# WCCI 2019-21

Section D: Endgame Studies

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### Remarks—Замечания

It is important for me that my compositions have clear solutions and are humanly understandable, similar to a game between two players. This holds also for the three miniatures in the selection ( $N_1$ , 3 and 5). None of the selected studies requires a computer to solve or to verify correctness. Exception: some secondary defenses in  $N_1$ , e.g., 1...  $C_3$  or 6...  $C_5$  are not obvious, but the main line follows the most principled and logical choices of both players.

In  $\mathbb{N}_2$  3, White can, on various occasions, lose time by repeating moves or taking longer king routes, but due to the strategic character of the study, I do not see this as a problem.

The published version of  $N_2$  4 has w $\Xi$ e1 instead of g1 in the initial position. The play is identical.

There is not yet an award for studies  $N_0$  3, 4 and 5.

Для меня важно, чтобы мои композиции имели четкие решения и были понятны почеловечески, как игра двух игроков. Это относится и к трем миниатюрам в подборке (№ 1, 3 и 5). Ни одно из выбранных исследований не требует компьютера для решения или проверки правильности. исключение: некоторые вторичные защиты в № 1, например, 1...  $\$  с 3 или 6...  $\$  с 5, но основная линия следует наиболее принципиальному и логичному выбору обоих игроков.

В  $\mathbb{N}_2$  3 белые могут в различных случаях терять время, повторяя ходы или выбирая более длинные пути короля, но из-за стратегического характера исследования я не вижу в этом проблемы.

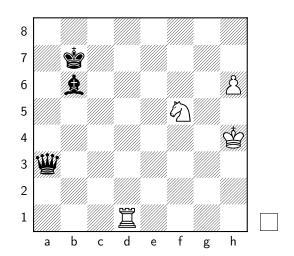
Опубликованная версия № 4 имеет w $\blacksquare$ e1 вместо g1 в начальной позиции. Игра идентична.

Вердикта по  $N_{2}$  3, 4 и 5 пока нет.

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# Study № 1: Oleg Pervakov-60JT, 2020, 4th prize

White to play and draw (4+3)



Tactical fight for promotion of the h-pawn with logical elements (try 2.  $\Xi$ d7+). First, bishop and rook fight for access to the long diagonal. Only when Black plays &c7, White can realize his main idea. In the end, Black is forced to block the exit roads for his queen with his own pieces.

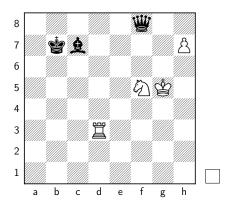
Тактическая борьба за продвижение пешки "h"с логическими элементами (попытка 2. \( \bar{\text{Z}}\)d7+). Сначала за выход на большую диагональ борются слон и ладья. Только когда черные сыграют \( \bar{\text{\text{Z}}}\)c7, белые смогут реализовать свою основную идею. В конце концов, черные вынуждены своими фигурами загораживать пути выхода ферзя.

#### Solution: 1. h7 \( \mathbb{e}\) f8 2. \( \mathbb{e}\)g5!

Logical try: 2. 量d7+? 曾c6 3. 罩f7 集d8+! 4. 曾g4 豐e8 5. 包e7+ 曾b5!! (The only refutation of White's play. 5...曾d6 or 5...曾c5 would allow the combination 6.罩f8!, like in the solution, and after 5... ②xe7 6. 罩xe7, the h7-pawn guarantees the draw.)

6. 當f8!? White's main tactical idea, but here it does not work: 6... 豐×f8 7. ②g6 豐b4+!, followed by 食f6 and Black is winning. Thanks to 5...曾b5, the diagonal a3-f8 remained open and Black could evacuate his queen with check. 2... 兔a5 3. 罩d3! Denying the black bishop access to the a1-h8 diagonal. Again, not immediately 3. 罩d7+? 曾c6 4. 罩f7 豐a8! 5. 罩f6+ 曾c5, and 兔c3 decides.

3... \(\(\delta\)c7. Threatening \(\delta\)e5, but now White can realize his plan.

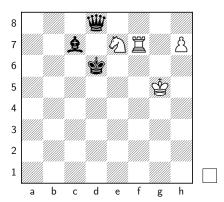


**4.**  $\Box$ **d7**  $\Box$ **ec6 5.**  $\Box$ **f7** It was too early for 5.  $\Box$ **x**c7+  $\Box$ **ex**c7, e.g., 6.  $\Box$ **eg**6  $\Box$ **ed**7 7.  $\Box$ **h**6  $\Box$ **e**6

8.  $\bigcirc$ g8  $\$ gf7+ 9.  $\$ gh6  $\$ gf5. Now, 5... $\$ ga8 would fail to 6. $\$ zc7+ and 7. $\$ h6, and so Black needs to work with checks.

5...  $\mbox{}\mbox{$\m$ 

6.  $\triangle$ e7+ **営**d6 After 6... **営**c5 7. **罩**f5+ **営**c4 8. **営**g6 (e.g.), White has prevented 8... **凰**e5 and enough counterplay for draw.

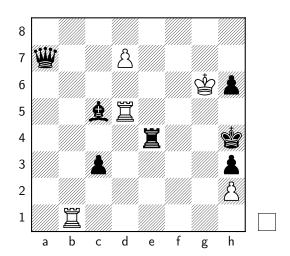


7.  $\square$ f8!! The point of the white play. After 7.  $\square$ g6  $\square$ g6  $\square$ e6 8.  $\square$ f5  $\square$ ge5 9.  $\square$ g7+  $\square$ gd6 Black is in full control. Now 7... $\square$ e7+ is answered with 8.  $\square$ f6+ and h8 $\square$ g, and so...

7... 豐×f8 8. ②g6 **Qd8**+ (Or 8... 豐d8+ 9. 堂h5.)

# Study № 2: Magyar Sakkvilág, December 2021, Prize

White to play and win (7+6)



Tactical massacre with uncommon logical structure. The two logical tries 2.  $\Xi$ 65 and 2.  $\Xi$ h5 fail to different defensive obstacles, but the preparatory rook sacrifice 2.  $\Xi$ b4 overloads Black's pieces and forces him to remove one of them. The two main lines then show how White implements his original plans.

Тактическая бойня с необычной логической структурой. Две логические попытки 2.  $\Xi$ 65 и 2.  $\Xi$ h5 не приводят к разным защитным препятствиям, но предварительная жертва ладьи 2.  $\Xi$ b4 перегружает фигуры черных и вынуждает их убрать одну из их. Затем две основные линии показывают, как белые реализуют свои первоначальные планы.

2. **Zb4!!** Regardless of how Black takes on b4, he must give up one of the two obstacles. White then chooses his plan accordingly.

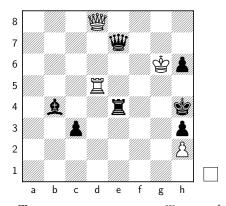
Logical Try: 2.  $\Xi$ e5? The idea is 2...  $\Xi$ ×e5? 3.  $\Xi$ b4+!  $\hat{\mathbb{Z}}$ ×b4 4.  $\overset{\text{\tiny d}}{\mathbb{Z}}$ d4+  $\Xi$ e4 5.  $\overset{\text{\tiny d}}{\mathbb{Z}}$ f2+  $\overset{\text{\tiny d}}{\mathbb{Z}}$ g6.  $\overset{\text{\tiny d}}{\mathbb{Z}}$ g3#. But Black refutes the plan with 2...  $\Xi$ g4+! 3.  $\overset{\text{\tiny d}}{\mathbb{Z}}$ ×h6  $\hat{\mathbb{Z}}$ e3+! 4.  $\Xi$ ×e3  $\overset{\text{\tiny d}}{\mathbb{Z}}$ ×d8 and White has no  $\Xi$ h5#.

**Logical Try:** 2.  $\mathbb{Z}h5+?$   $\mathbb{G}g4$  3.  $\mathbb{G}d1+\mathbb{Z}e2!$  4.  $\mathbb{G}a4+\mathbb{Z}e4$  5.  $\mathbb{G}d1+\mathbb{Z}e2$  and White has not more than draw.

Correction Try: 2.  $\blacksquare$ e1? This prevents 2...  $\blacksquare$ g4+ since Black is mated after 3.  $\diamondsuit \times h6$   $\textcircled{\#} \times d8$  4.  $\blacksquare h5 \ddagger$ . However, it also opens the road to e4 for the Black queen: 2...  $\blacksquare \times e1!$  3.  $\blacksquare d4+$   $\textcircled{\&} \times d4$  4.  $\textcircled{\#} \times d4+ \textcircled{\#} e4+$ , and Black is winning.

After 2. \( \begin{aligned} \b

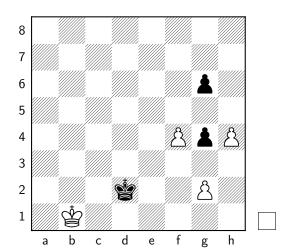
Main B: 2...  $2 \times b4$ . Now, Black has no 2e3+ any more, and so the 2e5 plan works.



- 3... **当g4+**. Black is also mated after 3... **豐**×d8 4. **二**×e4  $\ddagger$  or 3... **二**×e5 4. **豐**d4+ **二**e4 5. **豐**f2+ **壹**g4 6. **豐**g3  $\ddagger$
- 5. 曾xg6 豐xd8 6. 罩e4#. Model mate. 1-0

## Study $\mathbb{N}_{2}$ 3: EG, January 2021

White to play and win (4+3)



Strategic miniature with logical content and systematic king movements up and down the board. How shall White break the opposition of the kings after 1. g3 \$\displant\displant d1?\$ The point is to play \$\displant\displant a\$ at the right moment, when Black cannot reply \$\displant\displant a\$ due to the f4-f5 breakthrough (h8\displant\displant\displant a\$ occurs with check). But for this, the king first needs to go all the way up to b6!

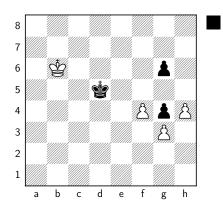
Black can also, at various points, rush to the

g-pawn. After \$\text{\cong}f2\$ or \$\text{\cong}f3\$, White plays h4-h5 g6xh5 f4-f5, promoting the f-pawn with check. Black then draws against the queen (1) pushing both the g- and the h-pawn if the white king is on the seventh rank or on c6; (2) with the doubled g-pawn (after hxg3) with a white \$\text{\cong}d6\$. If White has the king on c5 or d5, he is winning.

Стратегическая миниатюра с логическим содержанием и систематическими движениями короля вверх и вниз по шахматной доске. Как белым сломить сопротивление королей после 1. g3 \$\displant\displant^2\$ Смысл в том, чтобы сыграть \$\displant^2\$ а3 в нужный момент, когда черные не могут ответить \$\displant^2\$ с3 из-за прорыва f4-f5 (h8\$\displant\displant^2\$ происходит с шахом). Но для этого королю сначала нужно пройти весь путь до b6!

Черные также могут в разных точках броситься к пешке "g". После \$\footnote{g}\$f2 или \$\footnote{g}\$f3 белые играют h4-h5 g6xh5 f4-f5, продвигая пешку f с шахом. Затем черные тянут против ферзя (1), толкая пешку g и h, если белый король находится на седьмой горизонтали или на c6; (2) со сдвоенной пешкой g (после hxg3) белым \$\footnote{g}\$d6. Если у белых король на c5 или d5, они выигрывают.

Solution: 1.g3 Parries g4-g3. 1... 曾d1! Taking the opposition. 2.曾b2曾d2 3.曾b3. Thematic try: White would like to play 3.曾a3? with the idea 3...曾c3 4.f5! gxf5 5.h5, promoting with check, or 3...曾d3 4.曾b3, zugzwang. However, Black can run to the gpawn: 3...曾a3 (or曾e2/e1) 4.曾b4曾f3 5.h5 gxh5 6.f5曾xg3 (e.g.) 7.f6 h4 8.f7曾h2 9.f8曾g3=, and the white king is too far away. 3...曾d3 4.曾b4曾d4 5.曾b5曾d5 6.曾b6!

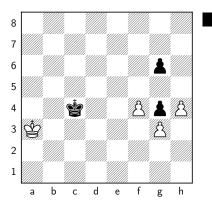


**6... †d6!** Black could also try to exploit the remote position of the white king:

7. \$\delta a 5!! Now the black king cannot attack the g-pawn directly, and so White can afford to move the king to the a-file.

7... \$\ddot c5 \ 8. \ddot a4 \ddot c4 \ 9. \ddot a3!. Now Black must either allow the f4-f5 breakthrough or

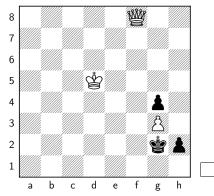
give up the opposition.



main A: 9... 當c3 10.f5! Echo with the breakthrough h4-h5 in main B. 10... g×f5 11.h5 f4 12.h6 f×g3 13.h7 g2 14.h8豐+. Thanks to the black 當c3, White promotes with check, winning.

main B: 9... 常d3 10. 常b3. We have reached the position after 3. 常b3, but now it is Black to move. And so White can move his king to d5. 10... 常d4 11. 常b4 (other moves just lose time) 11... 常d3 12. 常c5 常e4 13. 常c4! 13. 常c6? 常f3! or 13. 常d6 常f3! transpose into the tries given above. Now, after black 常f3, h4-h5 wins easily (the king is too close). So Black tries 13... 常e3!? 14. 常d5 常f2, closing the a8-h1 diagonal.

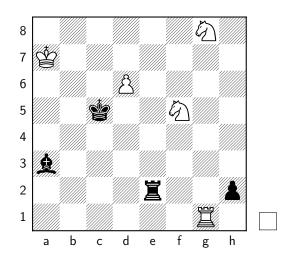
15. h5! g×h5 16. f5 h4 17. f6 h3!? With the king on d5 instead of d6 or c6, both \$\displays xg3\$ and hxg3 are hopeless. 18. f7 h2 19. f8\$\displays + \$\displays g2\$.



We see Black's idea: White has no check and cannot prevent h1豐. However, he can strike with 20.豐a8! (changing the move order is possible) 20... h1豐 21.堂e5+ 堂h2 22.豐×h1+ 堂×h1 23. 堂f4, and the g-pawn decides the day. 1-0

# Study № 4: Shakhmatnaya Komposiciya, December 2021

White to play and win (5+4)



Tactical fight for mutual promotion with minimal thematic material. Black sets up counterplay against the White king and sacrifices his rook for queen promotion. White accepts, but counters with a minor promotion, rook sacrifice and a three-knights checkmate in the middle of the board.

Тактическая борьба за взаимное продвижение с минимальным тематическим материалом. Черные создают контригру против белого короля и жертвуют ладью за превращение в ферзя. Белые соглашаются, но отвечают небольшим повышением, жертвой ладьи и матом тремя конями в центре доски.

Solution: 1.  $\Xi$ d1! 1.  $\Xi$ h1? &b2 gives Black sufficient counterplay: 2. &b7 &e5! 3.  $\Xi$ c1+ &d5 4. d7  $\Xi$ b2+ 5. &a6  $\Xi$ a2+ 6. &b5  $\Xi$ b2+ 7. &a4  $\Xi$ a2+ 8. &b3  $\Xi$ b2+ 9. &a3  $\Xi$ b8! (only now), and the combined threat of  $\Xi$ xg8, &e6 and &b2 secures the draw.

1... 堂 $\mathbf{g}$ 2. Threatens 罩 $\mathbf{g}$ 1 and 罩 $\mathbf{x}$  $\mathbf{g}$ 8. Both 1... 堂 $\mathbf{c}$ 6 2. ② $\mathbf{d}$ 4+ and 1... 罩 $\mathbf{d}$ 2 2. 罩 $\mathbf{x}$ d2 h1豐 3. d7 are winning for White.

2.  $\bigcirc$  f6  $\$  c6! Prepares counterplay against the white king. For the non-thematic try 2.  $\bigcirc$  ge7, see the pgn file. 2...  $\boxed{}$  g1 3.  $\boxed{}$  d5+  $\boxed{}$  c4 4. d7 gives White a mating attack after mutual promotion.

3. d7 \(\mathbb{Z}\)d2! Trying to decoy the white rook away from the h1 square.

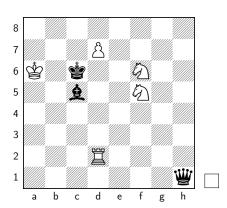
4...  $\blacksquare b2+$  5. \$ c8  $\blacksquare a2$  6. d8\$+!. Knight #3 lifts the checkmate threat, with decisive material advantage.

4.  $\mathbb{Z} \times d2!!$  4.  $\mathbb{Z} = 1$ ?  $\mathbb{C} \circ 7!$  5.  $\mathbb{C} \circ g7$   $\mathbb{C} \circ 5+$  6.  $\mathbb{C} \circ a6$   $\mathbb{C} \circ 6$ , and since 7.  $\mathbb{C} \circ 6$  runs into 7...  $\mathbb{Z} \circ 2\#$ , White must draw with 7.  $\mathbb{Z} \circ 6+$   $\mathbb{C} \circ 7$  8.  $\mathbb{Z} \circ 1$   $\mathbb{C} \circ 6$ .

4... **호c5+ 5. 當a6!** But not 5. 當b8? h1豐 6. d8②+ 當b5!, or 6. d8豐?? 豐b1+! 7. 當c8 豐b7#.

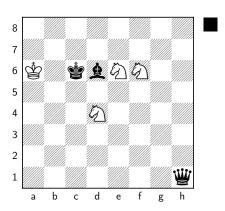
5... h1 Black seems to have reached his

goals, but...



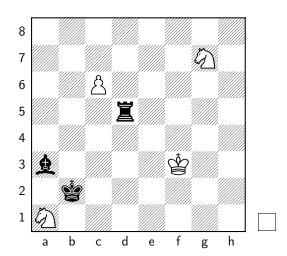
6. d8②+!! Of course not 6. d8豐?? 豐a1+! 7. 豐a5 豐f1+ 8. 豐b5+ 豐×b5#, but neither the thematic 6. 罩d6+? 魚×d6 7. ②d4+ 堂c5! (7... 堂c7? 8. ②e6+ 堂c6 9. d8②#! shows the white idea) 8. ②e6+ 堂c4 (or 堂b4), drawing.

6... 含c7 7. ②e6+ 含c6 8. 罩d6+!! 魚×d6 9. ②fd4# 1-0



## Study № 5: Variantim, April 2021

White to play and draw (4+3)



This miniature shows five white knight sacrifices on different squares (c2, c6, c5, d4, f4) in order to draw with pawn against rook and bishop. A Nowotny sacrifice with anti-critical defense, echo effects and various forks spice up the game.

На этой миниатюре показаны пять жертв белых коней на разных полях (c2, c6, c5, d4, f4) для ничьей пешкой против ладьи и слона. Жертва "Nowotny" с антикритической защитой, эхо-эффекты и различные развилки оживляют игру.

**Solution:** 1.  $\triangle$ c2!! Knight sacrifice #1. White "loses a tempo" to force the black king to liquidate the knight.

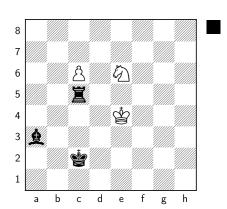
Thematic try: 1. ②e6? 營×a1! 2. c7 罩d3+3. 營e4 罩c3 4. ঔd5 魚e7! This anti-critical move prevents the Nowotny interference ②c5. White has no tricks and Black slowly moves his king up the a-file.

**Logical try:** 1. -6e4? -65! 2. -66 -68×c6 3. -60d4 (without check) 3... -66 (e.g.), with a theoretical win.

#### 1... 曾×c2 2. 曾e4 罩c5!

The line 2...  $\mathbb{Z}$ d6 3.  $\mathbb{Q}$ f5!  $\mathbb{Z} \times c6$  4.  $\mathbb{Q}$ d4+ shows why it was important to play 1.  $\mathbb{Q}$ c2 first (compare the logical try 1.  $\mathbb{Q}$ e4).

3. ②e6! with two main lines:



main A: 3... \(\mathbb{L}^2 \cdot 3 \cdot 4 \cdot \cdot 5 \cdo

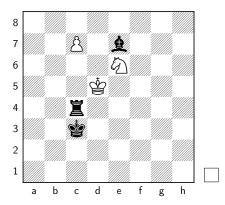
main A1: 5...  $\d a4$  6.  $\d c5+! \d xc5+$  7.  $\d d6=$ . Knight sacrifice #2! This Nowotny

interference has been shown first by Gulyaev in 1926.

main A2: 5... &e7 (anti-critical move) 6.  $\triangle$ d4+ &a4 7.  $\triangle$ c6! Knight sacrifice #3! 7... &c5+ 8. &e6 &xe6 9. &d7=, or

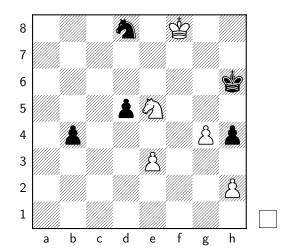
main B: 3...  $\Xi c4+$  4.  $\diamondsuit d5$  with two options:

main B1: 4...  $\del{g}$ d3 5.c7  $\del{g}$ e7! Anticritical move directed against  $\del{Q}$ c5, but ldots now White exploits the king position on d3 with knight sacrifice #4: 6.  $\del{Q}$ f4+!  $\del{g}$ c3 7.  $\del{g}$ e6 (or  $\del{g}$ e5) 7...  $\del{g}$ xc7 8.  $\del{Q}$ d5+, draw.



# Study № 6: Moscow Tournament 2021, 3rd prize

White to play and draw (5+5)



In a knight endgame with equal material, White allows the Black passed pawn to promote. But he achieves a positional draw with knight against queen on an open board. The black queen can drive the white king away, but to no effect.

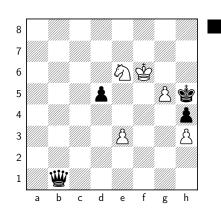
В коневом эндшпиле с равным материалом белые позволяют проходной пешке черных продвигаться вперед. Но он добивается позиционной ничьей конем против ферзя на открытой доске. Черный ферзь может отогнать белого короля, но безрезультатно.

**Solution:** 1.  $\triangle$ d3! Prophylaxis: White wants to play  $\stackrel{\bullet}{\otimes}$ e7, but first needs to do something against the threat ...  $\triangle$ c6+.

Thematic try: 1. -6: -7: -6: (Thematic sacrifice for promoting the b-pawn; 1... b3 2. -6: d3 -6: g5 3. h3 transposes to the solution.) 2. -6: -6: With the pawn still on h2, White is short of one move for constructing the drawing fortress, e.g., 5. h3 b1 -6: -6: d4 -6: -6: d4 -6: d4 -6: d-1.

- 3. h3 3.  $\dot{\mathbb{E}} \times d8$ ?  $\dot{\mathbb{E}} \times g4$  and the black h-pawn will decide.
- 3...  $\triangle$ b7. Embarking on another route. 3...  $\triangle$ c6+ 4.  $\stackrel{.}{\otimes}$ d6  $\stackrel{.}{\triangle}$ b4 5.  $\stackrel{.}{\triangle}$ b2  $\stackrel{.}{\triangle}$ c2 6.  $\stackrel{.}{\otimes}$ ×d5  $\stackrel{.}{\triangle}$ ×e3+ 7.  $\stackrel{.}{\otimes}$ d4  $\stackrel{.}{\triangle}$ ×g4 8.  $\stackrel{.}{\triangle}$ d3 and White holds the draw.
- 4. **堂e6!** Paradoxical: White runs voluntarily into the black fork. 4. **堂**f7? ②d6+ 5. **堂**e6 ②c4 loses. 4... ②**c5+!** Again, the thematic knight sacrifice for pawn promotion. But now, everything is shifted one rank to the bottom (**堂**e7 vs. **堂**e6, ②c6 vs. **堂**c5). This makes a difference:
- 5. ②×c5 b2 6. ♦ f7! Setting up the drawing mechanism.
- 6... b1 <sup>₩</sup> Delaying promotion with 6... <sup>♠</sup>h6

- 7. ②e6 b1營 transposes.
- 7.  $\triangle$ e6+ \$h6 8. g5+ \$h5! It is an immediate draw after 8... \$h7 9.  $\triangle$ f8+ \$h8 10.  $\triangle$ g6+ \$h7 11.  $\triangle$ f8+. 9. \$f6



Black is a queen up and on the move, and he manages to play 豐g6+, but it does not help: 9... 豐b6 10. 曾f5 豐b1+ 11. 曾f6 豐b2+ 12. 曾f5 豐c2+ 13. 曾f6 豐c3+ 14. 曾f5 豐c8 15. 曾f6 豐c3+ Also after 15... 豐c6, followed by 豐d7 and 豐d6, there is no progress. 16. 曾f5 豐d3+ 17. 曾f6 豐g6+ 18. 曾e7 豐g8 19. 曾f6 豐g6+ 20. 曾e7 d4!? The only attempt to break the deadlock. 20... 豐h7+ 21. 曾f6 does not change anything.

21. ②f4+ \$\psi \psi g5 22. ②\xg6 dxe3 22...d3? 23. ②e5! d2 24. ②f3+ even loses. 23. ②e5 e2 24. ②d3+! and White stops the pawns in time, e.g. 24... \$\psi g3 25. \$\psi e6 \psi \xext{xh3 26. }\psi f5 \psi g3 27. \$\psi e4 e2 28. \$\psi e3 h3 29. \$\psi \xext{xe2 h2 30. }\pi f2 1/2-1/2