ell}-1 \diamond-1 \circlearrowleft-1 N T-3 N T$.
All 5440 -distributions are shown with 2 NT , 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 $1 \$-1 \diamond-1 \bigcirc$. 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 $1 \boldsymbol{\wp}-1 \diamond-1 \diamond-2 \boldsymbol{\wp}-2 \diamond-$ 2 NT and $1 \boldsymbol{\varrho}-1 \diamond-1 \circlearrowleft-2 \diamond-2 \bigcirc-2 \mathrm{NT}$ ( 54 in minors and majors resp.), as there is only 4 steps available ( 5 would be ok). This mean that the four steps are $3 \diamond=$ canape, $3 \circlearrowleft=5422,3 \boldsymbol{\top} / \mathrm{NT}=$ shortness. The loss of showing 3 -card suits and $55+$ is not too big, but there is not enough space for telling canape and shortness below 3NT. Actually $3 \bigcirc$ in $\ldots-2$ NT- $3 ¢-3 \diamond-3 \bigcirc$ should be a control relay and not a shape relay, as it is not listed as an exception to the rule that relays from $3 \bigcirc$ 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 3 NT . One would have to use openers $4 \checkmark$ as to play, and only allow AKQ-ask $(4 \diamond)$ after the $4 \boldsymbol{\phi}$ 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 245431 :s, and similarly $1 / 12$ of the 6421 :s and $1 / 12$ of the $6430: \mathrm{s}$, all together about $1.6 \%$ of all second-positive hands, corresponding to about 1 of every 7000 deal (taking into account that opener must have $19+$ hcpts).
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 $3 \boldsymbol{\infty}$ (or by bidding $3 \boldsymbol{\%}$ directly, as with $\boldsymbol{\uparrow}$ as long suit)! The $3 \diamond$-relay asks then for short suit after this. Note that the 7222 -distribution is excluded from the $3 \boldsymbol{Q}$-bid, thus first step $(=3 \Omega)$ shows highest suit short. The 7222 distribution falls naturally under the $3 \diamond$ (=no shortness) bid.
The responses to a relay after one negative response and one positive response becomes like this:

 $\boldsymbol{\&}$ respectively being the long suit).
After 2nd Negative relayer's bids are:
$1 \mathrm{NT}=19-22$ NT distribution, Joppe NT is used
$2 \boldsymbol{\phi}=$ Strong relay $23+$ hcpts with $2 \diamond=0-2$ 3rd negative, others natural!
Other bids are 19-22, natural and non-forcing.

| Responses to 1\%-1 $\downarrow$ - $1 \bigcirc-1$ - $2 \%$ |  |  |
| :---: | :---: | :---: |
| $2 \diamond$ | 0-2 | 3rd negative, others GF |
| 20 | 3-5 | $5+\bigcirc$ |
| 2- | 3-5 | $5+$ ¢ |
| 2NT | 3-5 | NT distribution (3\% is Baron) |
| 3\% | 3-5 | $5+\%$ |
| $3 \diamond$ | 3-5 | $5+\diamond$ |

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: lowest NT $=$ guarded King, 1st step $=$ no control, 2 nd step $=$ singelton, 3 rd step $=$ Ace, 4 th step $=$ void .
After 3rd Negative, relayer may GF with the super strong relay $2 \triangle$ and responder is forced to describe his hand, even with a Yarborough. Other bids are natural and virtually GF.

| Responses on 1\%-1 $\diamond-1 \bigcirc-1 \pitchfork-2 \%-2 \checkmark-2 \bigcirc$ |  |  |
| :---: | :---: | :---: |
| 2^ | 0-2 | $5+\boldsymbol{p}$ |
| 2NT | 0-2 | NT distribution (3¢ is Baron) |
| 3\% | 0-2 | $5+\boldsymbol{6}$ |
| $3 \diamond$ | 0-2 | $5+\diamond$ |
| 30 | 0-2 | $5+\bigcirc$ |

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: 1 st step $=2$ or more cards, 2 nd step $=$ singelton, 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:
$1 \diamond=0-61$ st negative (and corresp. HCP adjustment for later bids)
$10+=7-9 \mathrm{GF}(1 \mathrm{NT}=7-10 \mathrm{hcp})$
The control base counts (see section 5.2 ) are 3 and 1 respectively for $7-9 \mathrm{hcpts}$ (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 (i.e $1 \mathrm{NT}, 1 \boldsymbol{1}-1 \diamond-1 \mathrm{NT}, 1 \boldsymbol{6}-1 \diamond-1 \diamond-1 \boldsymbol{\wedge}-1 \mathrm{NT}$, in all cases when opener show NT-distribution on the 1 level).
2. When NT distribution is revealed at the 2 level (i.e. $1 \boldsymbol{4}-1 \diamond-1 \circlearrowleft-1 \boldsymbol{-}$ or $1 \boldsymbol{\aleph}-1 \diamond-1 \circlearrowleft-1 \diamond-2 \boldsymbol{\varrho}-2 \diamond-2 \circlearrowleft-2 N T$ ) Baron $3 \boldsymbol{\%}$ (also described in nt_sys.pdf) is used.
3. When GF is established (i.e. $1 \boldsymbol{\rho}-1 \mathrm{NT}$ and $1 \boldsymbol{\ell}-1 \diamond-1 \circlearrowleft-1 \mathrm{NT}$, when responder show NT-distribution on the 1 level after a $1 \boldsymbol{\%}$ opening) $2 \boldsymbol{\%}$ 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 thus it is better that the unknown hand becomes declarer. The alternative meanings for the bids $2 \boldsymbol{\sim}$ are in this case clearly better than the original meanings. This means that $2 \boldsymbol{\sim}$ and 2 NT 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 $3 \diamond$, but it is also the lowest possible control relay. That is, all relays above $3 \diamond$ are control relays, and all relays below $3 \diamond$ are always shape relays. The meaning of $3 \diamond$ relay depends on the situation, in the GF 1 NT 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- $2 \boldsymbol{6}-2 \mathrm{M}-2 \mathrm{NT}-3 \boldsymbol{\$}-3 \diamond$ the last bid is a control relay, as it is not defined as a shape relay.
After Baron $3 \boldsymbol{\%}$ it is probably not beneficial to use any control relays, standard natural techniques (standard cue bids or CABs, RKCB for sure).

## 5 Relays

The following is a 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, 3 NT is always to play, 1 NT is usually natural and non forcing (if GF is not already established) and $1 \boldsymbol{\$}$ 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 4 NT and 5 NT are to play. Reverse relays are, if used, exceptions to this rule. Reverse relays occur only after positive responses to $1 \boldsymbol{\ell}$, and promise shortness in responders suit.
3. All relay auctions are GF (even after a break-out) with two exceptions:
(a) After 1\% Opening: Break-out after a negative response.
(b) Other Openings: Break-out after only one relay.
4. There are two types of relays: shape relays and control relays. The last shape relay allowed is $3 \diamond$, with two exceptions occurring only with two-suited hands: 1 ) when $3 \diamond$ shows a unspecified void when $3 \bigcirc$ ask for location of the void. 2) When $3 \diamond$ shows a 3 -card suit, and $3 \circlearrowleft$ asks for the last card (i.e. separate between 5431 and 6430). All relays from $3 \circlearrowleft$ and up to 6 are control relays.

### 5.1 Shape Responses

This section concerns mainly unbalanced hands, NT-distributions are shown by lowest NT-bid in all situations (e.g. 1NT and $1 \boldsymbol{\%}-1 \mathrm{NT}$ ), responses to 1 NT are described under section 4.4. Failing to bid lowest NT at first possible instance shows an unbalanced pattern. The objective with shape responses is to get as much of your shape across to the relayer as possible, so that your last response finishes somewhere in the range $3 \diamond$ to 3 NT .

1. In relay bidding, the motivating principle is space-saving. That is, responder should try to make the cheapest bid available which is consistent with the hand pattern. In fact, failing to make the cheapest bid, implies that this bid is incompatible with the hand pattern held. Opening bids do not follow this principle strictly, as one always start with the longer major, and minor bids can include 4-card majors. And NT-distributions are actually exceptions to this rule also, as one show these with NT-bids, without denying even 5 -card majors.
2. The general principle is to first show/deny $4+$ card suits, then exactly three card suits, and then switch to showing/denying shortness. This means that two cards in a suit are never shown directly (there is one exception in the NT-systems, 5332 is shown by bidding the short suit), only indirectly by denying three cards and shortness ! This can also mean that additional length in the primary suit is seldom directly shown, in most cases this is shown by denying length in some suits and/or showing shortness in other suits.
3. After showing a $4+$ major and denying a two-suiter by jumping over the three first steps, one must have a one- or three suiter, which are shown as follows. This applies only after limited major openings and positive

(a) step 4 (= raise of own bid) shows a $6+$ singlesuiter, and also non minimum after limited openings.
(b) Only after limited major openings the next step ( 2 M ) shows a $6+$ singlesuiter with minimal strength. This allows stopping in 2 M , when found necessary.
(c) The next three steps show three suiters (marmics), identifying the short suit in steps from above, that is $\mathrm{OM}-\diamond-\boldsymbol{\&}$. The bid showing a OM-marmic is $2 \boldsymbol{\downarrow}$ after initially showing the cheaper major, and 2NT otherwise.
(d) The following three steps show 6331-distributions which without this convention become inaccurately described in J-Moscito. Again, one identify the short suit in steps in descending order, using the bids $3 \diamond / \circlearrowleft / \uparrow$ or $3 \circlearrowleft / \uparrow / N T$ depending on if one started with the cheaper major or not. This convention can also be used after one negative response, see the tables in section 4.3.1.
4. $4+$ suits are showed using natural transfers, but obviously there is some redundancy in the use of or NT. After showing length in one suit (see the examples) and a relay by relayer, the three first relay response steps always show length in the side suits. The following rules are used for showing $4+$ suits in the situations when there is no obvious transfer to a suit:
(a) If $\odot$ is the first available response, it shows $\boldsymbol{\oplus}, \boldsymbol{\oplus}$ show $\odot$, NT show $\boldsymbol{\&}$, \& show $\diamond$.
(b) Related to the previous, after $1 \boldsymbol{\$}-1 \boldsymbol{(}=4+\varnothing)-1 \mathrm{NT}$ (=relay): $2 \diamond$ does not show hearts again, it shows the suit which is not otherwise possible to show in the three first steps: clubs! Other suits can in this situation be shown with natural transfers; $2 \boldsymbol{\phi}=\diamond, 2 \circlearrowleft=\boldsymbol{\phi}$.
(c) If $\boldsymbol{\oplus}$ is the first available response, $\boldsymbol{\phi}$ show clubs and NT spades or NT-distribution (when not already denied, occurs only after $1 \circlearrowleft$ interference after $1 \boldsymbol{\rho}$-opening). For example $1 \diamond-1 \circlearrowleft-1 \boldsymbol{\phi}=\Omega+\boldsymbol{\rho}$, and $1 \diamond-1 \circlearrowleft-1 N T=\circlearrowleft+\boldsymbol{\phi}$.
5. After showing two $4+$ suits, the first relay response show exactly four in opening suit and longer second suit (i.e. a canape). This is not possible after opening a Major and after relay showing the other Major, as the first one is always longer or equal, and this canape step falls out. The following step show a $5-5$ or a better distribution. All higher responses show exactly 4 in second suit, and another feature (three cards, an unspecified void, no shortness, or a specific singelton, see below) and indirectly the length in the first suit.
6. An unspecified void and a hand without shortness are shown with two bids between showing three cards in all suits and showing specific singeltons. The original idea was to show a void, then singeltons, and finally
deny shortness with 3NT. It was however found that after showing a hand without shortness one often want to play 3 NT if responder is minimum, but still want to check if responder has a little bit extra. After showing a specific singelton (which also is less common than no shortness at all) 3NT is less likely to be the optimal final contract. Furthermore, after showing an unspecified void the no-shortness-bid becomes a relay bid, and the same bids which as direct bids show specific singeltons now shows void in the same suit.
7. After showing/denying $4+$ cards in every suit, and excluding all artificial responses mentioned above, the following general principle is to show/deny features in steps, starting with the highest possible suit. This includes 3 card suits, specific shortness, and the last unrevealed card (e.g. after showing 444 or 543).
8. After showing/denying three cards in all suits, one start showing/denying shortness instead of two cards. This occurs in a number of situations, which are illustrated in the following tables (which also illustrate all artificial responses but the three-suiters):

| Responses after denying 4 cards in 3 suits |  |
| :---: | :---: |
| 20 | 3 card highest suit |
| 2^ | 3 card middle suit |
| 2NT | 3 card lowest suit |
| 3\% | an unspecified void |
| $3 \diamond$ | corresponding 7222 (or sometimes a 6322) |
| 30 | 1 or 0-1 in highest suit |
| 3 ¢ | 1 or 0-1 in middle suit |
| 3 NT | 1 or 0-1 in lowest suit |


| Responses after showing $\mathbf{6}+$ in one suit and exactly $\mathbf{3}$ cards in another suit |  |
| :---: | :--- |
| 2 NT | 3 card highest suit |
| $3 \mathbf{4}$ | 3 card lowest suit |
| $3 \diamond$ | an unspecified void |
| $3 \searrow$ | corresponding 6322 |
| $3 \boldsymbol{1}$ | 1 or $0-1$ in the highest suit |
| 3 NT | 1 or $0-1$ in the lowest suit |


| Responses after showing 4+ in two suits |  |
| :---: | :---: |
| 20 | canape |
| 2^ | 55+ |
| 2NT | 3 cards in highest suit |
| 2\% | 3 cards in lowest suit |
| $3 \diamond$ | an unspecified void |
| 30 | corresponding 5422 |
| 3 ¢ | 1 or 0-1 in the highest suit |
| 3NT | 1 or 0-1 in the lowest suit |

Note 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 singelton in a suit, now show a void in the same suit.
There are situations when bids drop out due to lack of space, and then one prioritize as follows (concerns the bids 2 NT to 3 NT ):
(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 $1 \diamond-1 \circlearrowleft-1$ - 2 - $?$, when $2 \diamond$ show canape, and all other bids are also one step lower ( $3 \boldsymbol{\infty}$ being the last defined bid). One could also let lower bids be undefined (e.g. $2 \diamond$ in the example above), which would give the bids $3 \diamond-3 N T$ always the same meaning, which could be easier to remember.
9. I have also introduced a new rule which only applies after all relay situations after $1 \boldsymbol{\infty}$ opening, the third bid available for showing a suit shows a two-suiter (54+) in the last two suits. The following two bids shows one-suiter ( $6+$ ) in the last two suits. Thus this concerns the bids $2 \boldsymbol{2}-2 \bigcirc$ after $1 \boldsymbol{\%}$, and $20-2 N T$ after $1 \boldsymbol{\%}-1 \diamond-1 \circlearrowleft$. This is motivated by three things: 1) The two-suiter at hand would otherwise be quite inaccurately described. 2) The two-suiter is more common than the single suiters. 3) The one-suiters become quite accurately described anyway, especially when using the 6331-convention defined above.
10. After second and third negative after $1 \boldsymbol{\%}$-opening, and a relay by opener ( $2 \boldsymbol{\%}$ and 20 respectively) switch to natural bidding. As a memory rule, after bidding all suits on 1 -level ( $1 \boldsymbol{\uparrow}-1 \diamond-1 \circlearrowleft-1 \boldsymbol{\uparrow}, 1 \boldsymbol{\omega}=2$ nd negative $)$, transfer relays are off. The 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 $3 \diamond$ to 3 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 $=\mathrm{AKQ}-$ ask (using $\mathrm{A}=3, \mathrm{~K}=2, \mathrm{Q}=1$ )
2. 2 nd step $=A K-$ 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 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 $3 \boldsymbol{\phi}, 4 \boldsymbol{\phi}$ is a AKQ-ask and $4 \diamond$ is a AK-ask. If the bidding started with 1\&, responder replies according to the following table:

| Control responses after a 1\& 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 2 nd-step shows 7 , the 3 rd-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 ( $=9 \mathrm{hcp}$ ) sums up to both base levels for a positive response to 10. 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 ( $9-14 \mathrm{hcpt}$ ), 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 $1 \boldsymbol{\%}$ explicitly promise 6 AKQ - and 3 AK -controls. A hand with four queens and four jacks and nothing else is problematic, but one cannot give a $9+$ positive response to $1 \boldsymbol{\%}$ with such a hand. It is too little slam-oriented for this purpose, and if $\mathbf{1 \%}$ 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, but if it seems too difficult to remember, it is of course possible to not use the rule.
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 $6 \boldsymbol{\sim}$. All bids from 6 NT and up are to play.

### 5.3 Zooming

Sometimes, after getting responder's shape, relayer will attempt to sign-off in game without checking for controls. Over all openings other than $1 \boldsymbol{\$}$ this will not present a problem, because relay-responder cannot have more than 14 hcpts. However, a positive response to a $1 \boldsymbol{\%}$ opening shows $9+$ hcpts and is unlimited. Relayer's sign off in game (without checking for controls) is based on the assumption that responder is limited to $9-14 \mathrm{hcpts}$. 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 relayer's sign-off is an AK-control ask. Since responder has $15+$ hcpts the first step shows 4 controls. Similarly does relay responses above 3 NT show the distribution that $3 N T$ would show, and $15+\mathrm{hcpt}$, and $4+$ AK controls. This allows the relayer to pass on a 3 NT response, as it denies 15 hcpt . It is of course possible to use AKQ-controls as well, must be decided.

### 5.4 Responses to major relays

 show $4+$ in another suit with transfers. The fourth step (which is a rebid) denies $4+$ in all side suits, and it thus indirectly shows $6+$ in the opening suit ( 5332 and 4333 are shown with initial NT-bids). After the openings, when the relay also can be invitational, the fifth step (raise of relay, in these cases always 2 M , new feature !!) shows a minimum hand that would not accept any invitations, something that would be called a sub-opening in most systems.
Three-suiters (4441 or 5440, marmics) are shown with the following three bids, by bidding shortness in steps from above. That is, in a sequence starting with $1 \mathbf{1}$, raise of relay ( +1 , after a limited opening) is a majormarmic, the next step is a diamond marmic, and the step after that is a club marmic. Note that you start with showing the longer major, or if they are equal, you start with the cheaper. This implies that after showing the more expensive major and a minor marmic, it means that you hold a 5440. Furthermore, after the three marmicsteps there are always at least three free bids, which can be used for showing 6331-distributions (identifying the singelton in steps starting with highest free suit), which otherwise is the distribution which becomes least accurately described in J-Moscito. The 6331 distribution can otherwise, as a worst case, be indistinguishable from a 10-1-1-1 distribution!
The benefit with these specific Marmic-bids is that after showing two $4+$ suits in a normal fashion, 4 cards are denied in the remaining suits! The precision of the relay-answers are improved quite much this way, and this information is also useful in situations where relayer has invitational strength, as he can forget 4 -card suits not shown by relay responder in the first two bids. Furthermore, a suit opener either holds a marmic, two-suiter with at least $5-4$, or a one-suiter with a $6+$ suit. The drawback is that it is sometimes difficult to stop below game after a Marmic-response, so one need to be prepared for a three level contract against a 12 misfit. That is, a 4441-hand should not be opened with less than $11+$ hcpts (which is in line with the 11-14 1NT).

| Responses to $1 \diamond-1 \bigcirc$ |  |
| :---: | :---: |
| 14 | $4+\boldsymbol{\%}$ (Spades are not bid directly) |
| 1 NT | $4+\infty$ and $5+0$ |
| 2\% | $4+\diamond$ |
| $2 \diamond$ | $6+\checkmark$, non-minimum |
| 20 | $6+\bigcirc$, minimum (raise) |
| 2- | ¢-Marmic ( $\boldsymbol{\wedge}_{\boldsymbol{\sim}}$ when cheaper major) |
| 2NT | $\diamond$-Marmic |
| 3\% | Q-Marmic |
| $3 \diamond$ | 1633 (jump rebid) |
| 30 | 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 18 bid (cf. the following table)! That is, the last card cannot be a $\boldsymbol{\phi}$ in a $\diamond$ and Marmic opened with $1 \diamond$.

| Responses to 1 10 －1／ |  |
| :---: | :---: |
| 1NT | 4＋\％ |
| 2\％ | $4+\diamond$ |
| $2 \diamond$ | $4+\bigcirc$ and $5+\infty$ |
| 20 | $6+\boldsymbol{¢}$ ，non－minimum |
| 2 － | $6+\boldsymbol{¢}$ ，minimum（raise） |
| 2NT | O－Marmic（2NT when more expensive major） |
| 3\％ | 5404 （with 4414，you open $1 \diamond$ ） |
| $3 \diamond$ | 5440 |
| 30 | 6133 （jump rebid） |
| 3 ¢ | 6313 |
| 3 NT | 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 $0-1 \mathrm{p}$ |  |
| :---: | :---: |
| 1NT | 4＋\％ |
| $2 \%$ | $4+\diamond$ |
| $2 \diamond$ | $4+\bigcirc$ and $5+\boldsymbol{\phi}$ |
| 20 | $6+\boldsymbol{4}$（rebid） |
| 2＾ | $\bigcirc$－Marmic（2 when cheaper major） |
| 2NT | $\diamond$－Marmic |
| 3\％ | \＆－Marmic |
| $3 \diamond$ | 6133 （jump rebid－1） |
| 30 | 6313 |
| 3－ | 6331 （3 when cheaper major） |


| Responses to 1\％－1中－1NT |  |
| :---: | :---: |
| 2\％ | $4+\diamond$ |
| $2 \diamond$ | $4+\boldsymbol{¢}$（＂$\bigcirc$－bid＂replaces suit not included in the first three steps） |
| 20 | $4+\boldsymbol{0}$ and $5+\bigcirc$ |
| 24 | $6+\bigcirc$（rebid） |
| 2NT | ¢－Marmic（2NT when more expensive major） |
| 3\％ | 4504 |
| $3 \diamond$ | 4540 |
| 30 | 1633 （jump rebid－1） |
| 3風 | 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 start to show／deny three card suits and then shortness．


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中－1NT－2¢－2NT |  |
| :---: | :---: |
| 3\％ | 3¢ |
| $3 \diamond$ | 2722， 2632 or 2623 |
| 30 | $0-1 \boldsymbol{\wedge}, 7+\bigcirc$ ，if the 6331 convention is used |
| 3 － | 0－1৫， $2 \boldsymbol{\downarrow}, 7+\bigcirc$ |
| 3NT | 0－1¢， 2 ¢， $2-3 \diamond, 7+\bigcirc$ |

After showing a 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 $1 \diamond-1 \bigcirc-2 \diamond-2 \bigcirc-2 ¢-2 N T$ |  |
| :---: | :---: |
| 3\% | $3 \diamond$ (always 3730 , if 6331 -rule was used |
| $3 \diamond$ | $3 \boldsymbol{0}$ (always 3703, if 6331-rule was used |
| 30 | 3622 |
| 3 ¢ | $0-1 \diamond, 7+\bigcirc$ 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, responders next task is to inform relayer 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:


Note here that $1 \diamond-1 \circlearrowleft-1 \backsim-1 N T$ 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 $3 \diamond$. With $2 \checkmark$ 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 singelton 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:
$1 \diamond-1 \circlearrowleft-1$ - $2 \boldsymbol{\phi}-2 \boldsymbol{\wedge}-2 N T-$ ?
$3 \boldsymbol{\phi}=3604$
$3 \diamond=3514$
After the $55+$ response, the same scheme as with 54 -hands is used:

| The 55+ scheme, an example |  |
| :---: | :---: |
| Responses to $1 \diamond-1 \bigcirc-1 ¢-2 \%-2 \bigcirc-2 \dagger(=5+\bigcirc+5+\%)$ |  |
| 2NT | 3 ¢ $=3505$ |
| 3\% | $3 \diamond=0535$ |
| $3 \diamond$ | an unspecified void |
| 30 | 1615 or 1516 |
| $3 \boldsymbol{N}$ | 1 ¢ $=1525$ |
| 3NT | $1 \diamond=2515$ |

The only discrepancy with 54 -scheme is that the no-shortness bid is replaced with a equal-length 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. $), 5530=15.9 \%, 6511=12.6 \%, 6520$ $=11.6 \%, 7510=1.9 \%, 6610=1.3 \%, 7600=0.1 \%, 8500=0.055 \%$.
The tables above showed the "lowest" $4+-4+$, how about the others ? Lets try the most space consuming 4-4:

| Responses to 1\％－1中－1NT－2 $\diamond-2 \bigcirc(=4+\bigcirc+4+\%$ ） |  |
| :---: | :---: |
| 2＾ | 40 and 5＋\％ |
| 2NT | 55＋ |
| 3\％ | 3） |
| $3 \diamond$ | $3 \diamond(3 \bigcirc$ asks for last card） |
| 30 | 2524 |
| $3 \boldsymbol{1}$ | 0－1¢，1624，0724，1714， 0814 or 0904 |
| 3 NT | $0-1 \diamond, 2614$ 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．
The responses after showing other 4－4 holdings are not any higher．Note that after a positive response on a $1 \boldsymbol{\ell}$ opening does 1NT not have to be natural and nonforcing when GF already is established！All major－minor combinations，including the second relay：
$1 \diamond-1 \bigcirc-1 \diamond-2 \boldsymbol{\infty}=4+\bigcirc$ and $4+\boldsymbol{\infty}$
$1 \diamond-1 \bigcirc-2 \boldsymbol{Q}-2 \diamond=4+\bigcirc$ and $4+\diamond$
（1ヶ－） $1 \Upsilon-1 \boldsymbol{\omega}-1 \mathrm{NT}-2 \boldsymbol{\%}=4+\boldsymbol{\omega}$ and $4+\boldsymbol{\%}$
（1ヶ－） $1 \bigcirc-1 \boldsymbol{\omega}-2 \boldsymbol{\phi}-2 \diamond=4+\boldsymbol{\phi}$ and $4+\diamond$
$1 \boldsymbol{\phi}-1 \boldsymbol{\phi}-1 \mathrm{NT}-2 \boldsymbol{\phi}-2 \diamond=4+\diamond$ and $4+\diamond$
$1 \boldsymbol{\phi}-1 \boldsymbol{\omega}-1 \mathrm{NT}-2 \diamond-2 \odot=4+\odot$ and $4+\boldsymbol{\%}$
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．

|  |  |
| :---: | :---: |
| $2 \diamond$ | $5+\boldsymbol{*}, 55+$ scheme apply，others show exactly $4 \dagger$ |
| 20 | $3 \checkmark$ |
| 2－ | 3\％ |
| 2NT | an unspecified void |
| 3\％ | 4522 |
| $3 \diamond$ | $1 \diamond=4612$ or 4711 |
| 30 | 10 $=4621$ |

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 $\bigcirc$－1 $\uparrow$－2 $\diamond-2 \bigcirc(=5+\uparrow+4+\bigcirc)$ |  |
| :---: | :---: |
| 2－ | $5+\bigcirc$ and $6+\boldsymbol{巾}$ ，modified $55+$ scheme apply，others show exactly $4 \bigcirc$ |
| 2NT | $3 \diamond$ |
| 3\％ | 3\％ |
| $3 \diamond$ | an unspecified void |
| 30 | 5422 |
| 3－ | $1 \diamond$ |
| 3NT | 1\％ |



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

When relaying a limited bid it does only promise invitational strength or better．As mentioned earlier，invita－ tional strength is shown by relaying only once，and 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 $1 \diamond-1 \circlearrowleft-1 \boldsymbol{\uparrow} \ldots \boldsymbol{\infty}$ and $1 \Omega-1 \boldsymbol{\infty}-1 \mathrm{NT} \ldots 2 \diamond$ when opener hasn't said anything about strength.

| Invitational bids after one relay |  |
| :---: | :--- |
| First bid | GF relay, with $1 \diamond-1 \circlearrowleft-1 \wedge-1 N T$ as only exception |
| Lowest NT | Balanced, probably misfit |
| 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 $1 \diamond-1 \circlearrowleft-1 \uparrow$ ) |
| 3NT | to play (misfit but enough points) |

### 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 $1 \mathbf{d}$ opening is $54+$ in the minors, which also needs most space for resolving. Thus this must be shown with the first step, $2 \diamond$, which is not standard J-M relays. Furthermore, I have introduced minimum bids also after minor openings, which also slightly messes around with the relay system. My first intention was to use 3NT as solid suit bid, and to show shortness in a suit by bidding the suit itself. Although the system below seems to be more complicated, it follows J-M relay rules, except the $2 \diamond$ and 3 m responses, as mentioned

| Responses to 1¢-2\%( $=4+\diamond$ ) |  |
| :---: | :---: |
| $2 \diamond$ | Minors at least 54, \% can be longer |
| 20 | $4 \uparrow$, $6+\diamond$, relay resp. according $55+$ scheme |
| 2, | $4 \bigcirc, 6+\diamond$, relay resp. according $55+$ scheme |
| 2NT | $3 \boldsymbol{*}, 6+\diamond$ |
| 3\% | $6+\diamond$, maximum, denies shortness, $3 \diamond=$ AKQ ask, $3 \bigcirc=\mathrm{AK}$ ask |
| $3 \diamond$ | $6+\diamond$, minimum |
| 30 | $6+\diamond, 0-1$ ¢ |
| 3 ¢ | $6+\diamond, 0-1 \bigcirc$ |
| 3NT | $6+\diamond, 0-1 \boldsymbol{\&}$ |

The main reason for why I changed the system to be more standard relay like was to be able to open with 2 with $6+$ in $\boldsymbol{\&}$ and $4 \diamond$. The minimum bid $3 \boldsymbol{\%}$ is the only exception to standard relays here.

| Responses to 2\%-2 $\diamond(=6+\boldsymbol{\%})$ |  |
| :---: | :---: |
| 20 | $4 \boldsymbol{\downarrow}, 6+\boldsymbol{\$}$, relay resp. according 55 -scheme |
| 2- | $40,6+\boldsymbol{\infty}$, relay resp. according 55 -scheme |
| 2NT | $4 \diamond, 6+\boldsymbol{\infty}$, relay resp. according 55 -scheme |
| 3\% | $6+\boldsymbol{\%}$, minimum, $3 \diamond$ asks for shortness, $4 \boldsymbol{\%}=\diamond$-shortness!! |
| $3 \diamond$ | $6+\boldsymbol{\$}$, maximum, denies shortness |
| 30 | 6+¢, 0-1 ¢ |
| 3^ | 6+\%, 0-1 0 |
| 3NT | $6+\boldsymbol{\$}, 0-1 \diamond$ |

As indicated in the tables, one may relay after the 2 M and 2 NT responses. As these bids promise 64 or better, 55 -scheme can be applied:

|  |  |
| :---: | :---: |
| 2NT | 4306 (4360) |
| $3 \%$ | 4036 (4063) |
| $3 \diamond$ | void in a suit, $7+\boldsymbol{¢}(7+\diamond), 3 \bigcirc$ relays for location |
| 30 | 4117 |
| 3^ | 4126 |
| 3NT | 4216 |

After a $1 \boldsymbol{0}$ there is three bids available for positive minor-hands, and the bids are best used for showing a two-suiter, \&-singlesuiter and $\diamond$-singlesuiter respectively. This is convention which is also used after $1 \boldsymbol{\ell}$ - $1 \diamond$, while then it concerns the highest suits in that case, $\boldsymbol{\phi}$ and $\boldsymbol{\phi}$

| Responses to 1\&-2¢-2 $\diamond$ (=minors 54) |  |
| :---: | :---: |
| 20 | $4 \diamond, 5+\boldsymbol{¢}(\diamond$ base-suit, this is a canape-bid) |
| $2 \boldsymbol{1}$ | $5+\diamond, 5+\boldsymbol{¢}, 55+$ scheme apply |
| 2NT | 3 ¢, $5+\diamond, 4 \boldsymbol{4}$ |
| 3\% | $3 \bigcirc, 5+\diamond, 4 ¢$ |
| $3 \diamond$ | an unspecified void, $7+\diamond$ |
| 30 | 2254 |
| 3- | 1巾, $6+\diamond$ |
| 3 NT | 2164 |

The $2 \diamond$ response to $1 \boldsymbol{1}$ now shows a $\boldsymbol{\%}$-singlesuiter:

| Responses to $1 \%-2 \diamond-2 \bigcirc(=6+\infty)$ |  |
| :---: | :---: |
| 2^ | 3¢ |
| 2NT | 30 |
| 3\% | 3\% |
| $3 \diamond$ | 2227 |
| 30 | 0-1/ ${ }_{\text {d }}$, 8+9 |
| 3 ¢ | 0-10, 8+¢, $2 \boldsymbol{4}$ |
| 3NT | 2218 |

And the $2 \circlearrowleft$ response to $1 \boldsymbol{1}$ shows a $\diamond$-singlesuiter:

| Responses to 1¢-2@-2円 ( $=6+\diamond$ ) |  |
| :---: | :---: |
| 2NT | 3/ |
| 3\% | 30 |
| $3 \diamond$ | 2272 or 2263 |
| 30 | $0-1 \mathbf{\downarrow}, 7+\diamond(3$ cards are denied in $\mathrm{M}, 4$ in $\mathbf{¢}$ ) |
| 3^ | 0-1®, $7+\diamond, 2$ ¢ |
| 3NT | $0-1 \diamond, 2281$ or 2290 |

### 5.6 Reverse relays

After a $1 \boldsymbol{\%}$ 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 by looking at his cards. Reverse relays are suggested in these situations in Moscito 2001. This means that the $\mathbf{1 \%}$ 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 Moscito 2001), first with normal relays:


Use of the new 6331-convention makes it now clear that responder has $3 \diamond$, but still opener will not be comfortable passing 3 NT . The responder may almost zoom if opener signs off in 3NT, as he almost has 15 hcpts and 4 AK controls. Even if opener relays for AK-controls (AKQ-controls works even worse), he will not confident that he has reached the right contract. A reverse relay auction follows the same principles as shape relays after $1 \boldsymbol{Q}+$ opening when responder shows a major. When responder shows a minor opener uses (almost) natural bids, see later in this section.

| Hand |  | Auction |  |
| :---: | :---: | :---: | :---: |
| Opener | Responder | Opener | Responder |
| ¢ - | ¢ Qxxxxx | 1\% | 10 |
| $\bigcirc$ Axxx | $\bigcirc$ KQJ | $2 \boldsymbol{\phi}(54+\diamond+\bigcirc, 0-3 \boldsymbol{\phi}, 0-1 \boldsymbol{\oplus})$ | $2 \diamond$ |
| $\diamond$ KQJxxx | $\diamond$ Axx | 2NT ( $=3 \boldsymbol{¢}, 4 \bigcirc, 5+\diamond$ ) | $3 \%$ |
| \& Axx | \& K | $3 \bigcirc$ (last card in $\diamond$, 0463) | 3 |
|  |  | 4¢( $=9 \mathrm{AKQ}$ controls) |  |
|  |  | $5 \diamond(=\diamond \bigcirc$ ¢ | $7 \diamond$ |

Note that opener has shown 10 cards in $\diamond+\odot$, which means that his base AKQ count is 8 (if clearly agreed). The trickiest part is that one have to take into account that it is known that the $\boldsymbol{\phi}$-suit is short, and thus falls out from suit length responses. Furthermore, as you may not have a hand without shortness, the shortness scheme is changed.
After revealing information about $4+$ and 3 card suits, instead of standard shortness bids, the next two steps show

1. Singelton in partners suit
2. Void in partners suit

This means that you ignore the remote possibility to have a single-suiter with two short suits (7411- and 8311like distributions which are quite infrequent, the most common 6511 can still be shown). One can also use one bid to show a marmic, the same bid which by responder would show the other-major marmic is the first one available ( $2 \boldsymbol{\uparrow}$ and 2 NT respectively). Let us summarize the reverse relay responses after major-showing responses.

| Reverse relays after 1\%-1 $\bigcirc$, all bids show 0-1 ¢ |  |  |
| :---: | :---: | :---: |
| 1NT |  | 4+\% |
| 2\% |  | $54+$ in $\diamond+\odot$ |
| $2 \diamond$ |  | $6+\bigcirc$ |
| 20 |  | $6+\diamond$ |
|  | 2NT | 30 |
|  | $3 \%$ | 3\% |
|  | $3 \diamond$ | 1282 |
|  | $3 \bigcirc$ | 0292 |
| 2 ¢ |  | ¢-Marmic, 2NT asks for last card |


| Reverse relays after 1\%-1中, all bids show 0-1 $\odot$ |  |  |
| :---: | :---: | :---: |
| 2\% |  | $\begin{aligned} & 4+\diamond \\ & 54+\text { in } \boldsymbol{\varphi}+\boldsymbol{\varphi} \\ & 6+\boldsymbol{\phi} \\ & 6+\boldsymbol{\phi} \end{aligned}$ |
| $2 \diamond$ |  |  |
| 20 |  |  |
| 2^ |  |  |
|  | 3\% | 3/ |
|  | $3 \diamond$ | $3 \diamond(3 \bigcirc$ asks for $\bigcirc$ length, $3 \mathbf{~}=1,3 \mathrm{NT}=0$ |
|  | 30 | 2128 |
|  | 3- | 2029 |
| 2NT |  | $\bigcirc$-Marmic, 3\% asks for last card |

In the case of minor showing bids there is not enough room for standard-like relays, so the reverse relays have almost natural meanings. All bids still show $0-1$ in (one of) partners suit(s), so NT-bids and raises can have special meanings. The goal for the reverse relays must now be a) to show $5+$ suits, b ) to inform about length in partners suit(s).

| Reverse relays after 1\％－2¢（＝54＋in minors） |  |  |  |
| :---: | :---: | :---: | :---: |
| 20 |  |  | 5＋C， |
|  | 2 － |  | asks about short suit，accepts $\bigcirc$ as trumps |
|  |  | $\begin{gathered} \text { 2NT } \\ 3 \stackrel{\downarrow}{4} \\ 3 \diamond \\ 3 仓 \end{gathered}$ | $\begin{aligned} & 1 \boldsymbol{\wedge} \\ & 1 \diamond \\ & 0 \boldsymbol{\varphi}, \\ & 0 \diamond, \end{aligned}$ |
|  | $\begin{gathered} 2 \mathrm{NT} \\ 3 \boldsymbol{\omega} \\ 3 \diamond \\ 3 \circlearrowleft \\ 3 \pitchfork \end{gathered}$ |  | ```\(55+\) in minors, no fit in \(\mathcal{O}\) \(6+\boldsymbol{\aleph}, 4 \diamond\), no fit in \(\odot\) \(6+\diamond, 4 \boldsymbol{\omega}\), no fit in \(\diamond\) raise with xx , values concentrated in minors asks for stopper in for NT, values concentrated in minors``` |
| 2． |  |  | $5+$－ |
|  | 2NT |  | asks about short suit，accepts as trumps |
|  |  | $\begin{aligned} & 3 \mathbf{4} \\ & 3 \diamond \\ & 30 \\ & 3 \uparrow \\ & \hline \end{aligned}$ | $\begin{aligned} & 1 \& \\ & 1 \diamond \\ & 0 \mathbf{4}, \\ & 0 \diamond, \end{aligned}$ |
|  | $\begin{aligned} & 3 ゅ \\ & 3 \diamond \\ & 30 \\ & 3 \dagger \end{aligned}$ |  | $5+\boldsymbol{\infty}, 4+\diamond$ ，no fit in <br> $5+\diamond, 4 \boldsymbol{\phi}$ ，no fit in <br> asks for stopper in $\odot$ for NT，values concentrated in minors raise with xx ，values concentrated in minors |
| 2NT |  |  | $55+$ in + （ 3 ¢ $55+$ relay |
|  |  | $\begin{gathered} 3 \diamond \\ 3 \circlearrowleft \\ 3 \uparrow \\ 3 \mathrm{NT} \end{gathered}$ | $\begin{aligned} & \text { a void } \\ & 6511 \text { or } 5611 \\ & 5512 \\ & 5521 \end{aligned}$ |
| $\begin{aligned} & 3 \uparrow \\ & 3 \diamond \\ & 30 \\ & 30 \\ & 3 \uparrow \end{aligned}$ |  |  | $\begin{aligned} & 5503 \\ & 5530 \\ & 7+\circlearrowleft, \text { sets trumps } \\ & 7+\boldsymbol{\uparrow}, \text { sets trumps } \\ & \hline \end{aligned}$ |

If responder shows a minor single suiter，reverse relays are natural，except that a bid of responders suit shows $5+$ in the suit which would need the highest bid，and 2 NT shows a $55+$ in the two suits needing the highest bids．The lowest bid showing a $5+$ suit may thus include another $5+$ suit，while the other two $5+$ bids deny other $5+$ suit．Just remember that raise and 2NT cannot be natural，and thus has the logical meaning

| Reverse relays after $\mathbf{1 \% - 2} \diamond(=6+\mathbf{\%})$ |  |  |
| :---: | :---: | :---: |
| 2 ¢ |  | $5+\boldsymbol{¢}, 2 \mathrm{NT}$ asks for ¢ length，new suits 3 card |
|  | $\begin{aligned} & 3 \& \\ & 3 \diamond \end{aligned}$ | $\begin{aligned} & 1 \% \\ & 0 \% \end{aligned}$ |
| 2NT |  | $55+$ in $\bigcirc+\diamond$ ，3¢55＋relay |
|  | $\begin{gathered} 3 \diamond \\ 3 \circlearrowleft \\ 3 \wedge \\ 3 \mathrm{NT} \end{gathered}$ | 3550 2551 1651 or 1561 2650 or 2560 |
| $\begin{aligned} & 3 \mathbf{3 0} \\ & 3 \diamond \end{aligned}$ |  | $5+\bigcirc$ ，only $5+$ suit， $3 \diamond$ asks for \＆length $5+\diamond$ ，only $5+$ suit， $3 \bigcirc$ asks for $\&$ length |


| Reverse relays after $1 \mathbf{\%}-2 \bigcirc(=6+\diamond)$ |  |  |
| :---: | :---: | :---: |
| 2NT |  | $55+$ in $\bigcirc+$ ¢ |
|  | $3 \diamond$ | 5503 |
|  | 30 | 5512 |
|  | 3¢ | 6502 or 5602 |
|  | 3 NT | 6511 or 5611 |
| 3\％ |  | $5+\boldsymbol{\phi}, 3 \diamond$ asks for $\diamond$－length， $3 \mathrm{M}=3$ card suit |
| $3 \diamond$ |  | $5+\boldsymbol{巾}$ ，only $5+$ suit， $3 \bigcirc$ asks for $\diamond$ length |
| 30 |  | $5+\bigcirc$ ，only $5+$ suit， $3 \boldsymbol{\sim}$ asks for $\diamond$ length（ $4 \boldsymbol{Q}=0 \diamond$ ！${ }^{\text {a }}$ ） |

Responders relays after a openers bids showing one $5+$ suit ask for length in responders suit, other bids are natural (bids in new suits show 3 -cards, as 4 -cards are denied !). After openers 2 NT bid showing $55+$, $3 \mathbf{\$}$ is a $55+$ ask adjusted with the reverse relay rule that no shortness $=$ singelton in partners suit, shortness in partners suit $=$ void.

## 6 Interference by opponents

This is a very important issue in relay based systems, if not clearly agreed, 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. $1 \boldsymbol{\%}-(\mathrm{x})-$ ?
2. 18 - (x) - pass - (pass/raise) - ?
3. $1 \boldsymbol{\&}-1 \diamond-(\mathrm{x})-$ ?
4. 1\% - positive - (x) - ?
5. 1\% - positive - (x) - pass - ?
6. 1NT $-(\mathrm{x})-$ ?
7. 1NT - 2\&- (x) ?
8. $1 \mathrm{NT}-2 \diamond / \bigcirc-(\mathrm{x})$ ?
9. $1 \mathrm{NT}-2 \mathbf{d} / 2 \mathrm{NT}-(\mathrm{x}) ?$
10. limited $(=1 \diamond / \varnothing / \boldsymbol{\uparrow} / 2 \boldsymbol{\phi})-(\mathrm{x})-$ ?
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 it 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 10 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 a someone uses interference bids above 1ヵ 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 $\boldsymbol{\&}$ ). 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 $3 \diamond$.
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 14 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 conventions (see nt_sys.pdf) after interference on the 1NT opening, I thought it might be ok to reuse these conventions for the interference bids $2 \boldsymbol{\$}$ over $1 \boldsymbol{\%}$ opening also. Responder assumes that opener is balanced (at least 2 cards in all suits) and has $15-18 \mathrm{hcpts}$. 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 2 NT should show a bit of extras also)
2. Responder has more than 18 hcpts, and responder makes a passable bid or bids 2 NT (which asks for $3 \boldsymbol{\ell}$, which responder may pass on): Both cases responder may not pass or bid $3 \boldsymbol{\uparrow}$, 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 ( $1 \boldsymbol{2}-(2 \mathrm{~m})-3 \bigcirc-4 \bigcirc$ should actually show support in $\boldsymbol{\uparrow}$ and a control in $\Omega$ and deny controls in the minors, but as opener as well might bid $4 \boldsymbol{\downarrow}$ directly in this case, $4 \triangle$ should probably be used as own suit without support)

If opponents interfere at a lower level than 1 NT , 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 without length in the interference suit. A common situation is $1 \boldsymbol{\ell}$-(1M)-?, so for the sake of clarity:

| Responses to 10-(1ヵ)-? |  |
| :---: | :---: |
| pass | $0-4 \mathrm{hcpt}$ or penalty oriented, opener should be able to decide the latter |
| double | $5-8 \mathrm{hcpt}$, any shape |
| 1NT | balanced, 9+ hcpt |
| 24 | $4+\diamond, 9+\mathrm{hcpt}$ |
| $2 \checkmark$ | $4+\bigcirc, 9+\mathrm{hcpt}$ |
| 20 | $54+$ in $\boldsymbol{+}+\boldsymbol{\sim}, 9+\mathrm{hcpt}$ |
| $2 \boldsymbol{}$ | 6+\&, 9+ hcpt |
| 2NT | $6+$ - 3 - ${ }^{\text {c }} 9+\mathrm{hcpt}$ |
| 3\% | $6+$ - 3 , 3 , 9+ hcpt |
| $3 \diamond$ | 7222 or $6223,9+$ hcpt |
| 30 | 0-10, 7+巾, 9+ hept |
| 3¢ | $0-1 \diamond, 7+\oplus, 209+\mathrm{hcpt}$ |
| 3NT | $0-1$, ¢, 8221 or $92209+\mathrm{hcpt}$ |

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 $1 \circlearrowleft$ the $1 \boldsymbol{\uparrow}$ bid shows $4+\boldsymbol{\phi}, 2 \boldsymbol{\phi}=4+\diamond, 2 \diamond=54+$ in $\bigcirc+\boldsymbol{\phi}, 2 \circlearrowleft=6+\boldsymbol{\phi}$, $2 \boldsymbol{\infty}+=6+\odot$ ( 3 NT again promises an 8 - or 9 -card stopper). If the interference bid is $1 \diamond$ we can use exactly the same positive bids as without the interference. The interference bid 1 NT is usually some kind of two-suiter, and should thus be treated as one.
If opponents double the $1 \%$ opening, the bids are:
Redouble $=$ penalty oriented, length and values in promised suit(s)
Pass $=0-4$
$1 \diamond=5-8$ (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 $2 \boldsymbol{\downarrow}$ the following guidelines apply ( $2 \mathrm{NT}=$ minors can be treated with Rubensohlish conventions, see nt_sys.pdf):
pass $=0-8 \mathrm{hcpts}$
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) $1 \boldsymbol{\%}$-( 1 x )-pass-(pass)-?
b) $1 \boldsymbol{1}$-(x)-pass-(pass)-? $(x \geq 1 N T)$
c) $1 \boldsymbol{1} \boldsymbol{\%}$-(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 $3 \diamond$, 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, 3 NT to play
cue $=$ two-suiter with highest + another suit. When the interference is above $3 \diamond$, cue is the only forcing bid, and hence does not say anything about distribution

### 6.1.3 1\&-1 $\diamond-(\mathrm{x})-$ ?

If $x \leq 2 \boldsymbol{p}$ pass is the $19+$ relay, double/redouble is penalty oriented, and all other bids are natural and nonforcing (Joppe is used after 1 NT , Baron after 2 NT ). In the case of higher level interference ( $\mathrm{x}>2 \boldsymbol{4}$ ) 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 3 NT , but could be interested in a slam in responders suit
$3 \mathrm{NT}=$ to play if responder has $<15 \mathrm{hcpts}$, 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 3 NT ) 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 $2 \boldsymbol{x} \leq 2 \boldsymbol{d}$. If 2 NT 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, and cue bid is naturally the strongest possible bid.

If the interference comes after responders $2 \boldsymbol{\phi} / \diamond / \checkmark / \boldsymbol{\uparrow} / \mathrm{NT}$, assume that responder has the weakest alternative, and act accordingly.
When playing weak 1 NT , 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 $1 \boldsymbol{1}$ 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 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 $2 \boldsymbol{\phi}$ and $2 \boldsymbol{\uparrow}$, the meaning of openers bids are

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

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: $1 \diamond-1 \circlearrowleft-(2 \boldsymbol{\phi})-$ ?
Meanings: dbl $=3+\boldsymbol{\phi}$, pass $=4+\boldsymbol{\uparrow}, 2 \diamond=4+\diamond, 2 \circlearrowleft=3 \boldsymbol{\uparrow}, 2 \boldsymbol{\uparrow}=3 \diamond, 2 \mathrm{NT}=$ void, $3 \boldsymbol{\phi}=2227,3 \diamond / 3 \diamond / 3 \boldsymbol{\uparrow}=1$ $\operatorname{card} \boldsymbol{\oplus} / \diamond / \boldsymbol{\phi}$.
Right bid is $2 \boldsymbol{\uparrow}, 2 \mathrm{NT}$ is a relay, upon which $3 \boldsymbol{\rho}=$ a void, $3 \diamond=2632$ (right bid this time), $3 \bigcirc / \boldsymbol{\phi}=1 \boldsymbol{\uparrow} / \boldsymbol{\&}$. 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 $-(2 \boldsymbol{\phi})$ - ?
 $=0-1 \operatorname{card} \boldsymbol{\uparrow} / \bigcirc / \boldsymbol{\phi}, 6+\diamond$
Both 2NT and double are possible options for North in this case. With Axx in spades one should probably bid

2 NT and show $4+\boldsymbol{\omega}$ (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 2 NT instead of $2 \diamond$. 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 $1 \mathrm{D}-1 \mathrm{H}-(1 \mathrm{~S})$, 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 1 NT or 2 NT , or some other artificial bid ( 1 NT and 2 NT 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, $1 \diamond-1 \circlearrowleft-(1 \mathrm{NT}=$ minors $)-\mathrm{dbl}-(2 \diamond)$-pass-(pass) $-2 \Omega=$ long \& but not long enough $\diamond$. Openers pass naturally denies urge to double $2 \diamond$.
3. If the interference bid is $3 \boldsymbol{\%}$ or higher, when it is no longer possible to show all possible $4+$ suits and all possible short suits. Thus we use standard natural techniques in this case.

## 7 Preemptive bids

All opening bids from $2 \diamond$ 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 $2 \diamond$ opening includes 44 in majors and 9-10 hcpts
- The $2 \circlearrowleft /$ © openings include 5332 and $9-10$ hcpts.

One can't pass with such powerhouses, can one ? It is also thought that the $2 \Omega / \boldsymbol{\omega}$ 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 $2 \diamond$ as an undisciplined weak two also.

### 7.1 Ekren $2 \diamond$

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

| Responses to Ekren $2 \diamond$ |  |
| :---: | :---: |
| pass | $4+\diamond$, only $4 \diamond$ implies 2245 |
| 2,3,4 $\bigcirc / \uparrow$ | to play |
| 2NT | relay, at least invitational strength |
| $3 \%$ | $6+\boldsymbol{\%}$, to play |
| $3 \diamond$ | to play in better Major |
| 3 NT | to play |

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

| Responses to 2 $\downarrow$-2NT |  |
| :---: | :---: |
| 3\% | minimum, 3 勺asks, same responses as below |
| $3 \diamond$ | 5-5, probably too weak for 3-level |
| 30 | 5 ¢and 4¢, 3 ¢ ask for shortness, $3 \mathrm{NT}=4522,4 \mathrm{~m}=$ shortness |
| $3 \boldsymbol{}$ | 5 and $4 \bigcirc$, 4¢ ask for shortness, responses two steps up |
| 3 NT | $4-4$ and maximum (9-10 hcpt) |
| Responses to $2 \diamond$-2NT-3\&-3 $\diamond$ |  |
| 30 | $5 \bigcirc$ and 4巾, 3¢ asks as above |
| $3{ }^{\text {a }}$ | 5 and $40,4 \%$ asks as above |
| 3 NT | 4-4 |

Note that the hcp-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 $2 \diamond-2 \mathrm{NT}$ according to Chris Ryall |  |
| :---: | :---: |
| 3\% | minimum ( $5-6 \mathrm{hcpt}$ ) with a 5 card M, 3 3 asks which one |
| $3 \diamond$ | $4-4$ minimum ( $7-8 \mathrm{hcpt}$ ) |
| 30 | 59 and 4 , maximum ( $7-8 \mathrm{hcpt}$ ) |
| 3 - | 5 and 40, maximum ( $7-8 \mathrm{hcpt}$ ) |
| 3 NT | 4-4 and maximum (9-10 hcpt) |
| $4 \oplus / \diamond$ | 5-5, maximum (6-7 hcpt), splinter |
| 40 | 5-5 minimum ( $4-5 \mathrm{hcpt}$ ) |
| Responses to 2 $\checkmark$ - 2 NT-3¢-3 $\downarrow$ |  |
| 30 | 50 and 4 |
| 3 - |  |

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 $2 \bigcirc / Q$

The bids $20 / \boldsymbol{\infty}$ 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 wit 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 $2 \bigcirc / \uparrow$-2NT, simple version |  |
| :---: | :---: |
| 3\% | minimum, bad suit |
| $3 \diamond$ | minimum, good suit |
| 30 | maximum, bad suit |
| 3 ¢ | maximum, good suit |
| 3NT | 5332 distribution, 9-10 hcpt |
| $4 \%$ | $5+$ \% |
| $4 \diamond$ | $5+\diamond$ |
| 40 | 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 $3 \diamond$ and $3 \bigcirc$ 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 3 NT (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 $\mathbf{2} \odot / \uparrow$ according to Kent Feiler |  |
| :---: | :--- |
| New Suit | Stopper/length-asking bid |
| 2 NT | 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 made a shortened description of these conventions in my EHAA-version, which is described in ehaap.pdf.

## $7.32 \mathrm{NT} / 3 \S / 3 \diamond$

The idea with using 2 NT 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 3 NT is playable or not. After $2 \mathrm{NT} 3 \boldsymbol{\AA}, 4 \boldsymbol{\&}, 4 \diamond$ and $5 \boldsymbol{\%}$ are pass or correct bids, 3 M is natural and forcing, and $3 \diamond$ is a forcing relay.

| Responses to 2NT-3 $\diamond$ |  |
| :--- | :--- |
| $3 \diamond$ | \&-suit |
| 3 | $\diamond$-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 | 1 NT | 2\% | Diamond suit, denies other 4-suits |
| AKJxx | xxxxx | $2 \diamond$ | 20 | $5+$ diamonds, 4 hearts |
| Axx | x | 2 | 2NT | 3 Spades |
|  |  | $3 \%$ | 30 | 1 club, last card shown from above |
|  |  | 4\% | 4- | 5 -controls (AK-ask; $\mathrm{A}=2, \mathrm{~K}=1$ ) |
|  |  | 4 NT | 5\% | No $\diamond$ control |
|  |  | $5 \diamond$ | 5NT | $\bigcirc$ and $\boldsymbol{\sim}$ control;no \& control |
|  |  | $6 \%$ | 60 | 2nd $\odot$ control, no 2nd ¢ control |
|  |  | $7 \diamond / \odot$ | Pass | Must have AK-Hearts; A-Spades |

If the hands would be exchanged, only the first two bids would be exchanged: $1 \diamond-1 \bigcirc-2 \boldsymbol{\infty}-\ldots$ 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\% | 20 | 4+ Spades |
| AKQx | 10xxx | 2 | $3 \%$ | 4 Diamonds 4 Spades |
| AQ10x | K9 | $3 \diamond$ | 30 | 3 hearts (from above in steps), 4342 |
|  |  | 34 | $4 \diamond$ | 8 AKQ -points (3NT is 6 AKQ points) |
|  |  | 40 | 4NT | ¢ control; no $\diamond$ control |
|  |  | 5\% | 5 NT | $\bigcirc$, \% and 2nd Spade control; no 2nd Heart control |
|  |  | $6 \diamond$ | Pass | ¢ $A Q+\bigcirc \mathrm{K}$ or $\boldsymbol{¢} \mathrm{KQ}+\bigcirc \mathrm{C}$, \& K for sure |

An exchange of hands would lose some precision, the auction would go: 1NT- $2 \boldsymbol{\varrho}-2 \boldsymbol{\uparrow}(=4+\boldsymbol{\oplus})-3 \boldsymbol{Q}-3 \diamond(=4 \diamond)-$ $3 \bigcirc=(\mathrm{AKQ}$ ask $)$-identical sequence but one step lower (apart from the final contract).

In the following a a possible source of errors ( $(\Omega+\boldsymbol{\infty}$-two-suiters after 1\&) is illustrated.

| x | xxx | 1\% | 1/ | $4+\bigcirc, 9+\mathrm{GF}$ |
| :---: | :---: | :---: | :---: | :---: |
| KQx | AJxx | 1NT | $2 \diamond$ | $4+\boldsymbol{\$}$ (" $\bigcirc$-bid" = impossible suit) |
| AQJxxx | K | 20 | 2 | $4 \bigcirc, 5+\boldsymbol{\circ}$ |
| Axx | KTxxx | 2NT | 3\% | $3 \boldsymbol{¢}$ (from above in steps) |
|  |  | $3 \diamond$ | 30 | last card in $\diamond, 3415$ |
|  |  | 3/ | 4\% | 7 AKQ controls, 7 missing |
|  |  | $4 \diamond$ | 4NT | $\boldsymbol{¢}+\bigcirc$ control, no $\boldsymbol{\uparrow}$ control |
|  |  | $6 \diamond$ | pass | AKQ in spades $+\boldsymbol{\&} \mathrm{Q}$ missing |

Note how nicely $6 \mathbf{\%}$ is avoided.
The following is quite different:

| Txxx | A9x | $1 \diamond$ | $1 \circlearrowleft$ | $4+\odot$ |
| :--- | :--- | :--- | :--- | :--- |
| AJxx | KQ | 2 NT | $4 \boldsymbol{\AA}$ | $\diamond$-marmic, $4 \boldsymbol{\AA}$ is break-out, natural and invitational |
| K | J9x | $5 \boldsymbol{\AA}$ | pass |  |
| AJxx | Qxxxx | pass |  |  |

If we remove a point from relayer, his/her first bid should be $2 \boldsymbol{\&}$, which should be raised to 3 by opener, possibly followed by $3 \mathrm{NT} / 5$ by responder. If a point is also removed from opener the bidding would probably stop in 2\& (unless opps bid $\diamond$, 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\% | $1 \diamond$ | negative, 0-8 hcpt |
| :---: | :---: | :---: | :---: | :---: |
| Axx | KQxxxx | 10 | $2 \diamond$ | $1 \bigcirc=19+, 2 \diamond=4+\bigcirc$, less than $4 \diamond, 6-8 \mathrm{hcpt}$ |
| Axx | xx | 20 | $3 \%$ | $3 \boldsymbol{A}, 6+$ - |
| Ax | xx | $3 \diamond$ | 30 | 3622 exactly |
|  |  | 3 - | $4 \diamond$ | 5 AKQ controls |
|  |  |  | 54 | $\bigcirc$ and $\uparrow$ control, no $\diamond$ control |
|  |  | $5 \diamond$ | 50 | no \& control |
|  |  | 7NT | pass | The last control must be in $\odot, 14$ tricks ! |

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

| Ax | KTxx | 1\% | 1/ | $4+\bigcirc, 9+$ hcpt |
| :---: | :---: | :---: | :---: | :---: |
| Jx | AKQTx | 1 NT | 20 | $4+\boldsymbol{\oplus}, 5+\bigcirc$ |
| AQT | xxx | 2 | 3\% | $3 \diamond$, exactly $4 \boldsymbol{\downarrow}(2 \mathrm{NT}=55+$, canape impossible) |
| AKQxxx | x | $3 \diamond$ | 3 | 1\%, last card shown in steps from above |
|  |  | 4\% | 4 ${ }^{\text {a }}$ | 8 AKQ-controls |
|  |  | 4NT | $5 \diamond$ | $\bigcirc+\uparrow$ control, no $\diamond$ control |
|  |  | 50 | 5 | no \& control |
|  |  | 5NT | $6 \diamond$ | 2nd $\odot$ control, no 2nd $\boldsymbol{\phi}$ control |
|  |  | 75 | pass | AKQ in $\bigcirc+\mathrm{K}$ in $\boldsymbol{\uparrow}$ is the only possible control-combinatio |

Note that this illustrates a weakness in J-Moscito: After a $1 \boldsymbol{1} \boldsymbol{\circ}$ opening does the responder with $4+\boldsymbol{A}$ and a longer $\triangle$ (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\% | 14 | $4+\bigcirc, 9+$ hcpt |
| :---: | :---: | :---: | :---: | :---: |
| KJxx | AQxxxx | 1NT | 30 | 1633 exactly |
| AQx | KJx | 3 ¢ | 40 | 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 ?

2. $1 \diamond-1 \circlearrowleft-1$ - $-1 N T-2 \boldsymbol{Q}-2 \diamond-3 \boldsymbol{\%}$





### 9.1 Answers

1. $1 \boldsymbol{\infty}-1 \diamond-1 \circlearrowleft-1$ - $-1 N T-2 \boldsymbol{\infty}-2 \diamond-2 \bigcirc-2 \boldsymbol{\uparrow}$ : Responder has $0-3$ hcpts (the second negative $1 \boldsymbol{\uparrow}$ show $0-5$, and $2 \circlearrowleft$ 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 $\boldsymbol{\phi}$ to $\bigcirc$.
2. $1 \diamond-1 \circlearrowleft-1 \boldsymbol{\infty}-1 \mathrm{NT}-2 \boldsymbol{\phi}-2 \diamond-3 \boldsymbol{\infty}:$ Opener shows $4+\bigcirc, 1 \circlearrowleft=$ relay, $1 \boldsymbol{\infty}=4+\boldsymbol{\infty}, 1 \mathrm{NT}=$ misfit break-out, $2 \boldsymbol{\infty}=5+\boldsymbol{\infty}$, $2 \diamond=$ probably $4252,3 \mathbf{\$}=6+\boldsymbol{\%}$. All bids after break-outs are natural (including the break-out itself)
 $1 \odot, 6$ AKQ controls, $\boldsymbol{\phi}+\diamond+\boldsymbol{\phi}$ control but no $\diamond$ control.
 $7 \boldsymbol{\%}$ and thus $0 \boldsymbol{\wedge}, 8 \mathrm{AKQ}$ controls, controls in $\boldsymbol{\&}$ and $\odot$ but not in $\diamond$, no 2 nd control in $\boldsymbol{\&}$.
 actly, 7 AKQ-controls, controls in $\triangle+\diamond+\boldsymbol{\omega}+\boldsymbol{\omega}+2$ nd control in $\bigcirc$ and no 2 nd control in $\diamond$
3. $1 \circlearrowleft-1 \boldsymbol{\infty}-1 N T-2 \boldsymbol{\phi}-2 \diamond-2 \circlearrowleft-3 \bigcirc-3 \boldsymbol{\phi}-4 \diamond-4 N T-5 \boldsymbol{\phi}-5 \diamond-5 \bigcirc-5 \boldsymbol{\phi}-6 \diamond$ : Opener has $4+\boldsymbol{\phi}, 4+\boldsymbol{\phi}, 5+\boldsymbol{\phi}$ and $4 \boldsymbol{\phi}, 4126$ exactly, 6 AKQ controls, control in $\boldsymbol{\&}$ and $\boldsymbol{\phi}$ but not in $\diamond$, no control in $\Omega$, no 2 nd $\&$ control, no 2 nd control (Ace in \& and $\boldsymbol{\phi}$ 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

1. Use of AK-, AKQ-controls or both?
2. Base levels for control responses ( 5 or 6 after pos. resp to $1 \boldsymbol{4}$ ), adjustments for 10 cards in longest suits?
3. Reverse relays on or off?
4. 6331-convention on or off?
5. Alternatives in Joppe-NT for $2 \boldsymbol{4}$ ? After $1 \boldsymbol{\ell}-1 \mathrm{NT}$ ? 4441 allowed in $\mathbf{1 \%}-1 \diamond-1 \bigcirc-1 \mathrm{NT}$ ?
6. Control Asking Bids (CABs) on or off (in situations where ordinary relays are off, due to the bidding level)?
7. $2 \diamond$ natural undisciplined or Ekren? Or any other convention?
8. Feilers system or simple system after undisciplined twos?
9. Ryalls system or traditional after Ekren?
10. Which semi-positive two-suiter bids after $1 \boldsymbol{\%}$ ?
