## 1 Introduction

While we assess basic semeais by counting and comparing liberties (see Volume 1), we solve advanced semeais by tactical reading. Although we can occasionally transform advanced to basic semeais or accelerate reading by techniques, we must apply the following principles to almost all advanced semeais:

## Tactical reading includes all mandatory variations and choices.

We do not solve the problems by guessing, or considering one random variation and its resulting status. Instead, we perform proper tactical reading by analysing all mandatory variations, and making decisions relating and verifying their results.

## Avoid all mistakes in tactical reading.

Mistakes can occur early or late during tactical reading. Each mistake can reverse the result of a semeai and change the winner of a game. Although diligent kyus can solve the problems, even amateur dans would make at least one important reading mistake in about every second problem of this book if it occurs during their games. Since each misread semeai loses one rank, we use tactical reading carefully and practise with problems to overcome our weakness.
For a decade, I have collected the most interesting semeais from actual games, excluded those complicated semeais requiring the reading skill of top amateur or professional players, and suitably modified the eligible semeais to create the problems. Their answers cover all relevant variations and decision-making. Therefore, readers can always identify their mistakes and gaps in tactical reading.
First, we recall or learn the theory essential for solving the problems. They are grouped by reading levels of increasing difficulty, numbers or lengths of variations.
A problem is neither solved by only claiming a correct first move and result of life and death status, nor by only considering the most exciting sequence. Instead, we have the discipline to solve each problem by reading all mandatory variations and making all necessary choices to verify that the result is correct. In the answers, bold font or commands, such as "We read all variations.", distinguish the mandatory variations we have to read from the optional variations.

## 2 Conventions

Dia. $1=$ diagram 1 of the current problem and its answers
Dia. 2.1 = diagram 1 of Problem 2 and its answers
Problem ${ }^{*}=$ subproblem $/$ related problem in a list of problems
Dia. $=$ mandatory tactical reading of all alternative variations
Dia. $=$ mandatory tactical reading of at least one of alternative variations, or a group of alternative variations
Dia. $=$ optional tactical reading, resulting position or other text
Black 1-2-3... = Black 1-White 2 - Black 3...
White 1-2-3... $=$ White 1 - Black 2 - White $3 \ldots$

A letter before a problem number denotes the following range of the minimum number of variations whose reading is mandatory:

| $\mathrm{A}=1-3$ | $\mathrm{D}=20-29$ | $\mathrm{G}=100-199$ |
| :---: | :---: | :---: |
| $\mathrm{~B}=4-9$ | $\mathrm{E}=30-49$ | $\mathrm{H}=200-299$ |
| $\mathrm{C}=10-19$ | $\mathrm{~F}=50-99$ |  |

A semeai is a capturing race. - 'Reading' a diagram means tactical reading of its variation. 'We read all variations / diagrams' abbreviates the following command: 'Tactical reading of all variations / diagrams is mandatory. We also consider the decision-making.'
Many easy variations are not shown. Reading and decision-making also include variations in texts, although they are often not mentioned in reading summaries. Some techniques mentioned for particular moves also occur for other moves or in other diagrams. If a first move achieves a purpose, further moves are sometimes only shown for explanation; in an actual game, they might better be delayed or not played at all. Status reading sometimes ignores endgame details.
For the problems, consider local moves or imagined plays 'elsewhere'. Either might be correct.
We analyse local kos by emulating global ko fights. After a local ko capture, a play 'elsewhere' is a ko threat. A next play 'elsewhere' is an answer to the ko threat. Two successive plays 'elsewhere' are a shorthand for a ko threat and answer sequence, which might comprise a larger, even number of plays.
Charles Leedham-Green and Stephen Bashforth have corrected the author's English. The diagrams have been created with Lauri Paatero's GoWrite.


Problem B36: White to move

Problem B38: Black to move

Problem A40: White to move



Problem A37: White to move


Problem B39: Black to move


Problem A41: White to move

## 5 Reading Level II: Problems 48-78

### 5.1 Ordinary Problems



Problem A48: White to move


Problem B50: Black to move


Problem F52: Black to move


Problem C54: Black to move


Problem B49: Black to move


Problem D51: Black to move


Problem B53: White to move


Problem B55: White to move

```
All: Apply tactical reading. Read all mandatory variations.
```

Answer 48: We verify the success of either White 1 in Dia. 0 (reading the variations of Dias. 0 and 2) or Dia. 3 (reading its variations). Afterwards, we need not assess White 1 in Dias. 4 and 5. Initially, it is not obvious which moves are correct and require the least reading so we solve the problem by disciplined reading.


Dia. 0: correct, Black dead


Dia. 1: mistake 3, White dead


Dia. 2: Black dead

Dias. 0-2 conclusions: White chooses move 3 in Dia. 0 resulting in 'Black dead' but, in Dia. 1, discards move 3, 3 at A and 3 at B resulting in 'White dead'. Therefore, Black 2 in Dia. 0 results in 'Black dead'. Since Black 2 in Dias. 0 and 2 result in 'Black dead', White 1 in Dia. 0 results in 'Black dead'.

Dia. 0: We verify that Black 2 at 3, 2 at 5, 4, and 4 at 5 fail. Black 4 at 5 - A followed by 4 - B or C-B fails. - Dia. 1: White 3 at A-4 and 3at B-5 fail.

Dia. 2: Move 4 results in 'Black dead' because the continuations A and C fail. Since also move 4 at C results in 'Black dead', Black 2 results in 'Black dead'. Black A-B, C-B and 4at C-5-4-B fail. - Dia. 3: White 1 results in 'Black dead' because this is the result of Black 4 and 4 at A-5.

Dia. 4: White 1 results in 'White dead' as this is the result of the continuations White A-B and C - A.

Dias. $5+6$ : White 1 in Dia. 5 results in 'White dead' because this is the result of White 3 in Dias. 5 and 6.


Dia. 3: correct, Black dead

(5) at (A) 6 at (B)

Dia. 6: White dead

Answer 103: White 1 succeeds because each move 4 fails.


Dias. $0+1$ : See Problem 104 or 105 for the continuation, respectively.
Answer 104: For White's moves shown, all possible black replies fail. If we read these successful white moves, it is mandatory to read all these variations. If we want to verify the success of some alternative white moves, it is mandatory to read all the variations of all their possible, failing black replies.


Dia. 5: The alternative White 5 at A also succeeds.


Dia. 6: Black dead


Dia. 9: Black dead


Dia. 7: Black dead


Dia. 8: Black dead


Dia. 11: Black dead


Answer 105: For White's moves shown, all possible black replies fail.


Dia. 0: Black dead


Dia. 1: Black dead


Dia. 2: Black dead

Dia. 2: Black 4 at A-B-4-5 fails. - Dia. 3: Black 6at 9-7 fails.


Dia. 3: variation


Dia. 4: continuation, Black dead, Black 12 at A-12 fails

(11) at (A)

Dia. 5: Black dead

Answer 106 reading: Black avoids the failure to read at all and must not accept the result 'both live' in Dia. 0. In theory, we need not read the variations evolving from Black's mistakes. In practice, however, it can be difficult to first consider his correct moves. We also read Problem 107.


Dia. 0: both live


Dia. 1: correct move 1


Dia. 2: continuation

Dia. 1: Black 5at 6-8 fails: the result is a seki or ko.


Problem F133: White to move


Problem ${ }^{*}$ D134: White to move


Problem ${ }^{*}$ B135: White to move


Problem* B136: Black to move


Problem ${ }^{*}$ C137: White to move


Dia. 0: correct, reduction, Black dead


Dia. 1: mistake 2, bad exchange


Dia. 2: mistake 4, White dead

Dias. $1+2$ : White 2 and 4 in Dia. 1 result in an exchange because White discards move 4 in Dia. 2 resulting in 'White dead'. - Dia. 5: Black 4 at B fails as in Dia. 2. Black 1 at B-3 fails.


> Answers 133-137: Since the move order is not obvious, we need discipline to read all mandatory variations.

## Answer 133:



Reading: Since the correct result 'seki' is a compromise, we read the variations of all diagrams and subproblems.

Choice: The correct White 1 (after move 3 continued by Black A-B, C - B or D - E) in Dia. 0 results in a seki as White chooses either move 3 in Dia. 0 or $l$ with this result (see Problem 134). White discards each move 1 in Dia. 2 (see Problem 135), Dia. 3 (see Problem 130), Dia. 4 (see Problem 137) and Dia. 5 (after move 2 continued by White A-B, C to F or E-D) resulting in 'White dead'.


Dia. 3: mistake 1, White dead


Dia. 4: mistake 1, White dead


Dia. 5: mistake 1, White dead

Answer 134 reading: The correct result 'seki' is a compromise so we read all variations.

Choice: White avoids the mistake 3 in Dia. 4. White 1 in Dia. 0 and the correct white moves in Dias. 0-3 and 5 achieve a gote seki since no black reply prevents this. White chooses move 1 in Dia. 0 or 6 resulting in a gote seki and discards move 1 in Dia. 7 resulting in 'White dead'.


Dia. 0: seki, correct move 1


Dia. 1: seki


Dia. 2: seki

Dia. 0: The same result occurs after Black 2at A-3-4-5-6-7 or variations with other orders of the white moves. Due to the mistakes Black 4 at A-7-4-5 -6 and 6 at A-7-6, White achieves a seki in sente.

Dias. 0 - 3, 5, 6: White achieves a gote seki. - Dias. $1+$ 6: Black A - B and C B keep the seki.

Dia. 2: The mistake Black 4 at A-7-4-5 results in 'Black dead'.
Dia. 3: With the mistake Black 6 at B-7-6, White achieves a seki in sente.


Dia. 3: seki


Dia. 4: mistake 3, White dead


Dia. 5: seki

Dia. 4: White 3 at A-B-3-C-5-4 fails.


Dia. 6: seki, correct move 1


Dia. 7: mistake 1, White dead

Dia. 5: White 3 at 5 -4-7-6-3 results in White's gote seki. Dia. 6: White 3 at D - C - 5-4 fails. Dias. $134.7+135.2$ : White 3 at 7-4-38 fails.

Answer 135: White's play 1 elsewhere in Dia. 0 is correct because each significant play 1 in Dias. 1 3 fails, whose variations we read.

Dias. $1+3$ : White 5 at 7 - A fails.
Dia. 3: After White 5 at 7, the mistake Black 8 - B results in a seki.

(1)elsewhere

Dia. 0: correct, White dead


Answer 136: The correct Black 1 in Dia. 0 results in 'White dead' because each move 2 in Dias. 0-2 has this result. We read their variations. Black discards the inferior move 1 in Dia. 3 resulting in White's partial life.


Dia. 0: correct move 1, White dead


Dia. 1: White dead


Dia. 2: White dead

Dia. 0: White A - B, C - D, 2 at E-3-A - B and 2 at E-3-C-D fail.

Dia. 1: The mistake Black 3 at A-3-4 results in partial white life. - Dia. 1: White 4 at 6 - A and 6 at 8-9 fail. - Dia. 2: White 2 at 5-3-4-2 fails.

Dia. 3: The mistake Black 3 at 4-3-A - B - C - D results in 'Black dead'.


Dia. 3: mistake 1, White's partial life

Answer 137: Black avoids the mistakes in Dias. 8 and 9. We read all other variations. White's play elsewhere in Dia. 0 is correct: Black's correct moves let all white plays fail in Dias. 1-7 and 10 .

(1)elsewhere

Dia. 0: correct, White dead

Dia. 1: White 1 at 6-2-3-4-5-1 fails. - Dia. 3: White A - B and C - D - A - E fail. - Dia. 4: White A - B, C - A and D - E-A - B fail.


Dia. 7: White A to D and C - E-A - D fail.
Dia. 8: After White's mistake 3 at 4 - A - B - C, the whole white group is dead.

Answers 161-163: The problem looks simple but is complex. Therefore, read all mandatory variations with discipline.

Answer 161: Have you read a tesuji book with the shape of the two marked stones in Dia. 0? Do you think that just playing both solves the problem?
Dia. 1: White 1 at A, B or C results in 'most Black dead', 'ko' or 'White dead', respectively. White A has to be played first. Since the correct result 'most Black dead' is a compromise, we also have to verify by reading that White B or C are not better and cannot kill all black stones near the corner.


Dia. 0: shape


Dia. 1: first move


Dia. 2: simple capture


Dia. 3: no simple capture

Dias. $2+3$ : The different order of the moves 1 and 3 has different consequences. In Dia. 2, White simply captures the marked black string. In Dia. 3, Black 4 prepares a ko. This difference is the main topic of the problem.


Dia. 4: correct, becomes 'most Black dead'


Dia. 5: mistake 1, becomes a direct ko


Dia. 6: mistake 1, White dead

Answer 161 reading: Since the correct result is a compromise, we read Dias. 46 and Problems 162 and 163. - Choice: White chooses the correct move 1 in Dia. 4 resulting in 'most Black dead' (see Problem 162) but discards move 1 in Dia. 5 resulting in a direct ko (see Problem 163) and move 1 in Dia. 6 resulting in 'White dead'. - Dia. 6: The reversion White 3at 5-4-3-6 is also possible.

