

EBL Tournament Director Seminar 2001

MOVEMENTS

Introduction

Three types of movement are in common use in EBL tournaments:

- Teams Round-Robins
- Barometer Pairs
- Standard Mitchell movements for pairs

Whilst in the first two cases the movements will normally have been prepared in advance by the organisers, it is important that Directors know for themselves how to prepare such movements. For example, this knowledge could be useful at home when the Director himself is also the organiser.

Directors are probably already familiar with the many other types of pairs movement. In any case, we recommend the book *Movements – a fair approach*, by Hallén, Hanner and Jannersten.

Teams Round-Robins

By this we mean a league programme such as:

Round 1	Round 2	Round 3	Round 4	Round 5	Round 6	Round 7	Round 8	Round 9	Round 10	Round 11
12 v 1	12 v 2	12 v 3	12 v 4	12 v 5	12 v 6	12 v 7	12 v 8	12 v 9	12 v 10	12 v 11
11 v 2	1 v 3	2 v 4	3 v 5	4 v 6	5 v 7	6 v 8	7 v 9	8 v 10	9 v 11	10 v 1
10 v 3	11 v 4	1 v 5	2 v 6	3 v 7	4 v 8	5 v 9	6 v 10	7 v 11	8 v 1	9 v 2
9 v 4	10 v 5	11 v 6	1 v 7	2 v 8	3 v 9	4 v 10	5 v 11	6 v 1	7 v 2	8 v 3
8 v 5	9 v 6	10 v 7	11 v 8	1 v 9	2 v 10	3 v 11	4 v 1	5 v 2	6 v 3	7 v 4
7 v 6	8 v 7	9 v 8	10 v 9	11 v 10	1 v 11	2 v 1	3 v 2	4 v 3	5 v 4	6 v 5

Observe and note how the programme is calculated. In fact, there are many ways to achieve the required result (an all-play-all league), but the method described here is useful because it is both simple **and** it ties in nicely with the Barometer pairs movements which are to follow. Some sophistications can be added if you wish. For example, if we assume that the first named team is at home, you will see that team 12 are always at home (and all the other teams are at home in five of their 11 matches). To improve this situation change 12 v 7 to read 7 v 12, 12 v 8 to read 8 v 12 and so on up to 12 v 11 to read 11 v 12. Now all teams are at home in either five or six rounds (the high numbered teams, ie 7–12 are now at home in six rounds, and the low numbered teams, ie 1–6 are at home in five rounds).

For a further sophistication, note how the teams who were at home in Round 2 are all away in Round 7 (having renumbered the 12 v 7 match to 7 v 12). You can take advantage of this fact to avoid teams having a long run of home and away matches by playing the rounds out of order. Similarly, Rounds 3 & 8, 4 & 9, 5 & 10 and 6 & 11 have the home/away situation reversed.

So, you could play (for example) Rounds 2 & 7 first, then 3 & 8 and so on. Round 1 is the exception — the teams listed first in this round are the ones who get an extra home match.

A final feature to take care of (and another reason for reorganising the order in which rounds are played) is as follows. Take team 10 as an example. You will observe that each time they play, their opponents have just met team 8. So, if team 8 are a very weak team, team 10's opponents might always be feeling very pleased with themselves when they play them. You might or might not think this is too important — but what if team 8 were actually missing (as in an 11-team tournament), and so this was a 'Bye' round? Reordering the rounds takes care of this problem.

Barometer Pairs

This is the same as the league programme, although this time the numbers refer to a pair rather than to a team. Basically, it's a Howell movement in which all the pairs play the same boards at the same time.

So, the teams example quoted above will also work for a six-table Barometer pairs event (12 pairs). This time, you do not want to reorder the rounds — the simple progression of pairs from one round to the next is best left undisturbed (the movement is difficult enough as it is for the players). Note how the pairs follow the next lower numbered pair (and pair 1 follow pair 11) — this is a feature of all Howell movements.

Without modification, however, the 'player comparisons' for all pairs except pair 12 are terrible. Take pair 10 as an example. They sit the same way as pairs 9 & 11 on no fewer than nine of the 11 rounds; by contrast, they only sit the same way as pairs 4 & 5 on one round out of 11. This can matter very much in a pairs event (eg if pairs 9 & 11 are both strong and 4 & 5 are both weak, or *vice versa*). Likewise, there are too many comparisons with pairs 1 & 8 (7 out of 11), and too few with pairs 3 & 6 (3 out of 11). Ideally, there should be five comparisons with each pair, ie out of 11 rounds played, you sit the same way as any other given pair on five rounds and the opposite way on five rounds — the 11th round is the 'head-on match' when the two pairs play against each other.

Amazingly, this balance can be perfected by simply 'arrow switching' table 3 throughout (check it for yourself and see if you don't believe it!).

To find this solution, do **not** try calculating it for yourself. Instead, go to page 224 of *Movements – a fair approach* (copy attached).

If you are interested in knowing how to construct a normal Howell movement, you can try to find a unique pair of numbers on each of the six lines across without ever using the same column twice. For example, (by trial and error):

Table 1	:	11 v 2	:	Board set 1	[line 2]
Table 2	:	10 v 5	:	Board set 2	[line 4]
Table 3	:	9 v 8	:	Board set 3	[line 6]
Table 4	:	7 v 3	:	Board set 5	[line 3]
Table 5	:	12 v 6	:	Board set 6	[line 1]
Table 6	:	4 v 1	:	Board set 8	[line 5]

This is a perfect six-table Howell! Only Howells with an even number of tables can be perfect (unless you do some clever arrow switching half way through a round) and, if you want perfect Barometer, then you also need a prime number of moving pairs.

Standard Mitchell movements

- E/W up one; boards down one
- No exceptions for an odd number of tables
- With an even number of tables, 'SKIP' after half the rounds have been played, ie E/W up two; boards down one. If players made up the boards at the table, this counts as a round played for the purpose of timing when the skip shall be.

Movement of lines

You can use the Barometer pairs model to assist your calculations. For example, if you had four sections playing a seven-session event(!):

	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7
Section A	8 v 1	8 v 2	8 v 3	8 v 4	8 v 5	8 v 6	8 v 7
Section B	7 v 2	1 v 3	2 v 4	3 v 5	4 v 6	5 v 7	6 v 1
Section C	6 v 3	7 v 4	1 v 5	2 v 6	3 v 7	4 v 1	5 v 2
Section D	4 v 5	5 v 6	6 v 7	7 v 1	1 v 2	2 v 3	3 v 4

Note how section D has been switched to achieve perfect comparisons, this being the equivalent of table 4 in the Barometer model.

So, from one session to the next:

N/S A ⇔ N/S A	N/S B ⇔ N/S C	N/S C ⇔ E/W D	N/S D ⇔ E/W C
E/W A ⇔ N/S B	E/W B ⇔ E/W A	E/W C ⇔ E/W B	E/W D ⇔ N/S D

...and no one will ever meet the same line of opponents twice! Of course, if not all the sections are the same size, you may have to make exceptions for a few pairs.

For example, if sections A–C were 13 tables and section D were 14 tables, you would need to do something special for N/S D 14 and E/W D 14 [actually, just keeping them where they are throughout will work very nicely, but take care that they don't keep playing Round 1 against one another every session].

Hint: if sections must be different sizes, have the one containing the stationary pairs (usually section A as one of the smaller sections — it will make calculating the exceptions a lot easier).

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