Multi-Goal Stipulations, Quodlibets and Argentinian Twins



This is a follow-up to my previous article "Reciprocal Stipulations" (<u>https://juliasfairies.com/wpcontent/uploads/Reciprocal-Stipulations.pdf</u>). Since then, I have discussed the subject with Torsten Linss, Vlaicu Crisan and Kevin Begley (see <u>here</u>). As mentioned in the previous article, the terms "Reciprocal Helpmate" and "Reciprocal Selfmate" already existed (along with the equivalent "Grazer") and the same prefix "Reciprocal" was continued for the two new types "Reciprocal HelpSelfmate" and "Reciprocal Semi-Reflexmate". As it turned out and as highlighted by

Vlaicu and Kevin, the term "Reciprocal" was somewhat misleading, though it could be justified by the fact that in the double goals, both Black *and* White deliver the final mate. Still, as will be seen, we will run out of names when the number of combinations of double (or even triple, etc.) goals increases. Instead, the term "Multi-Goal Stipulation" is being adopted in this article. The solution for handling the multitude of new types is a notation system suggested by Torsten and modified by me which will be explained here. Also, two other closely related stipulation concepts: "Quodlibets" and "Argentinian Twins" are reviewed and their interrelationship with Multi-Goal stipulations are examined.

Multi-Goal Stipulations

In this type, White and Black play an adversarial or cooperative sequence to reach a position where two or more goals exist with either White or Black to move. Torsten suggested the following notation to describe all such types: md|h(w|b b|w) --> A & B & ... where:

- |, & are abbreviations for "OR" and "AND".
- d or h indicate defensive or help play (equivalent terms: adversarial, antagonistic, cooperative).
- m is the move length, with m.5 for sequences with an odd number of half-moves or plies.
- (wb), (bw), (ww), or (bb) indicate who makes the initial move, and who is to move when the final multigoal position has been reached. For the cases (wb) and (bw), m.5 will necessary.
- A, B, C ... are the different goals to be executed in the final position. For each goal, the customary side is assumed, e.g.: h#1 is by Black, #/1/s#1 is by White. But this can be changed by indicating "h#1w", "#1b", "s#1b", etc. Some of these "non-customary" types can be converted back to the customary types by reversing piece colours and turning the board 180° (if necessary). Here's a table listing the customary and non-customary sides for various familiar goals:

Goals	#1, #2	s#1, s#2	h#1, h#2	hs#1.5	h#1.5	hs#2
Customary side	W	W	В	В	W	W
Goals with non-customary side	#1b, #2b	s#1b, s#2b	h#1w, h#2w	hs#1.5w	h#1.5b	hs#2b

• For hs#1.5 and h#1.5, it may be a bit unclear as to who is actually executing the nested goal. Is it the side moving first, the side moving second or the side delivering the final mate? Here, to avoid any confusion, it is assumed to be the side moving first! The side executing the goal need only be mentioned if it is not the customary one. If it is the customary side, then it need not be mentioned. For example, s#1 is enough (not s#1w), but s#1b is required (not s#1).

With the above clarifications, the notation can be modified as $d \mid hmb \mid w \rightarrow A \& B \& ...$ Here, only the side making the initial move needs to be mentioned. The goals themselves indicate who has to execute them. Also, in defensive sequences, white always moves first, so this too need not be indicated in the notation: $dm \rightarrow A \& B \& ...$

Examples: Reci-h#: hmb --> #1b & h#1 or hm.5w --> #1b & h#1 Reci-semi-r#: dm --> #1 & h#1w Reci-hs#: hmb --> #1 & s#1 or hm.5w --> #1 & s#1 Reci-s#: dm --> #1 & s#1

As may be seen, the Reciprocal Semi-Reflexmate is the defensive (or antagonistic/adversarial) counterpart of the Reciprocal Helpmate. Likewise, the Reciprocal Selfmate is the defensive counterpart of the Reciprocal HelpSelfmate.

- The execution of the goals is always *voluntary*. i.e. it is not *forced*. The help play or defensive play indicated is applicable *only* to the initial sequence. In an s#1, Black is forced to #1, but the s#1 by White is still voluntary. Forced goals may be the subject of a future article! ;-)
- Note that multi-goals are different from twins of the type a) "Goal A" b) "Goal B" which is an "Argentinian Twin", as explained later. These have separate solutions for each goal.
- Unlike the earlier convention, the length m or m.5 of the initial sequence does not include the moves of the multi-goals. Example: d2w --> #1 & s#1 means a sequence of WBWB moves followed by moves W and WB. Earlier, this would have been stated as "Reci-s#3".

I had initially left out the anomalous cases where either side could continue after reaching the final multi-goal position, as this would involve an illegal "out-of-turn" move in one of the goals by White or Black. Vlaicu opined that these cases could also be considered valid. This is already taken care of in the modified version of the notation, as the side executing each of the goals is clearly indicated.

Example: hmb --> #1 & #1b. Here, White executes a #1 in the first goal, though it is not his turn to move. See <u>16</u>.

For series movers, the notation can be: **Ser-mw**|**b** --> **A** & **B** & ... which means a series of m moves by W or B to reach a position where goals A, B, ... are to be executed with W or B to move.

Example: **Ser-mw** --> **#1** & **s#1**: White plays a series of m moves to reach a position from which he can both #1 and s#1.

A look at the possible combinations of double goals with 1, 2 or 3 plies

These are summarized in the table on the next page. Out of a possible 36 combinations, 5 are unsound. The reason being that one of the goals would also be playable in the other goal, thus cooking it. For example, #1 is cook in a #2 and h#1.5, s#1 is a cook in a h#1, etc. In the remaining 31, 10 are legal and 21 are illegal (with one side making an out-of-turn move). In the 5 unsound ones, both the goals are executed by the same side and it is possible to convert them to sound (but illegal) combinations by having the goals to be executed by different sides. Many of the illegal combinations can also be made legal by adding a half-move (ply) to one of the goals. Both types of conversions are shown in the table. Combining the 31 with defensive and help play, there are a total of 62 combinations. Names exist for 4 of these combinations, which are (Nos. refer to the table):

- 1. Reciprocal Helpmate: No.4 with help play
- 2. Reciprocal Selfmate: No.2 with defensive play
- 3. Reciprocal Semi-Reflexmate: No.4 with defensive play
- 4. Reciprocal HelpSelfmate: No.2 with help play.

Adding and mixing additional goals like +, = and × in place of # and increasing the number of plies beyond 3 per goal will obviously increase the total number combinations! $\underline{13}$ and $\underline{14}$ are examples of these.

Another possibility is that all goals except #1 can have set plays! See <u>16</u>. This is equivalent to adding a third, illegal goal.

#	1st Goal	2nd Goal	Executed by	sound?	legal?	sound & legal?	sound & illegal?	Examples	Colour changed versions to convert unsound types	Single ply added versions to convert illegal types (not exceeding 3 plies per goal)	
1	#1	#1	diff sides	1	0	0	1	<u>16</u>		#1 & s#1 same side ==2 #1 & h#1 same side ==4	
2	#1	s#1	same side	1	1	1	0	5,7			
3	#1	s#1	diff sides	1	0	0	1			#1 & hs#1.5 same side ==7	
4	#1	h#1	same side	1	1	1	0	1 2 3 4 6, 16			
5	#1	h#1	diff sides	1	0	0	1	<u></u> , <u></u> , <u></u> , <u></u> , <u></u>			
5a	#1	#2	same side	0	1	0	0		#1 & #2 diff sides ==6		
6	#1	#2	diff sides	1	0	0	1			s#1 & #2 same side ==12 h#1 & #2 same side ==19	
7	#1	hs#1.5	same side	1	1	1	0				
8	#1	hs#1.5	diff sides	1	0	0	1			s#1 & hs#1.5 same side ==14 h#1 & hs#1.5 same side ==21	
8a	#1	h#1.5	same side	0	1	0	0		#1 & h#1.5 diff sides ==9		
9	#1	h#1.5	diff sides	1	0	0	1			s#1 & h#1.5 same side ==16 h#1 & h#1.5 same side ==23	
10	s#1	s#1	diff sides	1	0	0	1			s#1 & hs#1.5 same side ==14 s#1 & #2 same side ==12 s#1 & h#1.5 same side ==16	
10a	s#1	h#1	same side	0	1	0	0		s#1 & h#1 diff sides ==11		
11	s#1	h#1	diff sides	1	0	0	1			s#1 & hs#1.5 same side ==14 s#1 & #2 same side ==12 s#1 & h#1.5 same side ==16 h#1 & h2 same side ==19 h#1 & hs#1.5 same side ==21 h#1 & h#1.5 same side ==23	
12	s#1	#2	same side	1	1	1	0				
13	s#1	#2	diff sides	1	0	0	1			#2 & hs#1.5 same side ==26	
14	S#1	hs#1.5	same side	1	1	1	0	<u>8, 9</u>		#2.9 ha#1.5 aama aida 26	
15	S#1 c#1	h#1.5	same side	1	1	1	0	10		#2 & hs#1.5 same side ==26	
17	s#1	h#1.5	diff sides	1	0	0	1	<u></u>			
18	h#1	h#1	diff sides	1	0	0	1			h#1 & h#1.5 same side ==23 h#1 & #2 same side ==19 h#1 & hs#1.5 same side ==21	
19	h#1	#2	same side	1	1	1	0				
20	n#1	#2 bs#1.5	diff sides	1	1	1	1	11		#∠ & ns#1.5 same side ==27	
22	h#1	hs#1.5	diff sides	1	0	0	1	<u></u>			
23	h#1	h#1.5	same side	1	1	1	0				
24	h#1	h#1.5	diff sides	1	0	0	1				
25	#2	#2	diff sides	1	0	0	1				
26	#2	hs#1.5	same side	1	1	1	0	<u>12</u>			
27	#2	hs#1.5	diff sides	1	0	0	1		40 and 641 5 -145 - 00		
278	#2 #2	n#1.5	diff sides	1	0	0	1		#2 and n#1.5 diff side\$ ==28		
29	#∠ hs#1.5	hs#1.5	diff sides	1	0	0	1				
29a	hs#1.5	h#1.5	same side	0	1	Õ	0		hs#1.5 & h#1.5 diff sides ==30		
30	hs#1.5	h#1.5	diff sides	1	0	0	1				
31	h#1.5	h#1.5	diff sides	1	0	0	1				
		Totals	_	31	15	10	21	Sound and Lo	egal Unsound	llegal	
Possible Combinations of Double-Goals with 1, 2 and 3 plies											

Only some of these combinations are testable in WinChloe, Jacobi and in Popeye (using the structured stipulation form).

Quodlibets

This is a slightly different type of multi-goal stipulation. Here each of the goals A, B, C... are *optional* and have to be achieved in one of the variations of an *adversarial* sequence, after the key. Ideally, each goal is achieved an equal number of times (usually once) and the variations should be of the same length. Theoretically, a help play or series play Quodlibet should also be possible, but these would be equivalent to the Argentinian Twins type (covered next)! Quodlibets are not directly supported in WinChloe, Popeye and Jacobi. But a workaround is to solve the stipulations separately, merge the solutions and omit the lines which are refutations!

The notation here is simply of the form An/Bn/Cn...

Example: #2/s#2, #2/r#2, s#3/r#3, #2/s#2/=2/s=2, etc.

Argentinian Twins

Here, each of the Multi-Goals is given as a stipulation in a twin. As before, ideally, the move length should be the same in each twin. Also, it is preferred to have no additional twinning mechanism like change of condition, shifting of pieces, etc. But such examples do exist.

Comparison of the 3 types

The 3 types can be compared in the diagrams below:



The Argentinian Twin can be converted to the Multi-Goal stipulation by adding an initial sequence of moves. It can be converted to a Quodlibet by arranging for a common key in all the twins.

Which type is "better"? When the interest is in the initial sequence, the Multi-Goal type is to be preferred. The final Multi-Goals by themselves are difficult to create interest. But, having even two goals can motivate interesting effects and themes in the preliminary sequences. The Quodlibet and the Argentinian twin are to be preferred when the interest lies in the actual goals (and the sequences leading to them). These differences can be seen in the example problems.

Multiple goals set Quodlibets play in my mind, Argentinian twins --ChatGPT



Example Problems

Of course, like all other fairy elements, stipulations are only a means to an end - of showing interesting effects and themes in the play. Here is a varied selection. Both the new notation and the older one (if existing) are stated. Readers can also refer to the previous article, as I have not repeated the examples given there.

The "defensive" versions of these are more difficult to compose. Even the two existing ones: $dm \rightarrow +1$ & s#1 (5) and $dm \rightarrow +1$ & h#1w (6) have been done very rarely. Only a few examples exist.



No.<u>9</u> has been published as a "Reci-HS#9", which obviously clashes with the same name being applied to No.<u>7</u> and other examples by Torsten. <u>13</u> and <u>14</u> use = instead of # as one of the goals. <u>15</u> is a series mover example. <u>16</u> is an example of both a *triple* goal and an *illegal* goal (Black makes an "out-of-turn" move to #1). It could also be considered as a Reci-h# with a set mate for the h#1!



(4+2) C? h2w --> s#1 & h#1.5 1.Kh7-h8 Rg6-e6 2.h6-h7 Re6-e8 3.Rg7-f7 + Kf8xf7 # & 3.e5-e6 Re8e7 4.Rg7-g8# (3+3) C? h5.5w --> h#1 & hs#1.5 1.Kh1 Bel 2.g4 Kc4 3.g5 Kd3 4.g6 Ke2 5.g7 Kf1 6.g8=Q Be2 7.Qg1# & 6...Bf3+ 7.Qg2+ Bxg2# (3+3) C?

h2.5w --> #2b & hs#1.5 1.Kb1 Kb4 2.Ka1 Ka3 3.Qb1 Qg7 + 4.Qb2 + Qxb2 # & 3...a4 4.Qb2 + Qxb2 # <u>17</u> is possibly the earliest example of a Quodlibet. In <u>19</u>, White has to either make a capture or reach g8 in 4 moves. In <u>20</u>, each of the 3 twins shows a different combination of two goals in a cycle.



21 to 24 are Argentinian twins. 21 is a famous position with some forerunners: John Dell, *The Ladies Diary*, 1830 (reflected) #2; Charles Tomlinson, *Amusements in Chess*, 1845, #2; C.K.Ananthanarayanan, *Phenix*, 1988, #2, b) Sentinels; Here, in c) White has to force Black to occupy b8 in 2 moves. 23 is one of many done by Torsten.



I hope readers will be inspired to try their own hand at these stipulations. There is plenty of unexplored ground!