

The 6th FIDE World Cup in Composing

# Section D – Endgame Studies

Preliminary award by

Harold van der Heijden

MMXVIII

## Participants

D01	B. Djurašević (SRB)	D18	A. Sochnev (RUS)
D02	M. Hlinka (SVK)	D19	S. Kindermann (DEU)
D03	S. Didukh (UKR)	D20	L. Katsnelson (RUS)
D04	A. Avni (ISR)	D21	E. Kopylov (RUS)
D05	J. A. Garzón (ESP)	D22	A. Avedisián (URY)
D06	V. Samilo (UKR)	D23	S. S. Nielsen (DNK)
D07	A. Pallier (FRA)	D24	O. Pervakov (RUS)
D08	L. Kekely (SVK)	D25	A. Gasparyan (ARM)
D09	E. Wyckoff (USA)	D26	D. Hlebec (SRB)
D10	Á. Rusz (ROU)	D27	M. Minski (DEU)
D11	L. Topko (UKR)	D28	L. M. González (ESP)
D12	S. Kasparyan (ARM)	D29	D. Gatti (ITA)
D13	P. Arestov (RUS)	D30	V. Syzonenko (UKR)
D14	D. Keith (FRA)	D31	K. Barikbin (IRN)
D15	V. Kalashnikov (RUS)	D32	G.Hadzi-Vaskov (MKD)
D16	V. Tarasiuk (UKR)	D33	B. Shleyfman (RUS)
D17	A. Skripnik (RUS)		

I thank the organizers for the honourable invitation to judge this major tourney. Following that, something must have gone wrong, because I saw my name listed as a judge for the endgame study section in several announcements before I had accepted (or declined!) the job.

The tourney director provided me with 33 anonymous entries. I had to disqualify one entry (D21) which had been sent to me for a previous tourney in which I acted as tourney director, so I knew the identity of the composer. This violates the rule of a formal tourney.

Further, five entries proved to be unsound:

**D07:** 9.&g2 \u00d9c6 10.\u00d97 \u00e9f5 11.&f1 &b1 and now 12.&c7 &:c2 13.c4 &d1 14.&d3+ \u00d9g5 15.\u00d9f7. In the 10...\u00d9c5 main line there is another cook: 13.&:f2.

D12: 3.堂c8 急:a5 is a winning position (7EGTB), e.g. 4.堂c7 wins. Another cook is the thematic try (!): 5.逸e1+ 堂c5 and now e.g. 6. 含c3.

**D14**: Cooked by 1. 單h5 營d8 2. 單h7+ 急c7+ 3. 單:c7 + 營:c7 4. 急c3 (7EGTB), or here: 1...營a7 2. 單h7+ 急c7+ 3. 單:c7+ 營:c7 4. 急d5+ (7EGTB).

**D22**: In addition to the duals (12.營g6, 12.營g7) mentioned by the author, White can win by playing f5-f6 at several instances. E.g. 19.f6 (20.f6, 21.f6, 22.f6) 19...e:f6 20.堂d3 堂e1 21.h4 堂f2 22.堂e4 堂g3 23.堂f5 (the pointe of f5-f6) 23... 渔h6+ 24.堂:f6.

**D24:** Instead of the dual 12. Le5 (mentioned by the author), White also wins when he gives up his f-pawn. E.g. 12.2f7 (also 12.2e7) 12...2:f4 13.2e7 2e2 (the hឋ escape: 13... \$h6 cannot 14.&d2 \$\u00e9g5 15.&d5\$) 14.&g7 &f4 and now e.g. 15.2g8 2d5 16.2e5 c3 17.**\$**g7 c2 18.**\$**b2 囟b4!? (18... 2e3/f4 19. 2f6+ 空h6 20. &c1) 19.囟f6+ \$Åh8 20.名d7+ Ϋ́h7 21. Ag7 and mate.

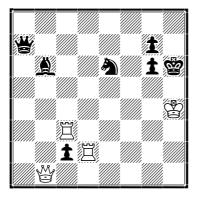
One study suffered from a major anticipation:

**D25**: Roxlau HHdbV#16170.

The overall level of the tourney was good, with only the gold medal study really standing out. In my view, a good study should always have at least one surprising move (and other artistic features like an idea, flow, economy, difficulty). A position with unique but obvious/normal winning moves is a technical ending rather than an artistic study.

In quite some of the studies with excellent moves in the award, there are passive pieces including pieces that are captured without playing.

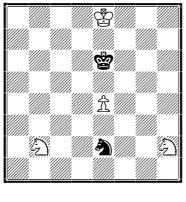
1<sup>st</sup> Prize – Gold medal VLADISLAV TARASIUK *Ukraine* 



1.<sup>™</sup>h1!  $(1, \exists h2?)$ \#b8/\#a5 and White cannot make progress) 1....2f4 2. \Bc8 \Deltah7! (2...\Be7+ 包h5 4.**B**h8 3.ůg4+ mate) 3. 2g5+ 2h5 At first sight, black is safe now. But White has a surprising rook sacrifice: 4. 吕h8+! 堂:h8 5.堂:g6 堂a5 Now White seems to win by 6. ge4 which threatens 7. 288 mate. But Black counters with a queen sacrifice: 6... 堂g5+! 7. 堂:g5 c1 堂 8. 堂e8+ 堂h7 9.\**\\$**:h5+ Фg8 10.営e8+ Ϋ́h7 11. 2 e4+ and White seems to win after all (11... 2g8 12. 2g6 2g1+ 13.**¤**g2 ₩f1 14.**≌e**8+ ₩f8 15.\u00effe6+ and mate), but 11...g6! 12.堂:g6+ 堂h8 draws! But White has 6. \Bh2! c1 ≌! 7. 営:c1 (7.邕:h5+? 盥:h5+ 8.盥:h5+ 盥h6+ draws, avoiding 8... 空g8? 11. 堂d5+) 8. 当:h5+ 堂g8 7....≌a6! The point of 7...營a6! is that White cannot check on c4 of c8 now, and obviously threatens to fire the 盥+& battery. Now 9.營c6? with numerous threats, and pinning the b& looks promising, but Black escapes by 9.26? 2d3+ 10.2f5 營g3+ 11.邕g5 營d3+ with ล positional draw. Instead White also sacrifices his other rook at h8! 9. 舀h8+! 站:h8 10.营h1+ 凶g8 11. 2d5+ 2h8 (11... 2f8 12. 2f7 mate). It is nonobvious that White wins here: 12.営d6! ₩c8 (12...增a2 13.增b8+! 營g8 14.營h2+ 增h7+ 15.營:h7 mate, would also make a nice main line) 13. 2h2+ ≌g8 14.≌h7+ ≌f8 15.≌h8+ wins.

This is a very entertaining study. White must sacrifice both his rooks at h8. After one has recovered from the surprise, White finishes off by the excellent quiet move 12.206! The inactive b & b6is a blemish, and also the initial position of the w2 being attacked by the b & c2 is a pity.

2<sup>nd</sup> Prize - Silver medal ÁRPÁD RUSZ *Romania* 

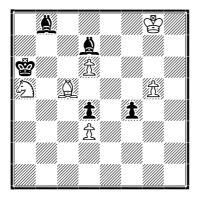


The thematic try: 1.2d3? 2f4! 2.2c5+ 2d6 3.2d7 2e6 4.e5+ 堂d5 5.堂f7! 名c5 6.名g4! 名:d7 7.e6 2b6 8.2e3+ (8.e7 2c8 9.e8" 2d6+ draws) 8... 2c5 9. 2e7! 2c8+ 10. Åd7 11.Åd8 ac8! 12.2c4! (12.2:c8 2:d6) 12...2a7! (12... \$d5? 13. \$d7) 13. \$a5 (13.e7 包c6+). This position, occurs. vertically mirrored, in the main line. The difference is asymmetry: 13...2c8! 14.2c4 (14.2:c8 2d6) 14...2a7 (a similar square is not available in the main line) 15. 265 2c8! 16.2c4 2a7 positional draw.

6.急c4! knight sacrifice 6...急f7 7.e6 急h6 (7...堂f6 8.e7) 8.急e3+! (8.e7? 急g8 9.e8營 急f6+ draws) 8...堂g5 9.堂e7! 急g8+ (9...堂f4 10.堂f8! wins) 10.堂f7 (10.堂f8? 堂f6! draws) 10... 急h6+ 11. 堂f8 (11.堂g7? (堂e7?) 急g8(+) 12.堂f7 急h6+ draws) wins.

We see a perfect symmetry study, i.e. symmetry of the initial position, but also with a unique solution and a unique refutation of the thematic try. Such studies might suffer from a mechanical solution, but here we see fine moves like 1...2d4!, 5.2d7!, and 9.2e7!

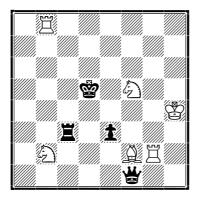
3<sup>rd</sup> Prize – Bronze medal ALEXEY SOCHNEV *Russian Federation* 



1.2c4 (1.2b3? &:d6 2.&:d6 \$e6+ 3.\$f8 \$:b3 4.g6 \$b5! 5. \$e5 \$c5 6. \$: f4 \$b4 7. \$d2+. e.g. 営a3 8.&c1+ 営a2 draws) 1... &e6+ 2. &h7! (Thematic trv: 2. 2h8, see move 12) 2... &:c4 (2...\$b5 3.\$:d4 \$c6 4.g6 \$:d6 5. 急:d6 岱:d6 6.g7 wins) 3.d:c4 d3! (3...\$:d6 4.\$:d4!) 4.d7 \$c7 5. & d6! d2! (5... \$b7 6. &:f4! \$c6 7.g6 堂:d7 8.g7 &:f4 9.g8營 wins) 6. &: c7 d1 営 7.d8 営 '≝:d8 8. A:d8 f3 9.g6 f2 10.g7 f1 11.g8≌ ≌f7+! (In the thematic try (2.堂h8?) the w堂 is now at h8. and it is a zz with WTM) In the present position, White plays 12. \$\Box h8! zz with BTM (avoiding 12.營:f7? stalemate) Now, White wins: 12...当h5+ 13.当g7 当g4+ 14 \$\$f8 wins

This shows us a good construction of a (non)-obvious

stalemate, which surprisingly seems to be original. The zugzwang position is remarkable. It is a pity that the less obvious move  $(2. \Barbox{harbox} h8?)$  is the thematic try. The b\Barbox{a6} does not play. 1<sup>st</sup> Honourable Mention STEFFEN SLUMSTRUP NIELSEN Denmark



+

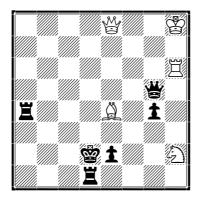
the surprise 7.  $\exists d3!$ . Unfortunately, we see another piece (w $\exists g2$ ) that is passive except for the fact that it delivers half of the mate! The initial version was (probably) unsound, but the author managed to provide a quick correction.

6+4

1.包d1! (1. 2:e3+?)¤∶e3 2. ¤g5+ ¤e5 3. ¤d8+, e.g. №e6 4. 邕e8+ 営d7 draws. 1. 邕d8+? 営e6 2. 急:e3 骂:e3 draws) 1... 幣h1+ (1...營:g2 2.急:e3+ wins) 2.営g3 當:d1! 3. 萬d8+! Winning the queen (3, 철:e3+? 호e6 (호e5) draws. 3... \$e4 4. 2d6+! But it is too early to capture the queen: 4. \B:d1? e2+ 5. \Bd3 B:d3+ 6. \Ddg4 5.2c4+ (5.2f7+? 2f6 6.2:d1 e2+ draws) 5... 堂e4 6. 邕:d1 e2+ 7. 표d3! ☆:d3! 8. 요b2+! ☆d2+ (8...\$c2+ 9.\$f4 \$b2 10.\$d4! wins) 9. \$f4  $(9... \exists c2$ e1 ≌ 10.&d4!) **10. &e3** mate.

The final double-check ideal midboard mate is nice mate. This study has some excellent moves: the key (1.2d1!), the nice knight manoeuvre 4.2d6+5.2c4+, and

2<sup>nd</sup> Honourable Mention AMATZIA AVNI *Israel* 



=

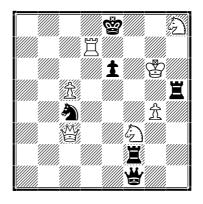
5+6

+

1. \Bd6+ \Bd4! Black sacrifices his rook. If 1... \$c3 2. \$c6+ \$c4 3.邕:c4+ 鸴:c4 4.營a4+, or 1...鸴e1 2. ¤:d1+ e:d1≌ 3. & f3+ \$¢d2 2. 舀:d4+ Åc3 4. Lid1 draw. **3.** \Bc4+! A counter-sacrifice. If 3.營a4? 營f6+ 4.営h7 邕:d4. or 4.**&**∶d3 3.邕d3+? ¤:d3 \\\$h4+ 5. &h7 e1₩ win. 3...≌:c4 4.≌a4+ ☆c3 5.≌c2+ ©°b4 6. \\begin{pmatrix} 6. \begin{pmatrix} b2+ & & c5 & (6... & & a5 & 7. & c3+ & 堂b6 8.堂c6+ 堂a5 9.堂c3+ draws) 7. \u03c8 c2+ \u03c8 d4 (7... \u03c8 d6 8. \u03c8 :e2 ■d2 9.営a6+ 営e7 10.営a3+ ■d6 11.2:g4 凿:g4 12.凿a7+ draws) 8.≝:e2 ₿d2 9.≝:g4 舀:h2+ (9...凿:g4 10.急:g4 當:e4 11.急h6 draws) 10. &h7+! ₩:g4 stalemate.

The stalemate combination with the queen sacrifice is original (the exact stalemate is not). w2h2 is captured without playing. The study makes a pleasant impression with rook sacrifices in the introduction by both sides.

#### 3<sup>rd</sup> Honourable Mention DARKO HLEBEC Serbia

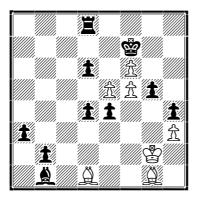


7+6

1.營g7! 囟e5+! 2. 包:e5 邕f6+! (After 2... 当h6+ not 3. 空:h6? 当h2+! stalemate. but 3.∰:h6! ¤f6+ 4. \$h7 ä:h6+ 5.\$;h6 wins) 3.堂:f6 (3.堂:h5? 暨h3+ guickly leads to a stalemate) 3... \Bh6+ 4. 堂:h6 堂h3+! (4...堂:f6+ 5. 堂h7! ₩:e5 6. 🛱 d8+ (買e7+) wins) (5.堂g6? 凿h6+ 6.堂:h6 5.營h4! 5...營∶h4+ stalemate) 6. 🖄 g 6! (6.堂g7? ₩g5+ 7.2hg6 ≌:e5+ (營h6+) 8.2:e5 stalemate) 6...增:h8 7. 邕d8+! \$\$e7! (7...堂:d8 8.包f7+ wins) 8. 包c6 mate, avoiding 8. \; h8? stalemate.

This is an adventurous study with a whole series of surprising moves:  $1... \ge e5+$ ,  $2... \ge f6+$ , a refusal to capture a whole queen  $(4... \ge h3+)$ , a queen sacrifice  $(5. \ge h4)$ , and a rook sacrifice  $(6. \ge d8+)$ , stalemate avoidance and a mate. Again, a passive piece  $(w \ge h8)$  is captured.

Special Honourable Mention LUIS MIGUEL GONZÁLEZ Spain



+

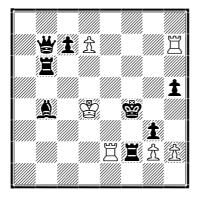
7+10

1. \$h5+ \$g8! (1...\$f8 2.e6) 2.e6 \Bc8! (2... \La2 3. \Lafter f7+ \D2h7 4.e7 急:f7 5.e:d8凿 b1凿 6. ≌f8 wins) 3.f7+ 営f8 4.f6 ¤c2+ 5. \$h1 \Bc7 6. \$h2! (6.e7+? \Bc7 7.f:e7+ ģ:e7 8. 象h2 象d3 (象a2) 9. &:d6+ 営d7 10.f8営 b1営+ draws) 6... \Bc1+ 7.\\$g2 \Bc2+ 8.\\$f1 (ģg1) ≌c1+ 9. \$f2! äc2+ (9...e3+ 10.堂f3 ₿f1+ 11.\u00dfg4 昌g1+12. &:g1 &f5+13. 堂:f5 b1增+ 14.\$\ddots\$\ddot 堂:e7 17. &h2 a2 18. &:d6+ wins) 10. \$e1 ¤c1+ 11.&d1! AC6 12.e7+! (12.&:d6+? \B:d6 13.e7+ 堂:f7 14.&h5+ 堂:f6 15.e8堂, and e.g. 15... &d3 draws) 12... 堂:f7 13. &b3+! (13. &h5+? ģ:f6 14.e8<sup>th</sup> Ec1+ 15.<sup>th</sup>f2 e3+ 16.<sup>th</sup>g2 邕c2+ draws) 13...d5! 14. 急:d5+ **堂:f6** 15.e8営 äc1+ 16.≌f2! 17. 🖄 g1 (堂f1) ₿c2+ ₿c1+

### 18. 알g2 프c2+ 19. 알h1 프c1+ 20. 요g1! wins.

This is a curious study. The w얼 has to shelter three times behind a w& for the checks delivered by the bB. b&b1 remains passive in the main line.

1st Commendation MARTIN MINSKI Germany



F

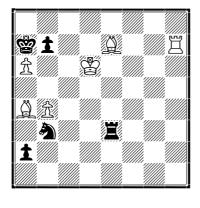
6 + 8

1.¤f7+ ≌g4 2.h3+ 🖄h4 (2... 堂g5 3.d8增+ 邕ff6 4. 邕e5+ 堂h4 5. 邕:f6 c5+ 6. 堂e3 with a mate soon) 3.d8增+ ¤bf6 4. 骂:f6 **≜e**7! This sacrifice. in combination with the next move, is the point of Black's defence. Of course 4...c5+ 5. \$c4 and mate to follow again. 5. 営:e7 c5+! 6. 営:c5 Although the w≝/w≡ battery has been destroyed, Black, being a rook down seems to have no chance at all. But: 6... #f5! playing for stalemate. If White captures the rook, Black had a rabid queen. The w≌ which is under attack has no good move: 7.營c4? 邕:f6 8.堂d3+ ຊື່໘5 9.∄e5+ ຊື່h6 draws. or ₿d5+! with perpetual check or stalemate. Of course 7. \mathbf{B}e4+? ≝:e4+ 8. 2:e4 ≡:c5 brings White nothing. But: 7. 当b6! Now the b營 does not have a good square

(7... 営d7+ 8. 営d6 wins) 7... 邑d5+! 8. \$\dot{e3!} (8.\$\dot{s}:d5? \$\dot{b6+} 9.\$\dot{e5}\$ ₩f6+! 10.\$;f6 stalemate; 8.\$e4? ₩h7+! 9. \$:d5 ≌f5+ with stalemate to follow) 8... \alpha d3+! 9. **堂**:d3 (9. **堂**f4? **暨**f7+) 9... **暨**h7+ (9....\\$a6+ 10.營c4+ wins. or 9...\≌d5+ 10.營d4+) 10.營f5!  $(10, \exists e4+?)$ 11.\$;e4 ≌:e4+ stalemate; 10. 2d2? (2d4?) 2d3+! stalemate) 10...增:f5+ 11.\$:d3 11. Be4+ \$\$g5 12.h4 mate.

A study that one begins to appreciate better and better when trying to understand what is going on. Black sacrifices a bishop to set up a defence which is based on stalemate. On an open board both queens are attacked by a rook  $(7. \pm b6!, 7... \pm d5+!)$  and unable to move. White must sacrifice his queen  $(8. \pm 63!)$  and Black counters by sacrificing his last rook. Then stalemate seems inevitable, but after a stunning queen sacrifice, White can play a crosscheck and mates.

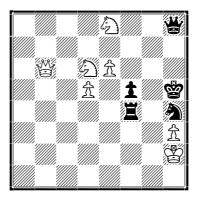
2<sup>nd</sup> Commendation ANATOLY SKRIPNIK Russian Federation



名d4 3.a:b7 邕c3+ 4.堂d7 a1營 5. &: d4+ &: b7 6. & d8+! & a6 7. Ba7 mate) 2. 当h2 (After 2. 含c7? a1營 2...a1 3.4:a1 2:a1 4. Ba2! 2b3 (4...2b6 5. E:a1 Ee4 6. Eb1 consolidates) 5. $\dot{2}c7$  (5. $\pounds$ :b3+? 2b5) 5...2a5 (5...2c1 6.2a1 2b3 7. 2a3 2c3+ 8. 2c6+ and mate) 6. & c6 b6 (6...b:c6 7. \Bar{a}:a5 6...¤e7+ 7. Åd6 ₿h7 mate. 8. ¤:a5+ \$b6 9. ¤b5+ \$a6 10. &e8 wins) 7. 堂b8 (7. 急d7? 邕e7 8.b5+ 호a7 draws) 7... 프b3 8.b5+ 프:b5 9. **Ab7** mate

A mate with two active selfblocks. Despite the fact that White plays various quiet and remarkable moves (2.邕h2, 6.逸c6, 7.岱b8), Black is helpless. The whole idea looks familiar, but only

the mate position is known (Stavrietsky HHdbV#21467). 3<sup>rd</sup> Commendation OLEG PERVAKOV *Russian Federation* 



+

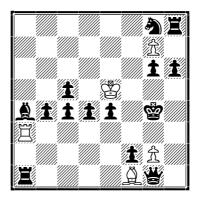
7 + 5

1.e7 Bf2+! (1... 2g6 2.2g7+! 盥:g7 3.e8盥 or, 1... 包f3+ 2. 堂g3 win) 2. ≌:f2 ≌e5+ 3. \$h1! (3.堂g1 堂a1+ 4.堂f1 堂d4+ 5.堂f2 time) 3... \:d5+ (3... \:a1+ 4. \:g1! wins) 4. 堂g1! 包f3+! (4...堂d1+ 5. \$h2 \$\alpha f3+ 6. \$\alpha g3 wins) 5. \$f1 (5.\u00e92?\u00e9h4+! 6.\u00e9f1 \u00e9d1+ 7.\u00e9e1 営f3+ draws) 5… 2h2+! 6.営:h2 (6.22)₩a2+ 7.\$e3 ₩a7+! draws) 6... 営d1+ 7. 営f2 (Loss of time: 7.\$2 \$d5+ 8.\$23 \$e5+! 9.Åg2 ₩d5+ 10.ඵg1 ₩d1+ 11. \$f2) 7....営d2+! (7...₩c2+ 8. \$\dd g3! f4+ 9. \$\dd f3 \$\dd g1+ 10. \$\dd g7+! 堂h6 11. 2gf5+ 堂h7 12.e8營 wins) 8.쑵g3! (8.堂f3? ≝:h2 9.2g7+ 업g5! draws) 8...f4+ 9. \$f3 **營e3+!** (9...營:h2 10.包g7+! 営h6 11.2gf5+ 2h7 12.e8營 wins) 10. \$\mathbf{g2} f3+ 11. \$\mathbf{g3} (11. \$\mathbf{f1}]

14. ģ:f3 loss of time) **11... 增e5+** 12. **ģ**:f3 **☆:h2** 13. 包g7+! (13.囟f6+? ቌ፟h4! 14.e8≌ ₩g3+! ₩g2+ 16. \$d3 ₩f3+ 15. \$e2 17. \$\$c4 \$\$:f6 draws) 13...\$\$h6! (13... \$\$g5 14.\$e4+! \$\$h4 15.\$af5+ 堂:h3 16.包g5 mate, or 13...堂h4 14.包gf5+ ⋭:h3 15.e8鬯 wins) 14. 包gf5+! (14.e8營? ₩:h3+ draws; 14.2df5+? 2h7 15.2g3 ≌:g7 draws) 14...≌h7! 15.2g3! **世:h3 16.包df5**! (16.e8世? 世f5+! 17.Åg2 ₩c2+ 18. \$h3 ₩f5+ 19.**b**h2 ₩f2+! 20.堂h3 ₩f5+ 21.Åg2 ≌c2+ 22.2e2 ₩g6+! draws) 16.... 2h2 17. 2e3! wins.

The last couple of moves of this study are remarkable, and during play there are some surprises  $(1... \Xi f2+! 5... \ge h2+!)$  this study has too many checks.

#### Special Commendation VIKTOR SYZONENKO Ukraine



5 + 14

1. &e2+ &h4 2. Bh3+ &g5 Now 3. \Bar{1} h5+? is not a mate, because h5 is covered by b & g6. 3. 邕g3+ 営h4 4. 邕g4+ 営h5 Now it looks like White quickly wins by 5.  $\exists f4+?$ 堂g5 6.g:h8包 - threatening 6.包f7 mate, but Black has 6... &e8. This not only covers f7, but, after 7. \Bg4+ \Be2h5 8. \Be3g6+ \Be2h4 9. \Bg4+ 增h5 10.ጄg3+ ≌h4 11.ጄh3+ ඵg5, also square h5, and prevents 12. \Bh5 mate. White must remove the b&a4∶ 5.邕:e4+! ₿g5 6.¤g4+ ≌h5 7.邕:d4+ ₿g5 8.邕g4+ **営h5** 9.邕:c4+ ≌g5 10. \Bg4+ \Deltah5 11. \B:b4+ \Deltag5 12. \Bg4+ \Deltah5 13. \Blackstructure a4+! \Deltag5 14. 邕g4+ Ϋ́h5 Mission accomplished. So now: 15. Ef4+ ₿g5 16.g:h8일! threatening 17. 含f7 mate, which is effectively prevented by 16... 岜a7 17. 岜g4+ 堂h5 18. 岜:g6+ Now we see the second function of the w渔h8: it covers g6, and the w邕 is able to remove this pawn, and moreover, g6 is not accessible for the b堂 later. 18... 堂h4 19. 岜g4+ 堂h5 20. 岜g3+ 堂h4 21. 岜h3+ 堂g5 22. 岜h5 mate!

Of course studies like this one are puzzles rather than artistic studies. However, I do like the idea that the Zwickmühle combination is used to replace a strong defence (6...&e8) by a weaker defence  $(16... \nexistsa7)$ .