Alleyne Balanced Game-Force Shape Relay

Describing Responder's Distribution following a Balanced Game-Force

by

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References

1. **The Useful-Space Principle, I**. Jeff Rubens. *The Bridge World* Vol. 52 No. 2, November 1980.
2. **The Useful-Space Principle, II**. Jeff Rubens. *The Bridge World* Vol. 52 No. 3, December 1980.
3. **Moscito Symmetric Relay Structure** http://mikevin.tripod.com/mosc/english/1_2.htm
4. **Symmetric Major-Suit Raises,** Norman Pestaina http://cs.fiu.edu/~pestaina/SymmetricMajor.docx

Acknowledgements

The response system described here is part of the Symmetric Major-Suit Raise System [4]. Responses to an opening bid of 1 of a major are defined by steps, not suit. Thus, the balanced game-forcing raise is 2N only when the opening is 1♠; when the opening is 1♥, the balanced game-force is 2♠. This strategy is motivated by the Useful-Space Principle described in [1] and [2]. The implementation uses the ideas of a residual grouping of responding hand-types, and a relay structure, both defined in [3].

What follows is a discussion of the Alleyne Shape Relay that seeks to present the motivation for the system as well as the details of its structure.

Discussion

When making a balanced 4-card game-forcing raise of major suit opening (1♠ - 2N or 1♥ - 2♠), responder will have one of the following distributions: 7[222] 6[322] 5[422] 5[332] 4[522] 4[432] 4[333] (The 1st number is the number of trumps, the others are the numbers in the other suits, in any order).

Opener can make the next available bid as a *relay*: 1♠ - 2N; 3♣ or 1♥ - 2♠; 2N asking responder to describe her distribution. The description is completed below the level of 4 of the agreed trump suit. Since there are only a relatively small number of bids (actually 8) between the relay and 4 of the major, some similar shapes are grouped together under the initial response to the relay, and resolved via additional relay steps; some shapes are described immediately. We will specify the groups later, but here are the meanings of the first response to the relay:

Spades			Hearts		
1♠	2N		1♥	2♠	
3♣	3♦	**R32** group	2N	3♣	**R32** group
	3♥	**R23** group		3♦	**R23** group
	3♠	**R22** group		3♥	**R22** group
	3N	4=2=2=5 *♣-transfer*		3♠	5=4=2=2
	4♣	4=2=5=2 *♦-transfer*		3N	2=4=2=5 *♣-transfer*
	4♦	4=5=2=2 *♥-transfer*		4♣	2=4=5=2 *♦-transfer*
	4♥	4=3=3=3		4♦	3=4=3=3
	4♠	7=2=2=2		4♥	2=7=2=2

This system places a premium on being able to locate *secondary* fits 4-4 and 5-5 fits when they exist; we'll explain why later. Notice that when responder has exactly 4-card support for the *primary* (agreed) suit, and exactly 5 cards in some other suit, responder *transfers* to this suit, i.e. by bidding just under 4 of the suit (like a normal transfer). This allows opener to *accept the transfer* when also holding 5 cards in this suit and to make some other bid when he doesn't. The only exception occurs when the primary suit is ♥, and the secondary ♠; then, responder bids 3♠ directly and opener accepts by bidding 3N.

As can be seen in the tables above, the 7[222], 4[522] and 4[333] distributions are described by the initial response to the relay. All other distributions are allocated to one of the **R32**, **R23** or **R22** groups and resolved via one or two further relays. The **R** in **R32**, **R23** and **R22** stands for **R**esidual; what does this mean? Consider a hand with 5[422] distribution as a 2-suiter, 5 cards in the agreed trump suit, and 4 cards in one of the other three suits; the remaining two suits are called *residuals* and the distribution in these *residual* suits must be 2-2. So, if the *primary* suit is ♠, the **R22** group includes the responding hands with 5=4=2=2, 5=2=4=2 or 5=2=2=4 distribution; if the primary suit is ♥, the **R22** group includes hands with 4=5=2=2, 2=5=4=2 or 2=5=2=4 distribution. These **R22** distributions are described by cue-bidding the 4-card suit in response to the 2nd stage relay:

Spades			Hearts		
1♠	2N		1♥	2♠	
3♣	3♠	**R22** group	2N	3♥	**R22** group
3N	4♣	5=2=2=4	3♠	3N	4=5=2=2 (NT surrogate for ♠)
	4♦	5=2=4=2		4♣	2=5=2=4
	4♥	5=4=2=2		4♦	2=5=4=2

These are example of 2-stage relays. Opener simply makes the next available bid to keep the relay going until the group has been fully resolved. The 5[332] distributions are resolved by a 3-stage relay, but always via the **R32** group. The 1st stage says **R32**, the 2nd stage says 5[332], and the 3rd stage is a cue-bid of the doubleton. Here it is:

Spades		
1♠	2N	
3♣	3♦	**R32** group
3♥	3♠	5[332]
3N	4♣	5=3=3=2
	4♦	5=3=2=3
	4♥	5=2=3=3

Hearts		
1♥	2♠	
2N	3♣	**R32** group
3♦	3♥	5[332]
3♠	3N	2=5=3=3 (NT surrogate for ♠)
	4♣	3=5=3=2
	4♦	3=5=2=3

There are other distributions included in the **R32** group, that's why 3 stages are needed.

Now we come to the most interesting, most frequent, and most critical distributions, the 4[432]. These holdings all include two 4-card suits, and either have 3 cards in the higher *residual* suit and 2 in the lower (that's **R32**), or 2 cards in the higher *residual* and 3 cards in the lower (that's **R23**):

Spades (♠)	Hearts (♥)
R32: 4=4=3=2, 4=3=4=2, 4=3=2=4	**R32**: 4=4=3=2, 3=4=4=2, 3=4=2=4
R23: 4=4=2=3, 4=2=4=3, 4=2=3=4	**R23**: 4=4=2=3, 2=4=4=3, 2=4=3=4

These distributions are also resolved via 2-stage relays, but using *transfers* at the 2nd stage:

Spades		
1♠	2N	
3♣	3♦	**R32** group
3♥	3♠	5[332]
	3N	4=3=2=4 ♣-*transfer*
	4♣	4=3=4=2 ♦-*transfer*
	4♦	4=4=3=2 ♥-*transfer*

Hearts		
1♥	2♠	
2N	3♣	**R32** group
3♦	3♥	5[332]
	3♠	4=4=3=2 *direct bid*
	3N	3=4=2=4 ♣-*transfer*
	4♣	3=4=4=2 ♦-*transfer*

Or

Spades		
1♠	2N	
3♣	3♥	**R23** group
3♠		
	3N	4=2=3=4 ♣-*transfer*
	4♣	4=2=4=3 ♦-*transfer*
	4♦	4=4=2=3 ♥-*transfer*

Hearts		
1♥	2♠	
2N	3♦	**R23** group
3♥		
	3♠	4=4=2=3 *direct bid*
	3N	2=4=3=4 ♣-*transfer*
	4♣	2=4=4=3 ♦-*transfer*

Finally, the 6[322] hands are (arbitrarily, but with good purpose) assigned to one of the residual groups **R32**, **R23** or **R22,** based on their specific ♦-♣ distribution, 6=2=3=2 and 2=6=3=2 to **R32**, etc. These are resolved by bidding 4 of the trump suit following the 2nd stage relay:

Spades		
1♠	2N	
3♣	3♦	**R32** group
3♥	4♠	6=2=3=2

Hearts		
1♥	2♠	
2N	3♣	**R32** group
3♦	4♥	2=6=3=2

Spades		
1♠	2N	
3♣	3♠	**R23** group
3N	4♠	6=2=2=3

Hearts		
1♥	2♠	
2N	3♥	**R23** group
3♠	4♥	2=6=2=3

Spades		
1♠	2N	
3♣	3♦	**R22** group
3♥	4♠	6=3=2=2

Hearts		
1♥	2♠	
2N	3♣	**R22** group
3♦	4♥	3=6=2=2

Here’s the complete relay structure with everything pulled together:

Spades

1♠	2N	
3♣	3♦	**R32** group
	3♥	**R23** group
	3♠	**R22** group
	3N	4=2=2=5 *transfer* ♣
	4♣	4=2=5=2 *transfer* ♦
	4♦	4=5=2=2 *transfer* ♥
	4♥	4=3=3=3
	4♠	7=2=2=2

Hearts

1♥	2♠	
2N	3♣	**R32** group
	3♦	**R23** group
	3♥	**R22** group
	3♠	5=4=2=2 *direct bid*
	3N	2=4=2=5 *transfer* ♣
	4♣	2=4=5=2 *transfer* ♦
	4♦	3=4=3=3
	4♥	2=7=2=2

Spades

1♠	2N	
3♣	3♦	**R32** group
3♥	3♠	5[332]
	3N	4=3=2=4 *transfer* ♣
	4♣	4=3=4=2 *transfer* ♦
	4♦	4=4=3=2 *transfer* ♥
	4♥	
	4♠	6=2=3=2

Hearts

1♥	2♠	
2N	3♣	**R32** group
3♦	3♥	5[332]
	3♠	4=4=3=2 *direct bid*
	3N	3=4=2=4 *transfer* ♣
	4♣	3=4=4=2 *transfer* ♦
	4♦	
	4♥	2=6=3=2

Spades

1♠	2N	
3♣	3♦	**R32** group
3♥	3♠	5[332]
3N	4♣	5=3=3=2
	4♦	5=3=2=3
	4♥	5=2=3=3

Hearts

1♥	2♠	
2N	3♣	**R32** group
3♦	3♥	5[332]
3♠	3N	2=5=3=3 (NT surrogate for ♠)
	4♣	3=5=3=2
	4♦	3=5=2=3

Spades

1♠	2N	
3♣	3♥	**R23** group
3♠	3N	4=2=3=4 *transfer* ♣
	4♣	4=2=4=3 *transfer* ♦
	4♦	4=4=2=3 *transfer* ♥
	4♥	
	4♠	6=2=2=3

Hearts

1♥	2♠	
2N	3♦	**R23** group
3♥	3♠	4=4=2=3 *direct bid*
	3N	2=4=3=4 *transfer* ♣
	4♣	2=4=4=3 *transfer* ♦
	4♦	
	4♥	2=6=2=3

Spades

1♠	2N	
3♣	3♠	**R22** group
3N	4♣	5=2=2=4
	4♦	5=2=4=2
	4♥	5=4=2=2
	4♠	6=3=2=2

Hearts

1♥	2♠	
2N	3♥	**R22** group
3♠	3N	4=5=2=2 (NT surrogate for ♠)
	4♣	2=5=2=4
	4♦	2=5=4=2
	4♥	3=6=2=2

A minor miracle! We are able to unambiguously describe 24 distinct distributions in the space of 8 bids. This is only possible by using a relay structure that allows related distributions to be grouped initially and later resolved via relay stages. The relay system described here borrows and simplifies the residue schema idea from the Moscito Symmetric Relay System. Did you notice that there are even 2 unused bids? We can try to make use of these bids, but it’s not necessary.

What about the transfers? Why introduce another level of complexity? The answer is, paradoxically: "to gain some simplicity". Unlike the more traditional Jacoby and Texas transfers, partner may either *accept* or *decline* a relay transfer; so at least 2 bids are required to respond to a transfer and space below 4 of the *primary* suit is at a premium. First, some observations about transfers

- Responder always has exactly 4-card support for the *primary* suit
- Responder transfers to a *secondary* suit in which she has either 4 or 5 cards
- Opener *accepts the transfer* only when he has the same number of cards in the *secondary* suit as responder (the partner initiating the transfer)

In other words, responder always transfers when his *primary-secondary* distribution is exactly 4-4 or 4-5. Since opener *accepts the transfer* when he has the same number of cards in the *secondary* suit as responder, acceptance is our means of locating a <u>*secondary* 4-4 or 5-5 fit</u> together with a <u>*primary* 5-4 fit</u>. There are 2 significant advantages to recognizing the *secondary* fit:

1. Often, there is an additional trick available when the suit of the *secondary* 4-4 or 5-5 fit becomes the trump suit since the 5-4 *primary* suit can provide a discard that is not available when the *primary* suit is the trump suit. Sometimes, this means that a small slam can be bid in the suit of the *secondary* fit, but only a game in the suit of the *primary* fit. Perhaps a grand slam is available in the *secondary* when only a small slam can be made in the suit of the *primary* fit.
2. Even if the final contract is not in the suit of the *secondary* fit, recognizing a double fit allows the partnership, along the way, to employ **6 Ace Keycard Blackwood** thus gaining more detailed recognition of their combined controls.

Our agreement is that opener *accepts the transfer* by making the next available bid; this will be 4 of the *secondary* suit except when the *primary* and *secondary* suits are ♥ and ♠ respectively (see above). When not accepting the *transfer*, opener normally returns to 4 of the *primary* suit or makes the keycard-ask for the *primary* suit. Acceptance of the transfer always initiates **6 Ace Keycard Blackwood**. For example:

<u>Example 1: Shape Relay R32, 4=4=3=2, Secondary Suit Grand</u>

(Modification of deal #5 of *Challenge The Champs*, Bridge World, April 2009)

<u>West</u>	<u>East</u>
♠ K J 7 4 2	♠ A Q 9 6
♥ A Q 5 3	♥ K T 9 2
♦ A 8 7	♦ K 6 3
♣ 5	♣ A 4

<u>West</u>	<u>East</u>	
1♠	2N	
3♣	3♦	Relay; response shows **R32**: 4[432] or 5[332] or 6=2=3=2
3♥	4♦	Relay; response shows a 4=4=3=2 "transfer" to ♥
4♥	4♠	♥-acceptance constitutes a *Both-Wood* Keycard-ask; (0 or) 3 Keycards shown
4N	5♥	Queen-ask; 3rd step shows higher trump Queen, Q♠, only
5N	6♥	King-ask; response shows the higher residual King, K♦, only (denies K♣)
7♥		

West knows East's exact distribution to be 4=4=3=2, and all of East's significant honors, and pictures East's hand as: ♠ A Q x x ♥ K x x x ♦ K x x ♣ A x. He can therefore expect to ruff East's ♣ loser and to discard East's ♦ loser on his 5th ♠. 7♥ will be routine barring an unfavorable 5-0 ♥-split, or unless one opponent holds ♥ J x x x. Note that 7♠ fails since there will be no legitimate way to dispose of the 3rd ♦.

Example 2: Shape Relay R32, 3=4=2=4, Secondary Suit Grand
(Alleyne Bridge Hand Generator)

West	East
♠ A	♠ Q 9 5
♥ K J 7 6 4 2	♥ A Q T 3
♦ 6 5	♦ A J
♣ A K 9 3	♣ Q T 7 6

West	East	
1♥	2♠	
2N	3♣	Shape Relay; response shows **R32**: 4[432] or 2=6=3=2
3♦	3N	Relay; ♣-transfer shows 3=4=2=4
4♣	5♦	Acceptance is a Both-Wood Keycard ask; 2 Keycards, both Q♣ and Q♥
5♥	5♠	King-ask; zero or both residual Kings
5N	6♣	Relay; no residual Kings
7♣		

The Shape Relay reveals a double ♥-♣ fit, and East's specific distribution to be 3=4=2=4. Accepting the ♣ transfer automatically triggers Both-Wood, East's the 6th Step response promising 2 Keycards and both trump Queens, Q♣ and Q♥. At this stage, West can count 12 tricks assuming the adverse ♣'s split 3-2. Any residual King, K♦ or K♠, would make the trick-count 13, but the King-ask discovers no Kings. With ♣ as trumps, East's ♦-loser may be discarded on the long ♥, and West's ♦-loser ruffed, so 7♣ is chosen.

Example 4: Shape Relay R23, 2=4=4=3 – Stopping on a Nickle
(Modification of deal #7 of *Challenge The Champs*, Bridge World, July 2009)

West	East
♠ A 9 6 5	♠ Q 8
♥ K J 8 7 3	♥ A Q 9 2
♦ A 9 8 5	♦ K T 4 3
♣	♣ A 9 5

West	East	
1♥	2♠	
2N	3♦	Relay; 2nd step response shows **R23**: 4[4][23] or 6=3=2=3
3♥	4♣	Relay; response shows a 2=4=4=3, *transfer* to ♦
4♦	4♥	♦ "acceptance" and *BothWood* Keycard ask; East shows (0 or) 3 Keycards
4♠	5♦	Queen-ask; East's 3rd step response shows higher trump Queen, Q♥, only
5♥		

Missing the trump Queen in a 4-4 fit will usually guarantee a trump loser, so West retreats to 5♥. Too, East's promised A♣ is probably wasted. East has no cover cards beyond the controls already promised and accepts West's decision. Note that either residual King, would offer good play for 6♦, so holding either of these cards, East should venture 6♦.

The examples above are from *Alleyne Game-Forcing Major Suit Raises*, another discussion on opener's continuations following the game-forcing sequence 1♠ - 2N or 1♥ - 2♠. There are other continuations available to opener when his distribution is exceptional, but the *Shape Relay* described here is the most frequently used continuation. The article also gives a description of *Both-Wood*, a variation of the **6 Ace Keycard Blackwood** convention. The Alleyne continuations and Both-Wood are summarized here.

The Alleyne Balanced Game-Force major suit raise (similar to the Jacoby 2N) takes the form of a single jump to the next higher denomination, 2N after a 1♠ opening, but 2♠ following a 1♥ opening. Opener's next bids after the game-forcing raise are summarized here:

Spades			**Hearts**		
1♠	2N		1♥	2♠	
3♣		*Shape Relay*	2N		*Shape Relay*
3♦		*Control Ask*	3♣		*Control Ask*
3♥		*Self-Splinter*	3♦		*Self-Splinter*
3♠		*Trump Ask*	3♥		*Trump Ask*
3N		*♠-♣ 2-suiter, at least 6-5*	3♠		*♥-♠ 2-suiter, at least 6-5*
4♣		*♠-♦ 2-suiter, at least 6-5*	3N		*♥-♣ 2-suiter, at least 6-5*
4♦		*♠-♥ 2-suiter, at least 6-5*	4♣		*♥-♦ 2-suiter, at least 6-5*
4♥			4♦		
4♠		*Sign-off*	4♥		*Sign-off*
4N		*Kickback*	4♠		*Kickback*

Both-Wood applies when two possible trump suits have been identified. Given a known double fit:

- There are 6 Keycards, 4 Aces and the 2 Kings of the *lower* and *higher* trump suits
- There are 2 trump Queens, of the *lower* and *higher* agreed trump suits
- There are 2 "outside" Kings, of the *lower* and *higher residual* (non-trump) suits.

Both-Wood employs a bid of 4 of the *lower* agreed trump suit as the Keycard-ask. The Keycard response structure is defined as:

1st Step:	0 or 3 Keycards
2nd Step:	1 or 4 Keycards
3rd Step:	2 Keycards but neither trump Queen
4th Step:	2 Keycards + the *lower* trump Queen only
5th Step:	2 Keycards + the *higher* trump Queen only
6th Step:	2 Keycards + both trump Queens

Following the Keycard response, the **King-ask** is the (would-be) *7th Step*, 5N when the lower trump suit is ♥, 5♠ when the lower trump suit is ♦, 5♥ when the lower trump suit is ♣. The responses identify the specific residual Kings and, initially, keep the bidding no higher than 6 of the lower trump suit by making the *1st Step* response ambiguous:

1st Step:	**zero** or **both** *residua*l Kings
2nd Step:	*lower residual* King only
3rd Step:	*higher residual* King only

Following a *1st Step* response to the Keycard-ask, the next available bid is the **Queen-ask**. Responses to the *1st Step* Queen-ask are identical to the Queen-showing responses to the Keycard-ask (above). Following a *2nd Step* response to the Keycard-ask, the next available bid is the **Queen-ask**. However, there are only 3 steps available for the response, so a modified response-structure, somewhat similar to the King-ask, can be adopted.