

# Mahjong: **Never** Finish Last 35 Techniques to Avoid Last Place\*

Anon

nomail

May 21, 2024

## Contents

|          |  |           |
|----------|--|-----------|
| <b>0</b> | <b>Preface</b>   | <b>4</b>  |
| <b>1</b> | <b>First part: Techniques and Considerations for Avoiding Riichi Bets, Basic Edition</b>     | <b>5</b>  |
| 1.1      | Chapter 1: Improving Tile Efficiency . . . . .   | 5         |
| 1.2      | Chapter 2: Data Flow and Simulation Flow . . . . .   | 8         |
| 1.3      | Chapter 3: Techniques of Fully Discarding (1) . . . . .                                      | 11        |
| 1.4      | Chapter 4: Techniques of Fully Discarding (2) . . . . .                                      | 13        |
| 1.5      | Chapter 5: Remembering Reading and Discarding Tiles in the Digital Flow . . . . .            | 16        |
| 1.6      | Chapter 6: Thinking about Attack and Defense . . . . .                                       | 18        |
| 1.7      | Chapter 7 The Value of Hand Tiles . . . . .  | 21        |
| 1.8      | Chapter 8 Attacking and Defending When There Are No Safe Tiles . . . . .                     | 23        |
| 1.9      | Chapter 9 Taking Full Defense to the Next Level . . . . .                                    | 26        |
| 1.10     | Chapter 10 Just Win First . . . . .  | 30        |
| 1.11     | Chapter 11: Techniques for Not Calling Tiles . . . . .                                       | 33        |
| <b>2</b> | <b>Second part: Techniques and Considerations for Avoiding Riichi Bets, Advanced Edition</b> | <b>35</b> |
| 2.1      | Chapter 12 Tile Call Vigilance . . . . .   | 35        |
| 2.2      | Chapter 13 Interpreting the Game State Information . . . . .                                 | 38        |
| 2.3      | Chapter 14 Reading Hand Composition . . . . .  | 41        |
| 2.4      | Chapter 15 Reading Melded Hands . . . . .  | 44        |

---

\*This document corresponds to mahjong v1.0.1, dated 2021/04/16

|          |   |            |
|----------|---|------------|
| 2.5      | Chapter 16: Unraveling One Chance . . . . .   | 47         |
| 2.6      | Chapter 17 Exceptions in Attack and Defense Judgment . . . . .                                | 50         |
| 2.7      | Chapter 18 Tile Efficiency and Tile Logic . . . . .   | 54         |
| 2.8      | Chapter 19 The Concept of Relative Speed . . . . .  | 57         |
| 2.9      | Chapter 20 Manifesting the Gap in Skill Levels . . . . .                                      | 60         |
| 2.10     | Chapter 21 Is San Shoku Doujun a Rare Yaku? . . . . .   | 62         |
| 2.11     | Chapter 22 Exceptions to Reckless Riichi . . . . .  | 64         |
| <b>3</b> | <b>Third part: Techniques and Considerations for Avoiding Riichi Bets, Tenhou Edition</b>     | <b>67</b>  |
| 3.1      | Chapter 23 Introduction: What is Tenhou? . . . . .  | 67         |
| 3.2      | Chapter 24 Strategies Unique to Phoenix Table . . . . .                                       | 69         |
| 3.3      | Chapter 25: Understanding the Meaning of Expected Value . . . . .                             | 71         |
| 3.4      | Chapter 26: Recommendation for Menzen (Concealed) Hands . . . . .                             | 74         |
| 3.5      | Chapter 27: Is a 2600-point Foolish Wait Iron-Riichi? . . . . .                               | 76         |
| 3.6      | Chapter 28: How to Use Silent Tenpai (Part 1) . . . . .                                       | 78         |
| 3.7      | Chapter 29: How to Use Silent Tenpai (Part 2) . . . . .                                       | 81         |
| 3.8      | Chapter 30: How to Use Silent Tenpai (Part 3) . . . . .                                       | 84         |
| 3.9      | 31: Rules of Engagement for Seven Pairs Hands . . . . .                                       | 87         |
| 3.10     | Chapter 32: Sense of Balance in Shaping the Hand . . . . .                                    | 89         |
| 3.11     | Chapter 33 The Killing Technique of the Heisei Era . . . . .                                  | 92         |
| 3.12     | Chapter 34 Feeding and Telegraphing Techniques (1) . . . . .                                  | 95         |
| 3.13     | Chapter 35 Feeding Techniques (2) . . . . .   | 98         |
| <b>4</b> | <b>Fourth part: Techniques and Considerations for Avoiding Riichi Bets, Practical Edition</b> | <b>103</b> |
| 4.1      | Practical Examination 1: Efficiency of Tiles and Point Selection . . . . .                    | 103        |
| 4.2      | Real Battle Examination 2: Judgment of Chasing Riichi . . . . .                               | 106        |
| 4.3      | Real Battle Examination 3: Information and Choices to Reduce Fourth Position Rate . . . . .   | 108        |
| 4.4      | Real Battle Examination 4: Decision Based on Point Situation . . . . .                        | 111        |
| 4.5      | Real Battle Examination 5: Judgment when in a trailing position . . . . .                     | 114        |
| 4.6      | Real Battle Examination 6: Harsh Choices Emphasizing Turn Order . . . . .                     | 117        |
| 4.7      | Real Battle Examination 7: A Strike Aware of the Expected Value of Points . . . . .           | 120        |
| 4.8      | Real Battle Examination 8: Choosing Based on Development and Tactics . . . . .                | 123        |
| 4.9      | Real Battle Examination 9: The Dilemma of Calling on a Pair . . . . .                         | 126        |
| 4.10     | Real Battle Examination 10: The Dilemma of Matching the Opponent's Speed . . . . .            | 129        |

|          |  |            |
|----------|--|------------|
| 4.11     | The birth of AI: what does it bring? . . . . . | 132        |
| <b>5</b> | <b>Tenhou discusión panel</b>                  | <b>133</b> |
| 5.1      | Afterword . . . . .                            | 143        |
| <b>6</b> | <b>Acknowledgments</b>                         | <b>144</b> |

The copyright of the original work of *Zettai ni rasu o hikanai mājan ~ rasu kaihi 35 no gijutsu ~* belongs to the original author Genki Hirasawa . The translation is for learning and communication only and may not be used for commercial purposes.

## 0 Preface

In recent years, there has been a surge in the mahjong book industry. Previously, only top professional players would write tactical books, but now various individuals such as freelance writers, researchers, well-known players active in online mahjong, and mahjong shop staff have begun to pick up their pens. The content of these books is also fascinating and has gained widespread readership.

Some might think that just reading books like this won't improve your mahjong skills. However, I have read over 50 mahjong tactical books since I began understanding the rules of mahjong, and without much practice in other areas, I reached the rank of Tenhou, which is equivalent to the level of the top 0.0001% of players on this online mahjong platform.

This book is written with the purpose of utilizing my experiences and aiming to become stronger through reading.

Just like the title of this book, Absolutely Never eat 4th place in Mahjong, the content of the book mainly focuses on defensive techniques. However, the general rule of mahjong is the rule of the battle for tenpai.

So, are the defensive techniques mentioned in this book useless? Not quite. Mahjong is essentially a game where only one out of four players can win, so more than half of the time is spent defending. If you can better navigate through these times, then your performance is bound to improve regardless of the rules.

# 1 First part: Techniques and Considerations for Avoiding Riichi Bets, Basic Edition

## 1.1 Chapter 1: Improving Tile Efficiency

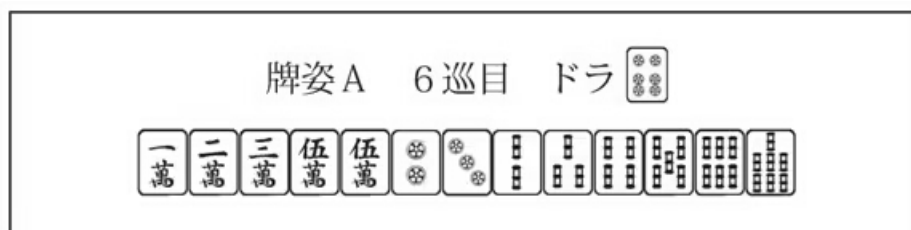
Mahjong is not a game where memorizing the answers to what to discard will lead to victory. Even if you memorize all the tile formations in this book, you won't encounter identical situations in actual gameplay.

Furthermore, mahjong has many different rules, so even with the same tile formation, the correct answer may vary depending on the rules. Therefore, what I want to convey to everyone is the process of how to think in order to improve your level.

Although this book is titled Absolutely Never Eat 4, the first thing to consider is how to improve tile efficiency.

I believe improving tile efficiency requires two steps:

1. Memorizing the theory (basics) itself.
2. Memorizing the exceptions where choices outside of theory become the correct answer.



Why not declare Riichi with Tile Formation A?

In the past, there was an era of theory where the notion of waiting for a peaceful hand and silently listening prevailed. However, nowadays, there is data indicating that declaring Riichi preemptively is significantly more advantageous.

Let's explain with specific examples.

(Note: This translation is a blend of formal and colloquial English to convey the tone and style of a blog post while accurately reflecting the content.)

So, is declaring Riichi always the correct answer regardless of the situation? Mahjong is a game where even a slight change in your hand can introduce new options. Additionally, factors like the state of the game, your point situation, and various other pieces of information besides your hand can all influence your choices. Depending on these factors, the optimal choice can vary.

Relying solely on the flat solution based on your hand is insufficient. Just mastering this aspect alone won't lead to victory.

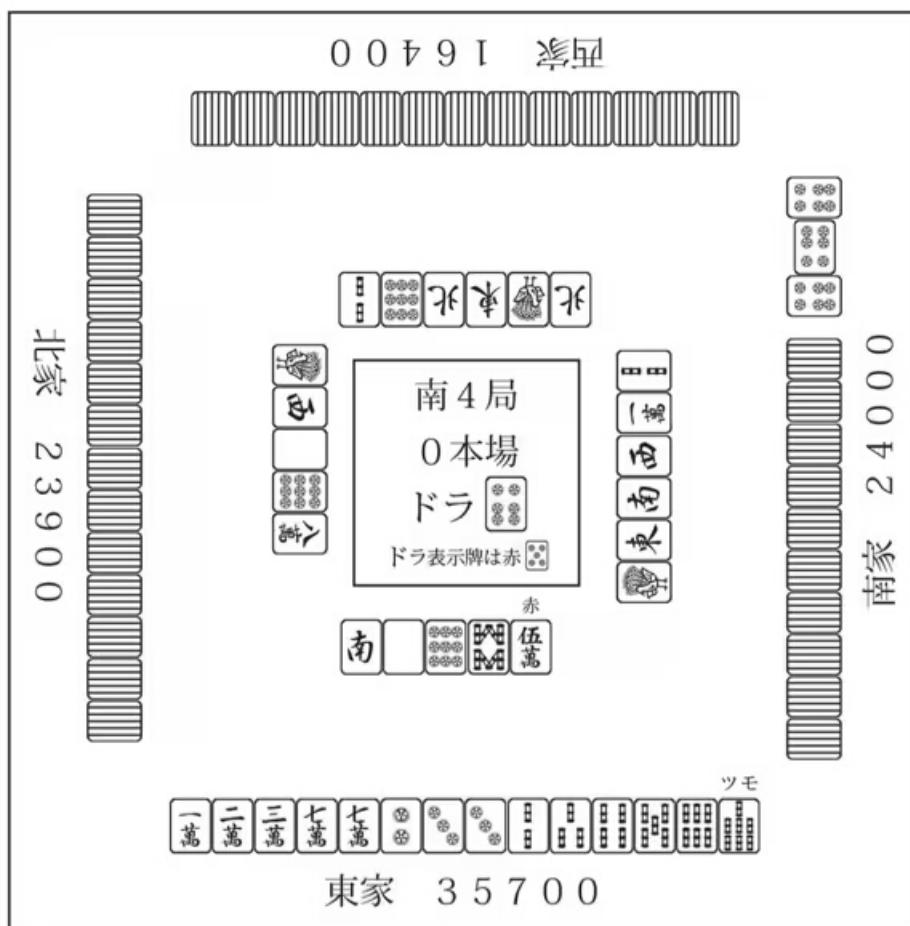
For example, in situations like All Last where winning means topping the game, it might be more prudent to wait silently. This is an exception.

Many people might think, Well, of course I know that! It's too simple! However, the structure of simultaneously remembering theory and exceptions remains unchanged no matter how strong you become.

Understanding exceptions is akin to recognizing that the conclusion of an exception in a specific situation

becomes a new theory. And beyond that, new exceptions can arise.

To be specific, in the previous example, learning that waiting silently in the situation of All Last where winning means topping the game is the exception becomes a new theory.



So, how should you handle the situation depicted in the diagram above?

Before thinking about waiting silently if winning means topping the game, consider the point situation. If the player next to you, who poned 3 dora, wins by self-draw, you will drop to 2nd place.

Now, what happens if you declare Riichi? This is influenced by the rules, especially the positional points. If the positional points are significant, the player who is likely to discard a winning tile worth 7700 points due to fear will find it difficult to attack. Similarly, the player ahead of you will also find it challenging to attack (although not as much as the player next to you).

Of course, the player in 4th place will attack, but even if you concede a maximum loss, you'll still be on top, and the likelihood of achieving a jump max from the appearance of dora is minimal.

In other words, for situations like winning means topping in All Last, there exists an exception to declaring Riichi.

Like this, first learn the theory that is the correct answer in most situations (such as declaring Riichi when waiting for a peaceful hand), then learn the exceptions where options outside of theory become the correct answer (such as waiting silently if winning means topping). Then, further grasp even more detailed exceptions to exceptions (such as declaring Riichi depending on the point situation). Because mahjong situations are constantly changing, these exceptions are endless.

The theme of this book is Absolutely Never Eat 4, following this idea:

Theory needed to reduce the rate of eating 4th place.

The theory of common but exceptional tile formations.

The theory applicable in general rules but not suitable for the Avoid Fourth place rule.

Remembering both theory and exceptions will enhance your mahjong skills.

## 1.2 Chapter 2: Data Flow and Simulation Flow

I'm sure many of you have heard the terms data flow and simulation flow. While these terms have various definitions, I—

**Data Flow:** A way of thinking that systematizes tactics based on numerical values.

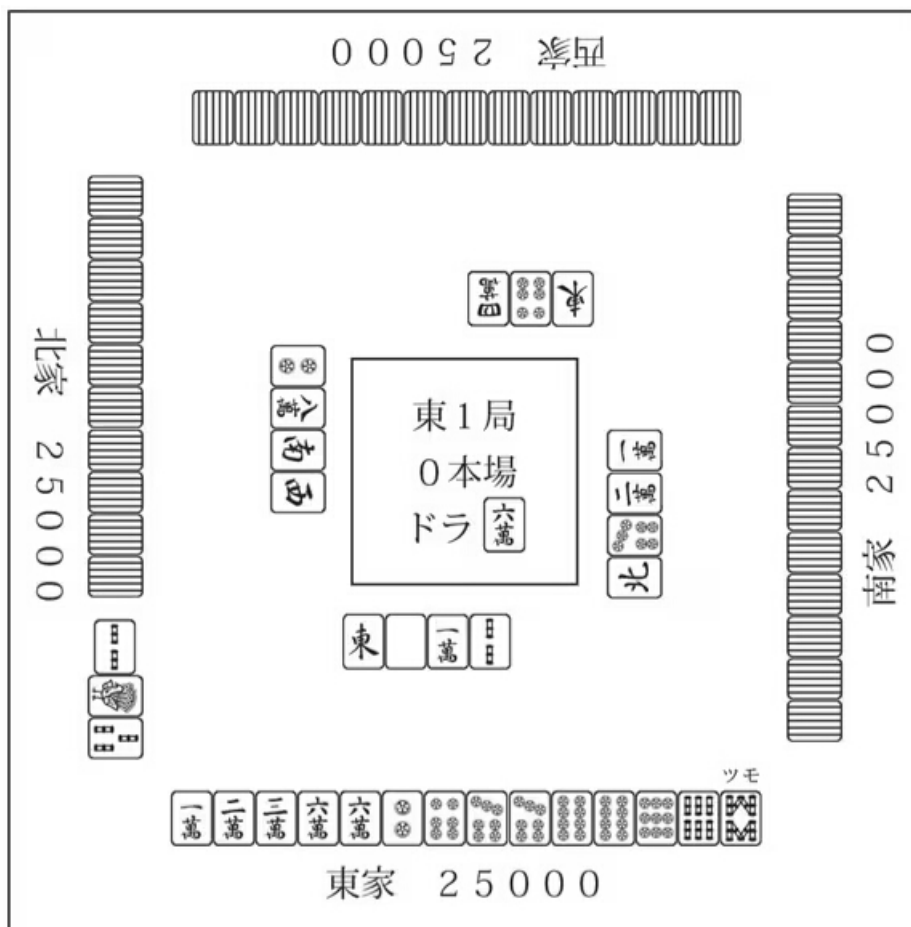
**Simulation Flow:** A way of thinking that seeks the correct answer in various situations based not only on numerical values but also on other factors.

Understanding it this way, data flow is good at mastering theory, while simulation flow excels at finding exceptions.

Both are necessary to become stronger. For example, in the example from the previous section, Declaring Riichi is more advantageous based on statistical data is a conclusion drawn from data flow. On the other hand, judgment based on point calculation is entirely simulation flow.

Indeed, both ways of thinking are necessary to become stronger, but it's essential to pay attention to the balance between them.

Once your mahjong skills reach a certain level, that is, when you can use simulation flow judgment to find exceptional situations, you may start overthinking and unnecessarily considering exceptions in situations where theory should be applied. This can happen too.



For example, in a situation like the one depicted above. Should you declare Riichi here? Firstly, your hand is a Riichi with a Dora 2, foolish shape, worth 5200 points. Based on statistical data, even a foolish shape with just one or more Dora tiles and if you're the dealer, declaring Riichi is more advantageous.

But take a look at the discard pile. The player ahead may be in Tempai, and generally, the Sou tiles are also tight. In this case, declaring Riichi with a risky foolish shape while waiting for Sou tiles may not be wise. Therefore, let's wait silently for now... Thinking like this won't work.

The difference in expected value between a no-yaku Dora 2 silent wait and a foolish shape 3 Han Riichi is enormous in statistical data. The content of judging the situation mentioned earlier is not wrong in itself, but the degree of difference is far from compensating for the difference in expected value.

Simulation flow judgment centered on reading tiles must consider whether the judgment will ultimately change.

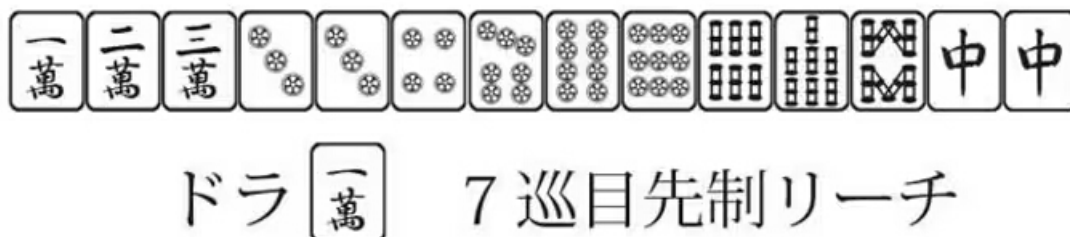
The example given this time is an extreme case, but it's extremely difficult to judge this in actual gameplay.

Determining whether the situation is tight or loose, whether the wait is good or bad, as long as you have a certain level of skill, you can judge these. But what's important is whether this difference in judgment can overturn the theory you are already familiar with.

If you can only play according to theory, then you won't be able to improve beyond a certain level. Because the theory you can easily grasp, others can easily grasp too...

So what should you do? First of all, I advocate if the difference in thinking is not significant, use simulation flow to judge.

If the Dora tile is changed to West, your hand becomes a foolish shape worth 1300 points. The expected value of declaring Riichi is not much higher than waiting silently (statistically). Therefore, depending on the situation, the judgment regarding declaring Riichi may change.



If you have the tile formations shown above, which one should you discard, 3p or 4p? If you discard 3p, you have a two-sided wait; if you discard 4p, you have a pair wait. Which one should you choose? It seems like having a two-sided wait means more remaining tiles, but the honor tiles are more likely to be discarded.

Actually, if it's mid-game and you're in Tempai, the final winning rate is about the same regardless of which one you choose. Since the winning rate is similar, you should choose the pair wait with a higher average hand value. The theory says so.

However, from a statistical perspective, the impact of the game situation when the winning rate is close is significant. In the case of winning meaning topping in All Last, if the tiles on the board are tight, you should declare Riichi with a pair wait; if the opponent has a potential Yakuhai hand or is in Tempai, and you can't expect honor tiles, then you should declare Riichi with a two-sided wait. Hands like these are heavily influenced by simulation flow judgment.

Point: Don't misuse simulation flow judgment!

### 1.3 Chapter 3: Techniques of Fully Discarding (1)

So, let's start writing about specific techniques to avoid eating 4th place from now on.

Although I say this, rules prioritizing avoiding the four, like Tenhou, are rare; generally, rules emphasize fighting for the top. However, regardless of the rule set, it's definitely better to eat 4th place less. Here, I want to write about some basic defensive techniques for not eating unnecessary 4th place. Not eating unnecessary 4th place means reducing unnecessary point losses, which also helps improve your top rate.

To avoid eating 4th place, it's essential to consider your discard rate and the tiles you discard. If you can manage to basically not discard tiles and not discard tiles to high-scoring hands, then, of course, your rate of eating 4th place will decrease.

The key here is to not discard tiles to Riichi. Declaring Riichi clearly indicates that your opponent is in Tempai, and on average, it scores higher than waiting silently or having melded sets, so reducing discards to Riichi is fundamental to avoiding eating 4th place.

To avoid discarding tiles to Riichi—

(1) Don't attack with hands where the reward doesn't outweigh the risk.

(2) Correctness of discarding waits.

These two points are crucial. I still see people trying to read the waiting tiles of Riichi players, but generally, it's impossible to accurately read the waiting tiles of a Riichi player. It may seem like you can get past tiles that are not the actual waiting tiles, but as long as it's not a dead tile, there's still a chance it'll be discarded, and the important thing is whether your hand is worth bearing that risk. I'll discuss this point in detail later. The ability to correctly choose safe tiles when discarding waits is what I'll talk about this time.

Firstly, let's discuss the theory, which is memorizing the order of safe tiles below.

S: Furiten tiles

A: Honor tiles with 2 tiles discarded

B: suji tiles (19), other honor tiles

C: suji tiles (28)

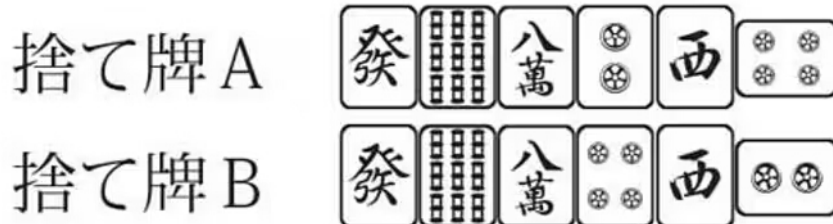
D: suji tiles (37)

E: No suji tiles (123789), half suji tiles (456)

F: No suji tiles (456)

The higher the rank of the tile, the safer it is. When fully discarding, basically discard tiles in descending order of rank from your hand. This way, your discard rate will be minimized.

Now, let's consider some exceptions, which are situations where you don't follow this order when fully discarding. As mentioned earlier, precise waiting tiles can't be read, but the level of danger, i.e., the order, can change based on reading tiles. People who try to read waiting tiles like this can't win, but those who completely abandon reading tiles also can't join the winners' group.



The above discards only swap the positions of 2p and 4p, but the danger level of 1p and 7p for both sets of discards is entirely different.

For discard set A, the danger level of 1p is basically the same as the usual suji tile (19). So, how about discard set B? After discarding 4p, keeping 2p until the opponent is in Tempai is highly likely, resulting in the most common shape of 112p. Of course, 1p may also be a pair, but under the circumstances of a double pair, it's highly likely to exist as a pair, significantly increasing its danger level. Therefore, the overall danger level is higher than the usual suji tile (19).

Next, consider the danger level of 7p. For discard set A, 7p is much more dangerous than the usual suji tile (37). This is the situation of holding 468p, where this part is kept until Tempai. This is what we call the declaration tile hanging, and it's necessary to treat it differently from the usual suji tiles. So how about discard set B? It's hard to imagine discarding in the order of 4p 2p from 2468p, so here, the danger level is about the same as the usual suji tile (37).

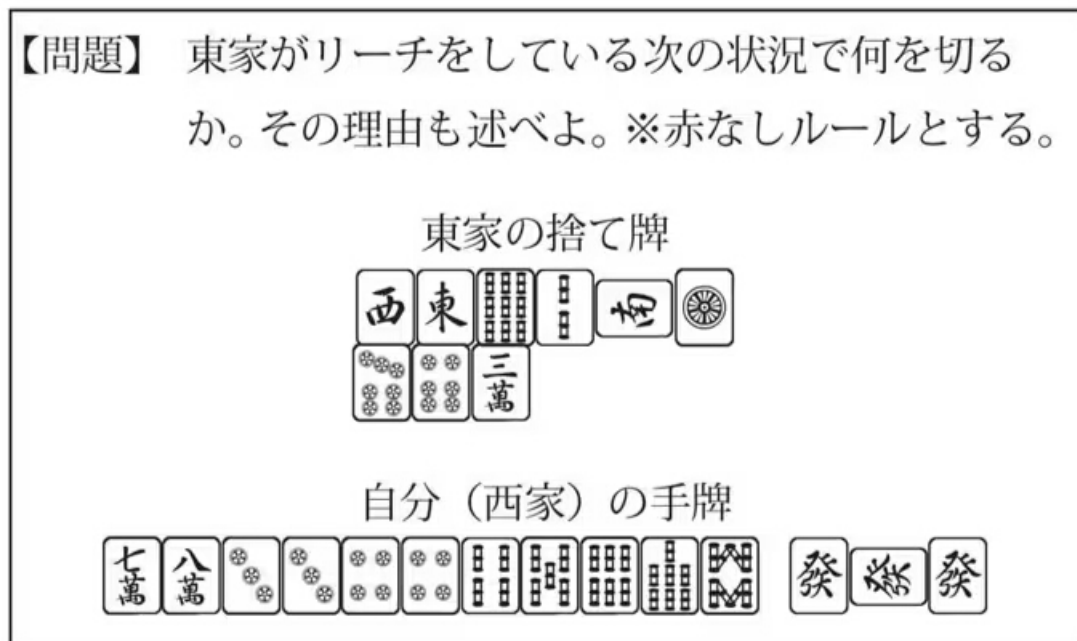
So, for example, comparing the safety of 1p and other rank tiles in discard set B, it's necessary to think about this. However, it's impossible to derive all the data for all the discards, so it needs to be based on intuitive judgment. There may be slight differences depending on the situation, but it's also possible for changes in the order of two ranks. My feeling is like this. To cultivate this kind of feeling, you need to be sensitive to changes in the order of discards in everyday situations.

It can be said that those with a discard rate of over 14% need to reassess their criteria for attacking and defending, and practice according to this ranking table. For those with a discard rate of around 13%, it's essential to respond to exceptions like this time to further reduce discards.

Point: After becoming proficient in using the ranking table, also pay attention to the order of discards.

## 1.4 Chapter 4: Techniques of Fully Discarding (2)

Continuing from the previous section, let's delve into the concept of tile danger. First, let's look at the following question.



What to discard? Assuming no red tiles rule.

This question is modified from a question in the first All Japan Mahjong Association's professional player exam that I participated in. Whether you're aiming to win or to discard, the only options for discarding are 3p and 4p. So, this is not about attacking or defending but purely about which tile is safer, i.e., the mechanism of tile danger.

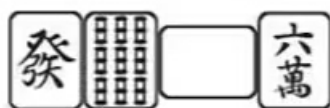
Why is there a difference in the danger level between different tiles? Why are honor tiles safer than numbered tiles? The likelihood of a tile being discarded and the number of possible waiting shapes for that tile are roughly correlated. For example, if 1m is discarded, the possible waiting shapes for the opponent are two-sided wait on 23m, double pair on 11m, single wait on 1m, and the special hand Kokushi Musou, totaling four shapes. On the other hand, if East tile is discarded, there are only three possible shapes: double pair, single wait, and Kokushi Musou, because 1m has an extra two-sided waiting shape, making it more dangerous.

Looking back at the question, the possibility of two-sided waits for both 3p and 4p is negated, and the likelihood of double pair, single wait, and closed wait is almost the same. However, only 3p has the possibility of a side wait, making 4p safer. So, the correct answer is to discard 4p.

In actual games, calculations are also made based on the number of visible tiles. For four identical tiles of the same kind, marked as A to D, there are  $4 \times 4 = 16$  combinations, such as 23m two-sided waits. If two tiles of 2p and 3p are visible, then the number of two-sided waits for 23p is only  $3 \times 3 = 9$ . Therefore, 1p is safer than 1m.

Now, let's consider the following question.

## 南家の捨て牌



## 自分（北家）の手牌



Similarly, what should be discarded here?

With too little information, some may choose to continue building their hand, but let's assume here that you're aiming to defend (imagine a point situation where you absolutely cannot afford to deal tiles).

Would your hand hold onto the 3m? Consider the likelihood of 1m and 3m being discarded.

切りリーチなので単騎待ちはないとして——

カンチャン待ち： 4枚 ×  3枚 = 12通り

ペンチャン待ち： 2枚 ×  4枚 = 8通り

シャンポン待ち： 3枚のうち2枚 (3 C 2) = 3通り

計 23通り

次に  の危険度を考えてみます。同じく単騎待ちと、  
 国士のケースを無視すると——

リャンメン待ち： 4枚 ×  3枚 = 12通り

シャンポン待ち： 2種類 = 1通り

計 13通り

Ignoring single waits and Kokushi Musou situations.

The chart above shows the results of the calculation, with 1m being safer. Moreover, 1m can cover the 2nd turn, so from the perspective of fully discarding, discarding 3m here is clearly a mistake.

How about that? There are surely some who have never tried to consider problems in this way. Of course, hand compositions are based on subjective human thoughts, not just combinations.

Basically, when building a hand, we tend to avoid keeping lone tiles and aim for better shapes, which increases the probability of achieving a good shape compared to the pure probability calculated by combinations. For example, if there are isolated 2m and 5p tiles, usually 2m will be discarded first, so the situations of two-sided waits are fewer than those of double pair and closed waits.

In the previous section, the ranking table based on statistical data ranked suji tiles (37) as safer than non-suji tiles (19) due to this reason. However, for early turn Riichi without much subjective player thought, the combination of tiles becomes important.

Understanding this mechanism, you'll realize that when all 9m are visible and 5m has passed, the safety of 8m is similar to that of the general non-suji tiles (19), and you can flexibly apply the ranking table in practical situations.

The fact that suji tiles (28) are safer than suji tiles (37) in the ranking table is also due to the combination of tiles (no side waits).

Point: Master the techniques of fully discarding by combining the mechanism of tile danger and the ranking table.

## 1.5 Chapter 5: Remembering Reading and Discarding Tiles in the Digital Flow

Previously, we discussed the danger level of tiles, considering both the safety ranking table and combination counts. Now, let's explore the minimum reading and discarding theory that you should remember.

(1) Tiles cut in the early game tend to be safer when they span across different groups (Sotogawa).

For example, cutting 3m from a sequence like 334m is relatively rare. If 3m is cut early in the game, it implies that 1m and 2m are comparatively safer.

However, there are still possibilities of getting hit, so this theory alone is not enough to alter your attack and defense judgments. You can trust this theory when comparing tiles of the same rank, when no safe tiles are available, or when the decision to attack is subtle.

Conversely, if 3m is cut early in the game, the danger level of non-spanning tiles among 4m to 9m will relatively increase.

(2) Cutting a 5 before declaring Riichi makes 14 and 69 dangerous.

This is an application of point (1). When a 5 is cut early in the game, the spanning tiles 36 and 47 become safer. Consequently, the only two-sided wait tiles left are 14 and 69. Particularly, when 2378 of the same suit are unseen, even the 19 tile is as dangerous as the non-spanning 456 tiles.

(3) Danger of Middle 4 and Middle 5 (Aidayonken).

You might have heard of Middle 4 but not Middle 5, so let me explain.

Firstly, Middle 4 refers to the four numbered tiles in between 3 and 8. If the early discards form a Middle 4 pattern, the inner tiles 47 will become critical tiles.



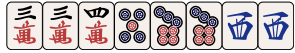
In such cases, the Middle 4 pattern would be 47s for 3s and 8s. This is essentially an application of point (1).

If 3 and 8 are discarded early in the game, the likelihood of waiting for 14 and 25 from 3 or 69 from 8 decreases. Similarly, waiting for 36 and 58 from 3 or 47 from 8 is denied. Consequently, the only two-sided wait tiles of the same suit are 47.

Point (2) discussed earlier follows a similar logic. Tiles that have only one option for two-sided waiting when discarding same-colored tiles are riskier than usual non-spanning tiles. Therefore, Middle 4 can be considered critical tiles.

Similarly, when both 3 and 9 are viable, only 47 and 58 remain, which are equally risky. Hence, not only Middle 4 but also Middle 5 needs attention.

(4) Pay attention to the surroundings of declaration tiles for foolish waits.

Many people feel that tiles surrounding declaration tiles are dangerous, but the difference isn't significant when limited to two-sided waits. However, for configurations like , cutting 3m keeps the tiles that could strengthen the foolish waits until the end. I believe that if you're foolishly waiting, the tiles around declaration tiles are more dangerous. Specific scenarios include:

Cutting 5m from 579m, which creates a foolish wait.

Cutting 7m from 799m.

Cutting 7m is either waiting for double pairs with another tile or choosing to wait for a closed wait with the same shape. Although it can't be said that tiles around declaration tiles are much more dangerous than other non-spanning tiles, for such discards:



Tiles like the 9m are more dangerous than 9p.

(5) The inside tiles of declaration tiles usually don't form pure two-sided waits.

If you have 578 in your hand, keeping the 5 doesn't make much sense. Therefore, the inside tiles of declaration tiles usually don't form pure two-sided waits, but there are some exceptions:

When declaring Riichi with a 0 tile. In this case, keeping 078 for the possibility of using the red Dora makes 14 and 69 critical tiles (more dangerous than usual non-spanning tiles).

When waiting for a pair. In a hand without a pair, cutting a tile from sequences like 12345m or 23345m during Riichi makes the inside tile of the declaration tile a potential waiting tile.

When dealing with complex shapes. Shapes like 556778m may lead to cutting 5m, waiting for the inside tile of the declaration tile, 69m.

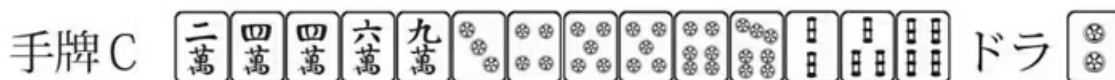
Since there are many exceptions, attacking based solely on being the inside tile of a declaration tile is not feasible. However, if you can see 3 pieces of 7m, you can negate the shape of 556778m. Remember this logic and use it in your decision-making process.

(6) When declaration tiles are safe tiles, it means waiting for a good shape.

If there are foolish waits in your hand, you generally keep reinforcing tiles or floating tiles that could improve your shape. Declaring Riichi with safe tiles (mostly honor tiles) already indicates a one-sided wait for a good shape, which increases the likelihood of waiting for a good shape. There are exceptions, of course, but they require a high level of accuracy in reading tiles. In such cases, the safety level of numbered tiles increases.

Point: Although reading discards cannot guarantee definitely passing or definitely getting hit, there will be changes in safety levels.





In this case of a foolish wait with 2600 points, anyone who still discards 9m can be said to be attacking too aggressively.

The examples I provided may be extreme, but what I want to emphasize is that even if the danger level of the desired discard is the same, there are situations where you can and cannot discard based on your hand. There's a fine line between offense and defense in hand B and hand C, and being able to accurately judge that is the ultimate goal. Reading discards is just a means to that end.

While the content of reading discards I mentioned earlier is indeed useful, it's easy to fall into the trap of thinking that if a tile can complete a hand, it can be discarded; if it's likely to be dealt, it can't be discarded. However, Mahjong is a game of incomplete information (you can't see your opponents' hands or the concealed tiles in the wall), so this kind of thinking is flawed. There are still tiles that can be discarded even if they might be dealt.

Conversely, I've also noticed many players who completely neglect reading their opponents' discards. Guessing opponents' waits is pointless (guessing opponents' waits doesn't earn points in Mahjong), but if you want to find the line between offense and defense and elevate your judgment to a higher level, reading discards is necessary. For example, in the discard pattern shown earlier, if your opponent discards 9p in the next turn, and your hand is like this:



You really want to win with a Dora 3, but your hand is already overloaded with melds. Haphazardly discarding 7m here, considering it's a live tile, won't work. In this case, discarding 9m when you're waiting is extremely risky. So, what should you discard? Considering safety levels, the next safest option after 1s is 6p. Even though discarding 1s still leaves you with a one-shanten wait, it's acceptable. But actually, 6p is even safer than 1s.

Firstly, since 9p has been discarded, the possibility of 69p is eliminated, and according to previous theories, the likelihood of 36p is also low. Although it's possible to discard 5p based on your hand, it's better than 14s. Typically, you wouldn't discard 5p from a sequence like 566p to wait for a pair, so the chance of discarding 6p for a pair is almost non-existent. Moreover, the possibility of discarding 6p for a pair is much lower than that of discarding 1s, which is a normal occurrence.

There are many benefits to reading the danger level of tiles from discards like this. However, whether or not to discard a tile depends on your own hand. The skill of reading discards, a form of simulated flow, is considered a signature skill of advanced players, but no matter how accurate your reading is, it's meaningless if you can't assess the value of your own hand. Even if you know that 6p is safer than 1s, if your hand is very scattered, you should still discard the non-related tiles.

Rather than that, players who use their own hand as the basis for offense and defense judgment can more effectively utilize reading tiles. The next section will discuss more about this basis.

Point: Reading discards is not about reading waits, but about reading danger levels!

## 1.7 Chapter 7 The Value of Hand Tiles

Here's a look at the specific criteria for offense and defense based on your hand. In conclusion, adopting attack when waiting, discard when not waiting as the basic criterion for hand judgment is fundamental.

Although it's a relatively rough criterion, as long as you can consistently follow this basic principle, in terms of offense and defense judgment, the average placement in an ordinary Mahjong game can reach around 2.40 to 2.45, and in Tenhou ranking, it can reach around sixth dan. Conversely, if you can't achieve such results, there's a high possibility that you're not adhering to this basic principle.

Yes, what matters is adherence. The same goes for other techniques, especially regarding the knowledge of offense and defense judgment. Simply understanding without execution is meaningless. Despite having consecutively discarded fours before or winning a few hands in a row, you still need the mental strength to discard and not win from a one-shanten wait in front of you. This kind of mental fortitude needs to be tested.

It's important to note when your skill level has reached a certain point. While it's fundamental to discard when not waiting, there are exceptions where you can still attack even when not waiting.

Considering factors such as potential winning hands, number of winning tiles, point situation, and the danger level of tiles deduced from reading discards, it's not so rare for advanced players to choose to attack from a one-shanten wait. These exceptional situations are also discussed in this book as your skills improve and you gradually grasp these concepts. However, intermediate players often tend to excessively attack from a one-shanten wait due to reasons like seeing a mangan, not having safe tiles, being in fourth place, or having only one chance. To attack from a one-shanten wait, the following conditions must be met:

\*Attacking from a one-shanten wait is only acceptable during the early game (up to the sixth turn).

\*Do not discard the non-related tiles 456.

\*Do not discard tiles identified as particularly dangerous from reading discards.

Based on these explanations, let's discuss the exceptions in offense and defense judgment, i.e., when to attack from a one-shanten wait and when to discard even when waiting. First, let's talk about when to attack from a one-shanten wait. Generally, you should attack if your hand has a high potential for scoring points and has a good shape, but there are other conditions as well. For example—



To attack from a one-shanten wait, you need to have enough potential for reward (scoring points), and insufficient number of winning tiles won't suffice. For a hand shape like Hand A, you should use as a benchmark a fully one-shanten wait with at least three dora visible.

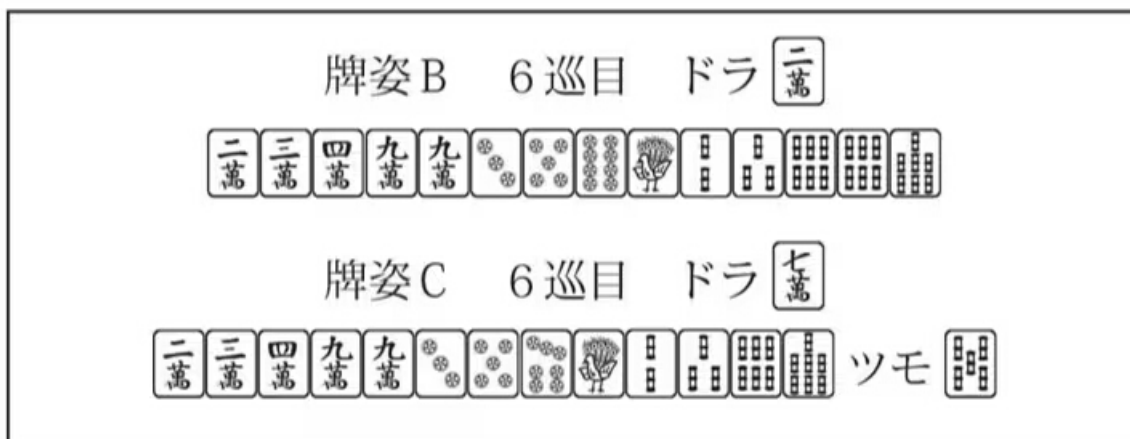
However, even for such a hand, it will take an average of about seven turns to wait for it to be fully one-shanten, and it's only after this point that the game truly begins. Considering this, after the mid-game, the likelihood of winning drops significantly, making the value of attacking decrease. You should be aware that the value of your hand decreases as the game progresses.

Moreover, non-related tiles 456 are more dangerous than other tiles, as their discard will significantly reduce

your win rate (it's obvious that you can't win with discarded tiles). In light of this, attacking from a one-shanten wait is not advisable.

Similarly, besides 456, tiles identified as particularly dangerous from reading discards, as mentioned in section 6, should not be risked. Considering the numerous conditions required to attack from a one-shanten wait, the majority of cases result in discarding instead.

Additionally, there are situations where tiles appear to be passable but should actually be discarded, such as when there are redundant tiles or tiles forming sequences from previously discarded tiles.



For example, a hand shape like Hand B, although there's a live tile 9m, it's still acceptable to discard the sequence tile 8p. If it's a two-shanten wait, a one-shanten wait with both tiles redundant, or a one-shanten wait in a riichi nomi situation, you should discard even sequence tiles and focus on discarding live tiles.

Next, let's discuss situations where you should still discard even when waiting. First, the most common scenario is like Hand C, a riichi nomi situation with a potential of 1300 points.

Here, chasing riichi is not advisable. Even if 3p or 7p are live or sequence tiles, it's better to silently wait for the win. If you win by self-draw, consider yourself lucky and continue playing with this mindset. In the case of a foolish wait with 2 han, it's quite delicate (it depends on other factors; if there's no specific information, both attacking and defending are viable), but—

If the opponent is the dealer,

If it's past the 9th turn, and

If cutting the 456 tiles without any safe tiles is required to become tenpai,

In these situations, it's probably better to discard instead. Conversely, if you're the dealer, don't hesitate to declare riichi.

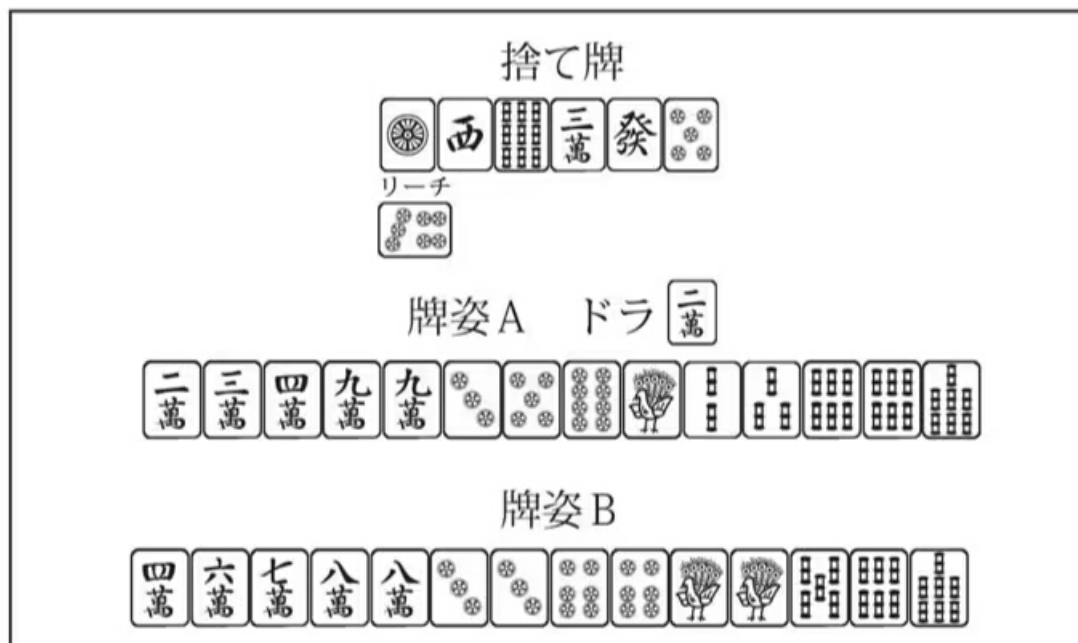
For foolish waits with 3 or more han and a good shape for tenpai, it's basically advantageous to pursue riichi, even if the opponent is the dealer.

However, as mentioned earlier, as the game progresses, the value of your hand decreases, so by the endgame (after the 13th turn), discarding may also be a strong choice.

Point: Before considering exceptions, remember the baseline value of your hand!

## 1.8 Chapter 8 Attacking and Defending When There Are No Safe Tiles

The previous section explained that most of the time, when facing a riichi with a 1-away wait, it's better to discard, but in actual games, situations where you want to discard but don't have any safe tiles are also common, right? If there are no safe tiles, then attack is something I often hear, but is it really correct? Indeed, discarding without safe tiles can be risky. In such cases, it's better to lean towards winning the hand, but if the chances of winning are very slim, it's better to choose to discard tiles with a lower discard-riichi ratio.



In terms of hand value, a hand like Hand A is considered safe to discard even if it's a terminal tile. Such hands are only suitable for discarding with no safe tiles in the early game. However, as mentioned in the conditions for attacking with a 1-away wait, after the middle game, it's better not to discard particularly dangerous tiles.

In practice, what's more useful is the technique of finding safe tiles. If you've faced a riichi like the one shown in the diagram and don't have any safe tiles but must discard, there are usually two choices:

- (1) Try to find a slightly safer tile to discard.
- (2) Discard tiles you have multiple copies of.

First, for (1), if you have a hand like Hand B, based on the explanations in section 3 and section 4, the 1s at the end is safer. But if you want to take it to the next level, try using tile reading to find tiles that seem likely to be winning tiles.

If the riichi declaration indicates a wait for 36p, you should have 45p in your hand, resulting in a shape like 4557p by the 6th turn. Typically, you wouldn't cut 5p followed by 7p, so you can determine that the wait for 36p is less likely. Moreover, if you cut 5p, you're unlikely to have 24p as a pair, so it's not a wait for a pair of 3p. Looking at the first discard being 1p, it's also unlikely to be a wait for a side 3p. Therefore, you can see that 3p is safer than 1s. Players who notice the safety level of 3p will have much better results than those who attack due to no safe tiles or lack of winning tiles.



In the baseline for attacking and defending, the same shapes were mentioned, and for a riichi declared after cutting 5p, 69p is the target tile. Therefore, you should discard 9m here. This combines situations (1) and (2).

If you have a hand like Hand G with no terminal pairs that are relatively safe, you should start by discarding 9m and then, after reaching tenpai, discard the 6m with two copies.

Point: Master the advanced technique of full discard by combining data flow hand judgment and simulation flow tile reading!



desire to move towards winning the hand. The judgment criteria in such situations are—

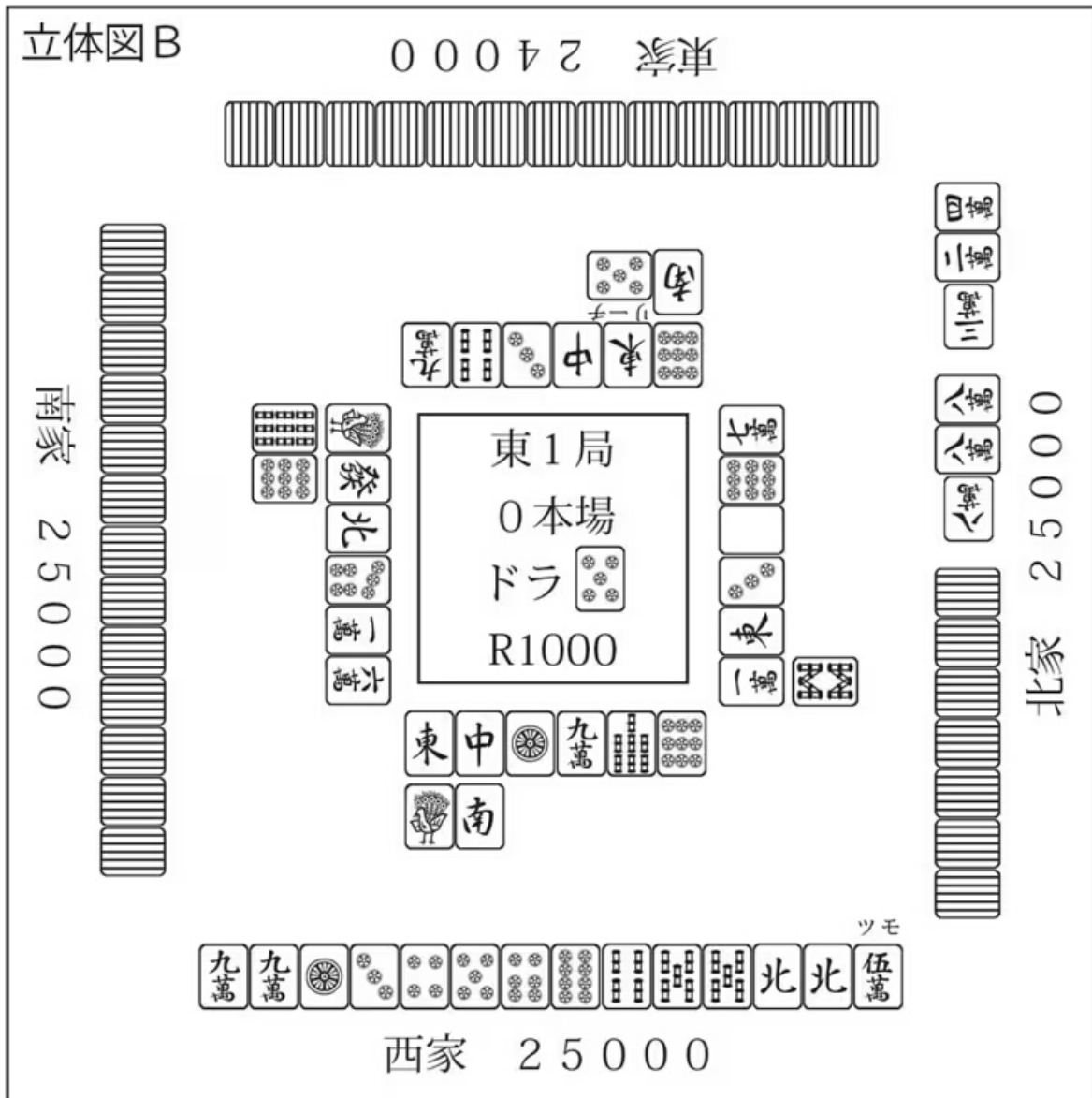
- (1) Whether your hand seems likely to become tenpai quickly.
- (2) Whether any opponents are declaring riichi.

These two points are crucial. Firstly, regarding (1), no matter how good your hand looks, if it can't win, it's meaningless, so the ability to reach tenpai is more important than scoring potential. Even a seemingly good hand like the one in the diagram has significant issues. The extra 2m and 3p are too dangerous. If you can't complete your hand with all your extra tiles, you can't win, so not only the shape but also the danger level of the tiles you'll need to complete your hand will affect your tenpai rate and win rate. Remember this well.

However, even after discarding North, tiles like 2m and 3p might still complete your hand. More importantly, (2): The previous player is obviously attacking. Typically, they're one step away from tenpai, possibly with high-scoring waits. Then there's the opponent who seems to be discarding safely. But what if their 3m and 6m were both discarded by them? Although 3m is a terminal tile, the possibility of them discarding it for a foolish wait is not small, but it was discarded even before 6m, which indicates they're prioritizing advancing their hand.

If neither of these conditions is met, this hand should switch to defense, so you should discard 4s (as 6m can potentially complete the opponent's hand).

Next is about reducing losses during full defense.



Please look at the diagram above. The opponent has declared riichi, and you're preparing for full defense. Keeping the shared safe tile North, you still have these five safe tiles: 9m9m4s3p5p. If you want to aim for winning, you'd think about discarding 9m, but the shape is too forced.

So, are you just going to wait for someone to deal into you? There's still something you can do. That's letting the next player fight on your behalf by calling tiles. If there's a lateral movement between the next player and the riichi declarer, your loss will be zero. While there's a possibility of the next player winning by self-draw after calling a tile, it's still better than being won off by the dealer's riichi.

So, what tiles should you discard to let the next player call? As mentioned in Tile Reading, Which Data Flow Should Also Remember, based on the next player's discards, it's highly likely they need 47p or 58p. 5p is a

Dora, which might be a reason for the next player to attack, and they won't discard immediately after achieving tenpai.

If 5p is called, it's obvious, but even if it isn't, there's a possibility the next player has already reached tenpai, and you don't want to deal into them, so you can't discard 4s. So, the order should be 3p9m9m. It's important to note that letting the next player call is something you do when there are still many rounds until a draw is declared, and there's a high chance of the riichi declarer winning by self-draw.

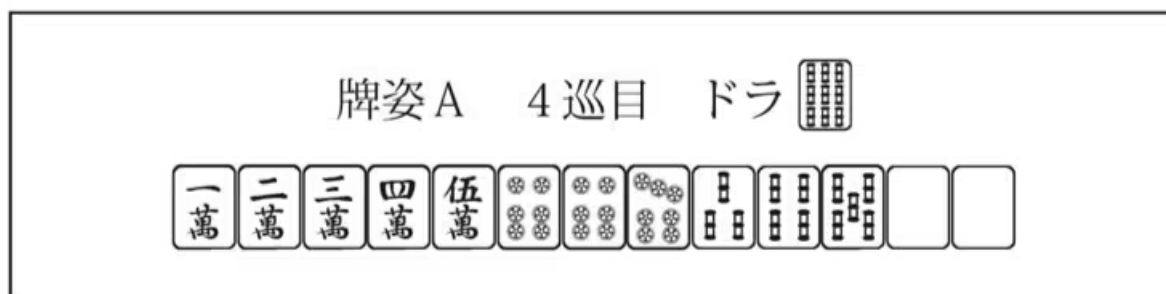
For example, if it's the 15th turn and the chances of the riichi declarer winning are low, it would seem foolish to let the next player call when they haven't reached tenpai yet, so you would discard tiles like North or 3p that make it difficult for them to call.

Point: Even during full defense, always look for what you can do!

## 1.10 Chapter 10 Just Win First

So far, we've covered the basic defensive techniques of full defense and attack-defense judgment. However, there's a method that can significantly reduce point losses more effectively than those—winning the hand yourself. Even if you're in full defense mode, you might still deal into a self-drawn hand or experience other costly mistakes, but you won't lose points by winning the hand yourself. In other words, the best way to avoid point losses is to win the hand as much as possible.

So, what's the most important thing for winning the hand? That would be reaching tenpai. It's a well-known fact that you can't win without tenpai, but understanding the game's composition beyond this obvious point can have an impact on both your application ability and your overall performance.



Now, for hand shape A, which tiles should you call for riichi on the 4th turn?

The answer is to aim to reach tenpai as soon as possible, so you should call all tiles that contribute to a potential winning hand, namely the 3m, 6m, and white dragons. Most people hesitate to call these tiles for two reasons:

(1) Starting to call tiles with numbered tiles may result in only having waits on honor tiles, which could lead to a delayed win.

Many players feel uncomfortable with delayed wins or single-wait hands. However, this discomfort is unfounded. Holding safe honor tiles actually adds an extra layer of safety. While single-wait hands may indeed be less stable than usual, being in tenpai while your opponent is still one step away from it due to their riichi is even less secure.

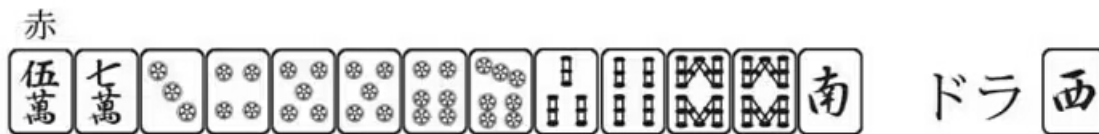
(2) Even though it's still early in the game and you appear to have a clean hand, calling tiles now would feel like a waste of a potentially open hand.

Having this mindset is not wrong. Even if you reach tenpai quickly, winning with only low-value tiles is unlikely to be profitable.

So, what's the benchmark for low-value tiles? Is it not reaching the mangan or not reaching 3900 points?

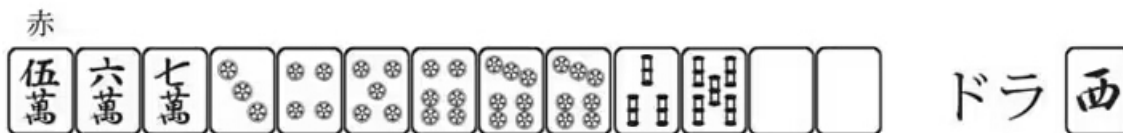
In fact, low-value is not determined by the number of points alone but rather by comparing the hand's potential when completed with a closed hand versus calling tiles.

For this hand, the most likely scenario when completed with a closed hand is waiting on a two-sided wait after drawing two tiles, resulting in a hand worth 1300 points. Of course, if you add riichi and a win with a drawn tile, the average hand value would increase slightly, but not enough to ignore a potential 1000-point win right now. Besides, if the white dragon is discarded later, you're likely to call it anyway, so you might as well reach tenpai as soon as possible.



If you call tiles now, your hand value would be only 2000 points, whereas if you reach tenpai with a closed hand, it would be worth between 5200 to 8000 points, a significant increase in potential points.

However, the issue lies in the hand's shape. It would take quite a long time to reach tenpai with a single-weight wait due to the foolish wait. Many people might start calling tiles after reaching a closed weight starting with a kan. While it's true that achieving a closed weight, whether by drawing or calling, is more challenging than having a better shape, it's better to reach tenpai quickly and win through a drawn tile from the previous player than to wait until you can complete a single-weight wait. Remember, Don't pass on calling or kan if it leads to a foolish wait.

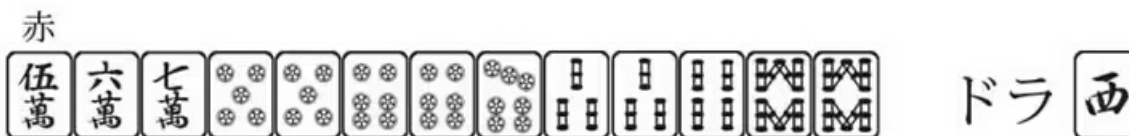


So, here you should either call the white dragon or complete a sequence with 4s. To summarize what we've discussed so far:

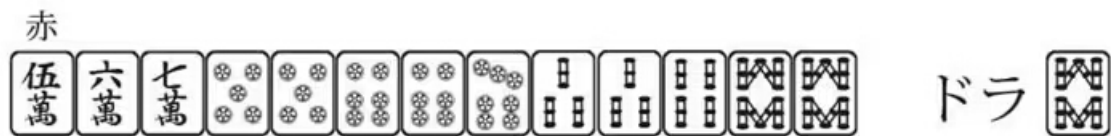
\* Don't worry about delayed wins. \* Reach tenpai, especially if you have a foolish wait.

Thus, as both criteria are met here, it's only natural to call tiles to reach tenpai.

Continuing in this vein, it might seem like you should call tiles for every hand, but of course, there are hands where calling tiles is not appropriate. That would be the opposite of the situations we've discussed so far—hands where the point value increases significantly, and the shape is good.



The hand above is in tenpai with a riichi, and depending on the situation, it might also have pinfu or iipeikou, with a substantial increase in potential points. Additionally, the shape is a fully one-away from tenpai with two open-ended waits plus a double pair. In this case, there is indeed no need to rush to declare riichi and call tiles; the focus should be on creating a decisive hand for this half-round. However, if it's past the 11th turn and still not in tenpai, it's better to call tiles to achieve tenpai. Achieving tenpai is significant.



The hand has the same shape as before, but the dora has changed to 8s. With a tenpai hand, the points are certain to be 12,000, but calling tiles could also yield 8,000 points. Comparatively, calling tiles to achieve tenpai is the correct answer. In mahjong, after reaching the mangan level, increasing the points further becomes challenging. Remember, if tenpai is a mangan, then call tiles to achieve tenpai. How about that? Of course, further subdividing the shapes would increase precision, but first, remember the basic criteria mentioned here.

Point: Use calling tiles to achieve tenpai as quickly as possible!

## 1.11 Chapter 11: Techniques for Not Calling Tiles

Continuing from the previous section's latter half, let's discuss hand shapes where calling tiles is not advisable. Actually, there's no established theory for calling tiles in modern mahjong, making generalization quite challenging.

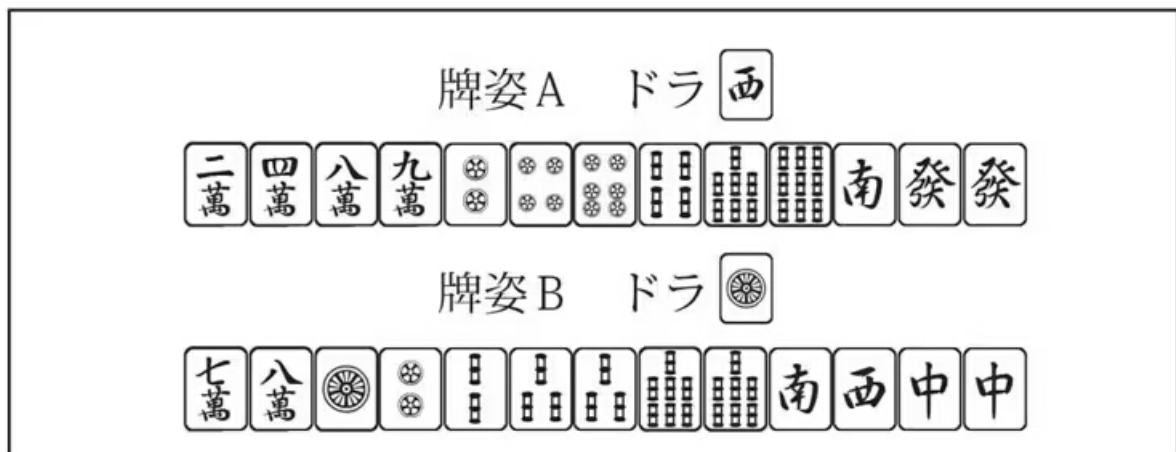
It's generally believed that there's a weak correlation between calling tile rate and performance. Both strong players who rarely call tiles and those who call tiles frequently exist. This is perhaps because in the early game, one tile call doesn't significantly impact the outcome; what matters more is the subsequent strategy of offense and defense. In online mahjong, if your tile call rate falls between 25% to 45%, then you need not overly concern yourself with this figure.

So, first and foremost, it's important to understand that opinions on calling tiles vary, even among strong players. However, there are hand shapes where calling tiles is absolutely necessary and others where it's absolutely inappropriate. To make judgments, let me explain the core thought process.

Firstly, the most basic rule is to avoid calling tiles for distant and low-scoring hands. Specifically:

- (1) Avoid scenarios where the hand's stability would be compromised after two tile calls (distant).
- (2) Avoid hands worth less than 2,000 points (low-scoring).

Hands meeting both these criteria should not call tiles.

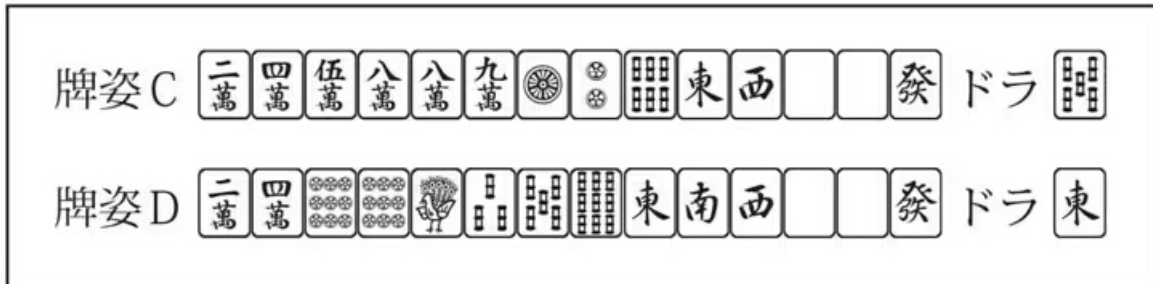


For example, consider Hand Shape A. After calling the pair of Green Dragon, the remaining tiles are all isolated. Regardless of where another tile is called, the hand remains incomplete. In such cases where two tile calls still wouldn't yield a decisive hand, it's best to refrain from calling tiles from the beginning.

So, what if we start calling tiles not from honors but from number tiles? If leaving honors as safe tiles reduces risks, then calling tiles is acceptable, but attention must be paid to subsequent tile arrangements. For instance, after calling 7m and then immediately having the Green Dragon discarded, wouldn't the concept of safe tiles be nullified if we call tiles again? Most players who call tiles usually do so when it stabilizes their hand shape after two tile calls. Remembering this point allows for better balance.

Now, what tiles should be called for Hand Shape B? With this shape, calling the 3p and 7p as early waits is suitable, but everything else should be passed. Some may think that calling the 7s is urgent, but if you call the 7s and later the 3s becomes the pair, then it's not an urgent wait anymore. Therefore, calling tiles cautiously is essential, especially when it stabilizes the hand shape after two tile calls.

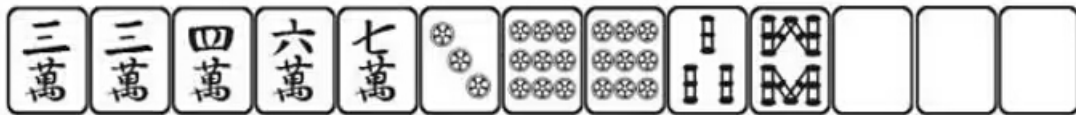
Then, another condition to consider is the potential points. Even if it's a distant wait, if there's a substantial reward, calling tiles is justified. Although the baseline is set at 2000 points, in cases where achieving a 2000 point All Last hand improves the player's rank, this restriction doesn't apply.



A typical example of a high-point but distant tile call is aiming for a mixed flush, as seen in Hand Shape C. Normally, a mixed flush with a riichi white is worth 2600 points, but calling tiles can yield even higher points comparable to a non-calling mixed flush white worth 3900 points. While this may not hold true in every scenario, calling tiles can offer point advantages similar to having a non-calling hand in a mixed flush. Additionally, retaining honor tiles for a mixed flush improves defensive capabilities, ensuring full discards even if preempted. Considering these factors, it's better to discard the 12p instead of honor tiles.

Calling tiles can significantly speed up the hand's progression when one away from tenpai, but if the hand is widely dispersed, calling tiles may not accelerate the hand's progress significantly.

It's essential to be mindful of situations where the hand lacks enough pairs.



For instance, in the hand above, if we call 258m and discard 8s, we lose potential tiles around 8s. While calling tiles can accelerate from pairs to complete sets, forming pairs from floating tiles requires drawing tiles. Calling tiles reduces the number of floating tiles in hand, making it difficult to form pairs. Therefore, for hands in disarray, achieving tenpai in a closed hand before calling tiles is more stable and efficient.

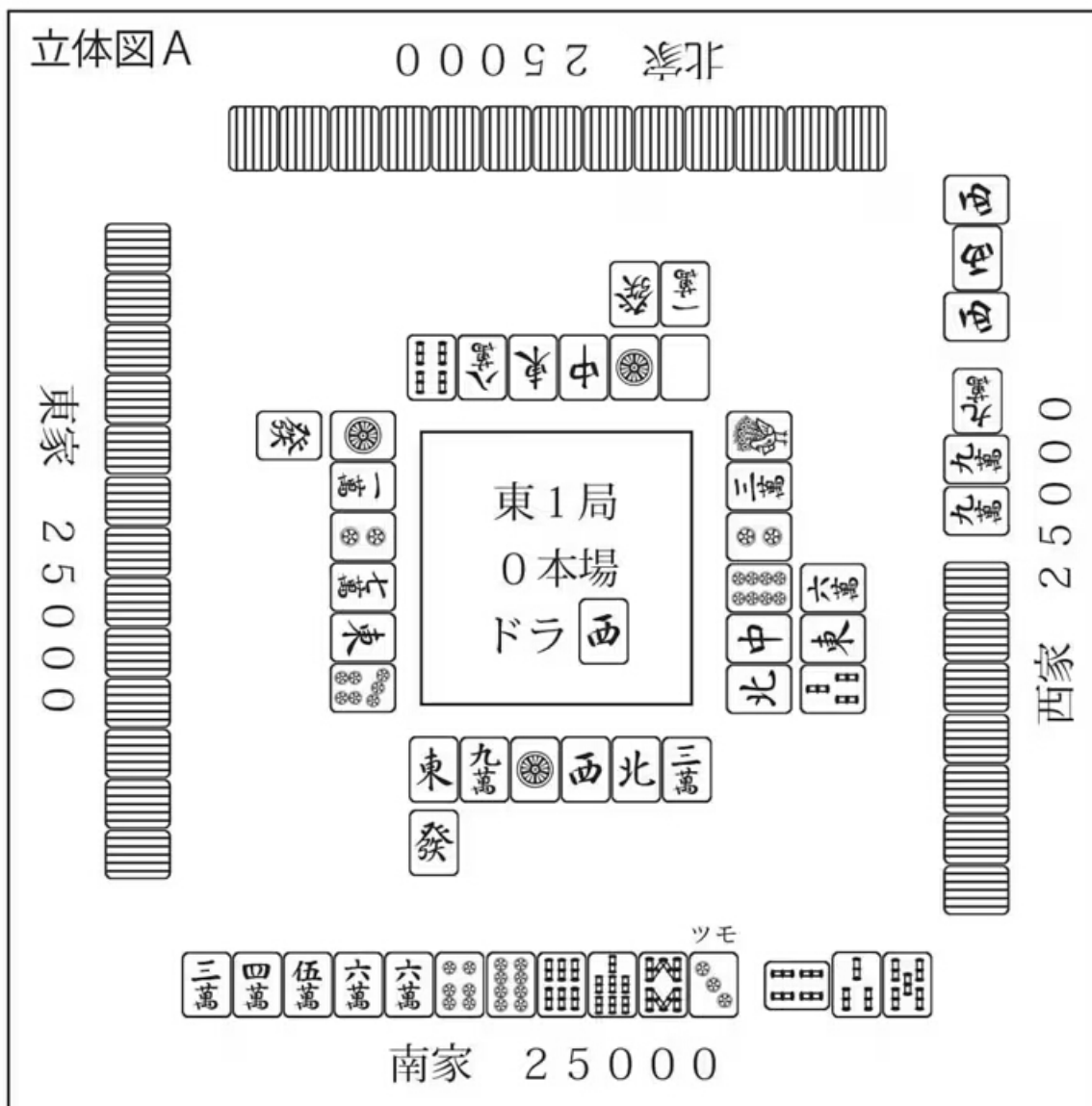
For example, in Hand Shape D, with scattered tiles like this, even if we call tiles like white or 3m to aim for tenpai, it's challenging to win. In such cases, it's more stable to aim for high-point hands like Kokushi Musou, seven pairs, or mixed flush by discarding 24m.

Point: It's taboo to call tiles when the hand shape remains unstable and low-scoring after two tile calls.

## 2 Second part: Techniques and Considerations for Avoiding Riichi Bets, Advanced Edition

### 2.1 Chapter 12 Tile Call Vigilance

So, you've mastered the basics as outlined in the previous sections, but your performance still isn't improving. This could be due to a lack of vigilance against tile calls.



Take a look at Diagram A. If you find yourself in such a situation, where you disregard any tile without value

due to being in tenpai, only to end up losing to a winning hand... If you've encountered such scenarios, it's time to develop a sense of caution against tile calls.

Unlike riichi hands, it's challenging to determine definitively whether an opponent is in tenpai with tile calls. Consequently, generalized theories about tile calls aren't as deep-rooted as those related to riichi. Players who focus on data flow theory often face hurdles in this area.

On the other hand, the point values and potential yaku of tile calls are relatively easy to read compared to riichi hands, and encounters with them are frequent in practical play. Therefore, mastering tile calls can significantly boost your performance. Tile callers should pay special attention to:

- Reaching a situation where three han are visible in the tile calls.
- Pairs of East tiles being called.
- Two sets of yakuhai tiles being called.
- Having a single-colored hand (Chanta, Honitsu).

All these situations indicate high-point hands. Data suggests that the average point value for riichi hands is around 7000 points (9500 points for the dealer). Therefore, calling a hand worth mangan or higher is riskier than reaching riichi and should be approached with caution, assuming the player is already in tenpai.

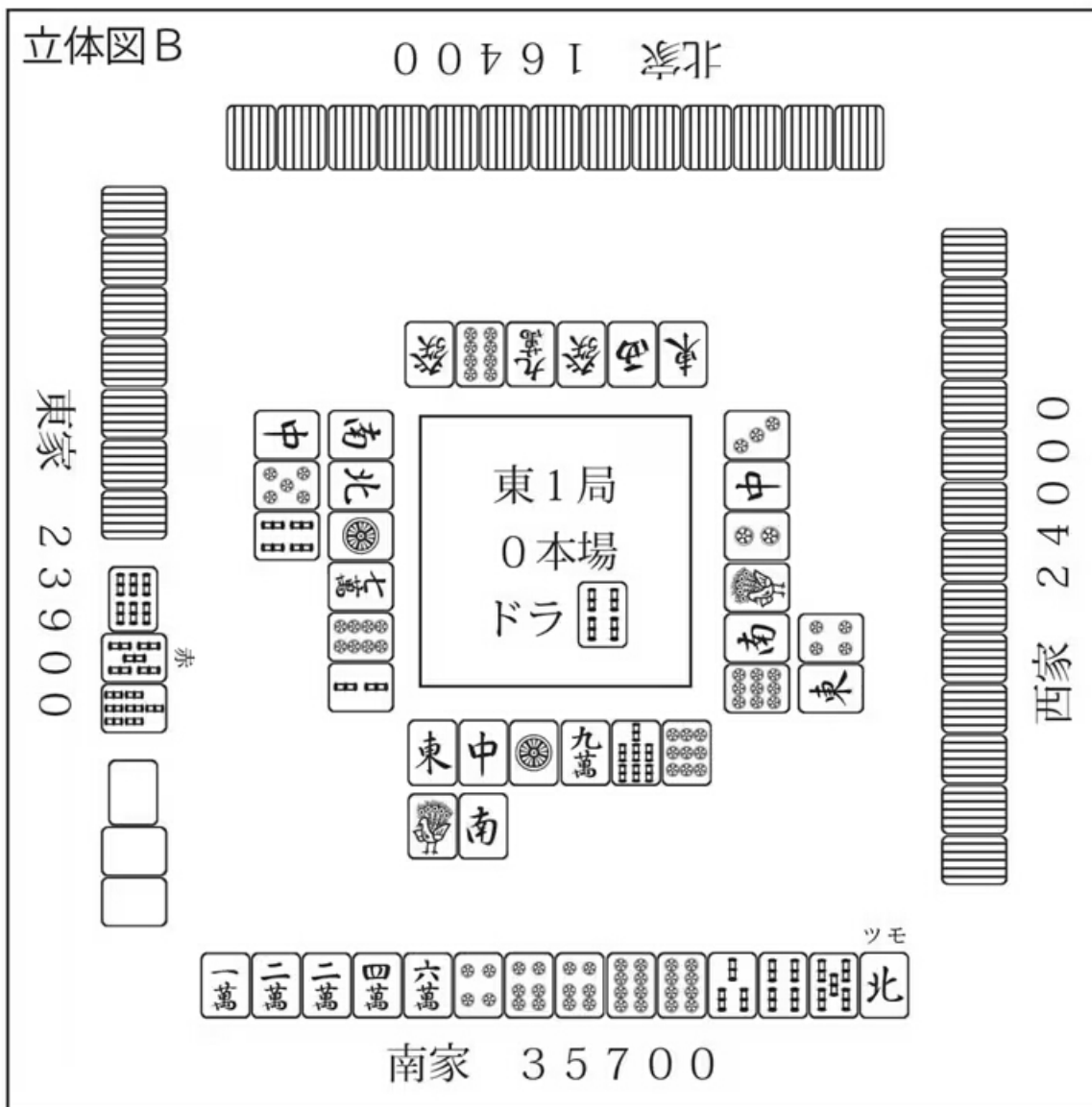
For instance, an opponent who calls a tile, revealing a dora, has secured a hand worth mangan. Just as we advised against chasing riichi with a 1300-point tenpai in the basics section, similarly, it's not wise to challenge a tile caller with a tenpai worth only 1000 points (due to the absence of ippatsu, ura-dora, and riichi's dealer self-draw bonus), especially if their hand exceeds the point value of a riichi hand. In such cases, a player needs to reconsider their approach.

Some might think, But we don't know if the opponent is in tenpai. Indeed, if a player immediately discards their winning tile after their first tile call, just like in riichi, they won't win. It requires a certain level of skill to predict the timing of an opponent's tenpai.

The theory on this point suggests that the probability of reaching tenpai after the first discard segment (early game) with three tile calls, the second discard segment (mid-game) with two tile calls, and the third discard segment (late game) with one tile call, is approximately 50%. If there are hand discards after this, the probability of reaching tenpai further increases. Moreover, if commonly used tiles (middle tiles 3-7, dora, overflow of single-colored tiles) are discarded, the probability of tenpai also increases.

I personally use a benchmark where, based on the principles of three tile calls in the early game, two in the mid-game, one in the late game, and considering tenpai after one more hand discard, I adjust based on the concentration of my hand and the opponent's discards.

For example, if the player to the left of the dealer discards 6m after calling 9m and discarding 3s, it should be considered as being in tenpai, and we should treat it like a riichi hand. Following the benchmark discussed in the basics section, the 3p here is not a safe discard.



Another crucial factor is your own hand composition. Look at Diagram B. If the dealer called 6s and discarded 5p, and then eats and discards the dora 4s...

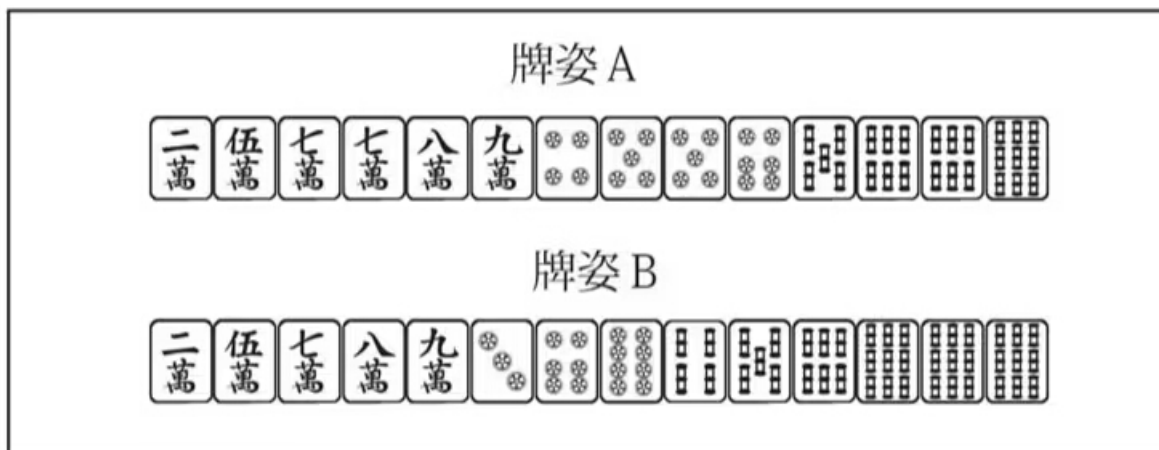
While this hand may not meet the criteria for high-point hands discussed earlier, the scent of tenpai is strong. Conversely, your own hand is a mess with plenty of useless pairs and two shanten away from tenpai.

Although it's a tile call with uncertain point value, with such a scattered hand, it's crucial to avoid dealing into the opponent's hand, perhaps even holding onto the North as a safe tile to prepare for another player's riichi. Discarding the 8p, which is a live tile for the dealer, would also be a good move.

Point: Vigilance against tile calls is key to advancing beyond intermediate-level play!

## 2.2 Chapter 13 Interpreting the Game State Information

In Mahjong terminology, there is a term called game state, mainly referring to the discard pile. By inferring the opponents' hands and the remaining tiles in the wall based on the discard pile, this process is called reading the game state. For those who have never thought about this aspect, they may find it to be a very abstract and sophisticated technique, but basically, it's just about gaining information from the perspective opposite to tile efficiency.



What should be discarded for Hand A?

It's best to start with 9s, then discard 2m. When playing tiles based on tile efficiency, 6s and 5p are only discarded after some progress has been made in the hand. Tile efficiency is a way to connect tiles, starting from isolated tiles, so—

- (1) The tiles cut by the opponent's initial discard are not in one's own hand within the immediate vicinity (within 2 tiles).
- (2) The tiles cut by the opponent's subsequent discards after their initial discard will be in one's own hand within the immediate vicinity (within 2 tiles).

These two points are valid for reading tiles. Additionally, for Hand B, it's advisable to discard 2m. This is because 2m and 5m overlap in usefulness, which is basic tile efficiency. So, it can be inferred that—

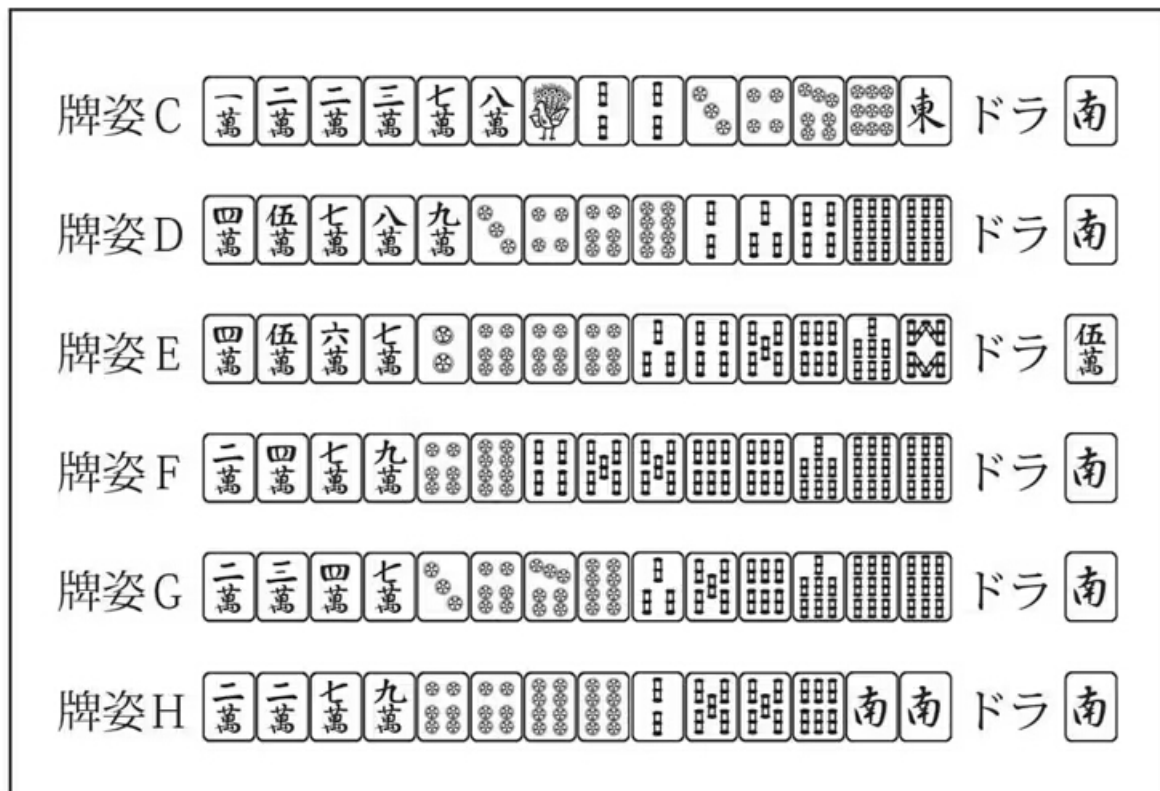
- (3) Tiles discarded by opponents in the early game are likely to be valuable tiles.

This reading is also valid. So, how should these conclusions be applied? For example, if multiple players have discarded tiles from the early game, it indicates a higher expected tile count in the wall. Further consideration reveals that tiles of less frequency (those not frequently discarded) on the board are likely being used by players, resulting in fewer remaining tiles in the wall, making tile reading feasible.

Moreover, tiles perceived as favorable from one's perspective are unlikely to benefit opponents even if drawn later. After discarding 2m from Hand A, drawing 1m would not be beneficial. Therefore, if a player declares Riichi waiting for 1m, not only is there a higher chance of self-draw due to more remaining tiles, but even if an opponent draws 1m after 2m is discarded, they cannot use it effectively, leaving them with only the options of discarding or dealing into someone else's hand.

In terms of results, improving the rate of Riichi wins and reducing the rate of dealing into others' hands after

declaring Riichi will lead to better performance stability. In a way, dealing into others' hands is most likely to occur after declaring Riichi. Improving the rate of dealing into others' hands after declaring Riichi can significantly reduce the fourth-place rate.



It always feels like the reasoning makes sense, but is it really that reliable? Perhaps some people might think so. In fact, this is the biggest issue. The conclusion that the tiles adjacent to the initial discard are not in one's hand is supported by data. However, in cases like hand pattern C, players might opt to discard 2m or 1s, which means there are adjacent tiles in one's hand. Consequently, the above inference doesn't hold true.

So, how much should we prioritize the current situation? There's no specific indicator for this. Even if hand pattern D has a poor situation in Manzu tiles and a favorable situation in 7p tiles, players would still generally choose to discard 6 or 8p.

A more nuanced situation is presented in Hand E. Assuming the situation with the 10,000-point tiles is unfavorable and two players have discarded 1m, and 4m is a dora, suggesting there aren't many tiles left in the wall. Additionally, 7m is adjacent to the Dora. Conversely, if three players have discarded 1p or 3p in the early game, the situation with 2p is good. In such cases, what should be the choice for declaring Riichi? In reality, I don't know the answer to this question. It ultimately depends on the specific situation at the time, but there's no clear indicator like if three 3p tiles have been discarded, then choose a Single Wait. Strong players make decisions based on their intuition at the time.

While there are players adept at judging the game state, everyone is susceptible to this vague feeling of whether the game state is good or bad. Should priority be given to the game state or tile efficiency? This is the difficulty

in game state judgment. Therefore, the first step is to prioritize the game state when there's no difference in theoretical tile efficiency.

Hands like Hand F with equal numbers of pairs, Hand G with tile dependency, and Hand H with reserved tiles for Seven Pairs often incur significant losses if the game state is not assessed properly. Therefore, the first step is to be able to read the game state when you get these hands.

point: Reading the game state is a necessary skill for strong players, but don't rely on it too much!

## 2.3 Chapter 14 Reading Hand Composition

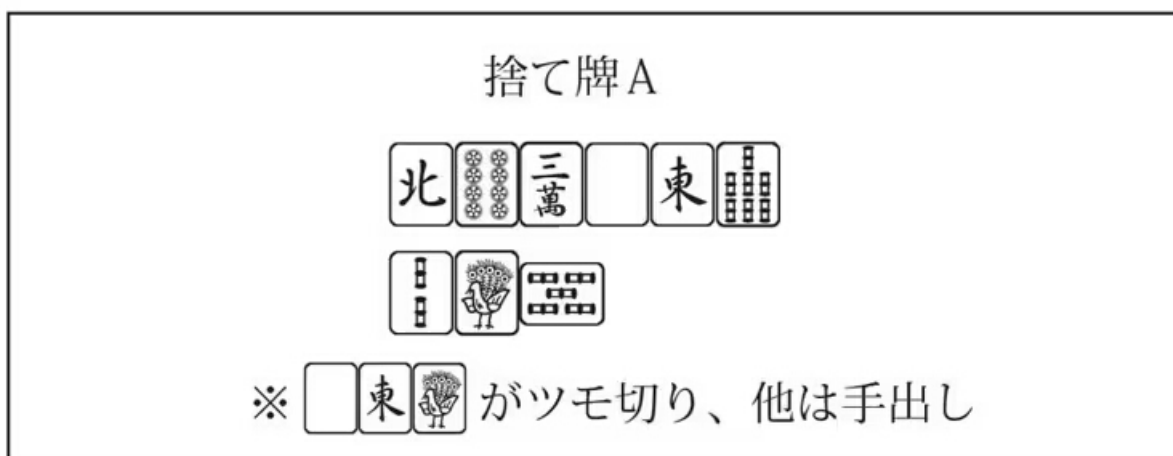
I've previously discussed the importance of vigilance in regards to melds, now I'll specifically introduce the reading method related to melded hands.

You might think that reading melds is just about calling this tile and discarding that tile, so the original hand composition is... But first, let's go over some prerequisite knowledge about reading hand compositions.

In the section on reading the game state:

- (1) Tiles discarded by opponents in the early game are not in their hand.
- (2) Tiles discarded by opponents in the mid-game and beyond are likely to be in their hand.
- (3) The likelihood of opponents having the neighboring tiles of those discarded in the early game is high.

The above theories were explained, and using them to infer which parts of opponents' hands belong to which suits is what we call reading hand composition. It might be hard to imagine, so let me provide some specific examples.



Let's try to read the hand composition of the player who declared Riichi with the discard A from the diagram above. In the early game, tiles 8p and 3m were discarded. Based on theories (1) and (3), we can infer that the upper part of the Characters (8p's surroundings) and the lower part of the Bamboo (3m's surroundings) are not in the hand, while the upper part of the Bamboo and the lower part of the Characters seem to be in the hand.

Next, the discards for the Sou tiles were 7s, 2s, and 5s. If there were no other Sou tiles in hand, then 2s was discarded before completing a Kan set. Drawing and discarding 1s also negates the possibility of a 112s shape.

In other words, shapes like 24557s, where there are still tiles between 2s and 5s, are highly likely. By the way, if they were going for Seven Pairs, they'd simply be waiting for a draw of 0s, so the discard order makes sense for that strategy, but from the perspective of discarding Dora tiles, it doesn't seem like Seven Pairs.

Summing up the information gathered so far:

|                          | マンズ | ピンス | ソーズ |
|--------------------------|-----|-----|-----|
| 上                        | ○   | ×   | ×   |
| 下                        | ×   | ○   | ○   |
| (手牌にありそうな部分は○、なさそうな部分は×) |     |     |     |

From left to right, the suits are mps

As shown in the diagram. In Mahjong, a hand with completed sets is made up of 5 parts, which are also known as blocks. This includes the parts indicated by the circles plus the honor tiles, totaling 5 blocks. If all honor tiles have already been seen, then only the three circled parts make up the 5 blocks. However, the discarding pattern for Sou tiles, for example, doesn't seem to suggest having 2 blocks (2 sets or 1 set + 1 pair). So, it's easy to imagine that there are 2 blocks in the upper part of Bamboo, 2 blocks in the lower part of Characters, and 1 block in Sou.

In reality, at this point, the hand of the player who declared Riichi is:



That's pretty much on point. Oh, it's just a coincidence, you might think. Indeed, I only introduced cases of accurate reading, but there are many exceptions in actual gameplay.

There are situations where natural discards start with 3m and 8p, and situations where the last discard before reaching Tempai doesn't have any tiles adjacent to it. Furthermore, reading tiles according to this method cannot reveal the wait pattern.

So why am I explaining all this? Because it's very helpful for reading melded hands.

Although it can also be useful for opponents who are in Tenpai to accurately read the wall, the result is that due to imprecise information, they can only make decisions based on slight differences in judgment.

On the other hand, reading melded hands is completely different. First, a few words of explanation: the sets displayed by melds are visible, so there's no need to read all 5 blocks. If it's a 2-melded hand, only reading the remaining 3 blocks is necessary, and there are fewer exceptions.

Moreover, in a hand that's waiting for completion, it's possible to start with 3m, but in a melded hand, 3m is a pair material, so it's unlikely to be discarded. Therefore, the reliability of the earlier theory (1) increases.

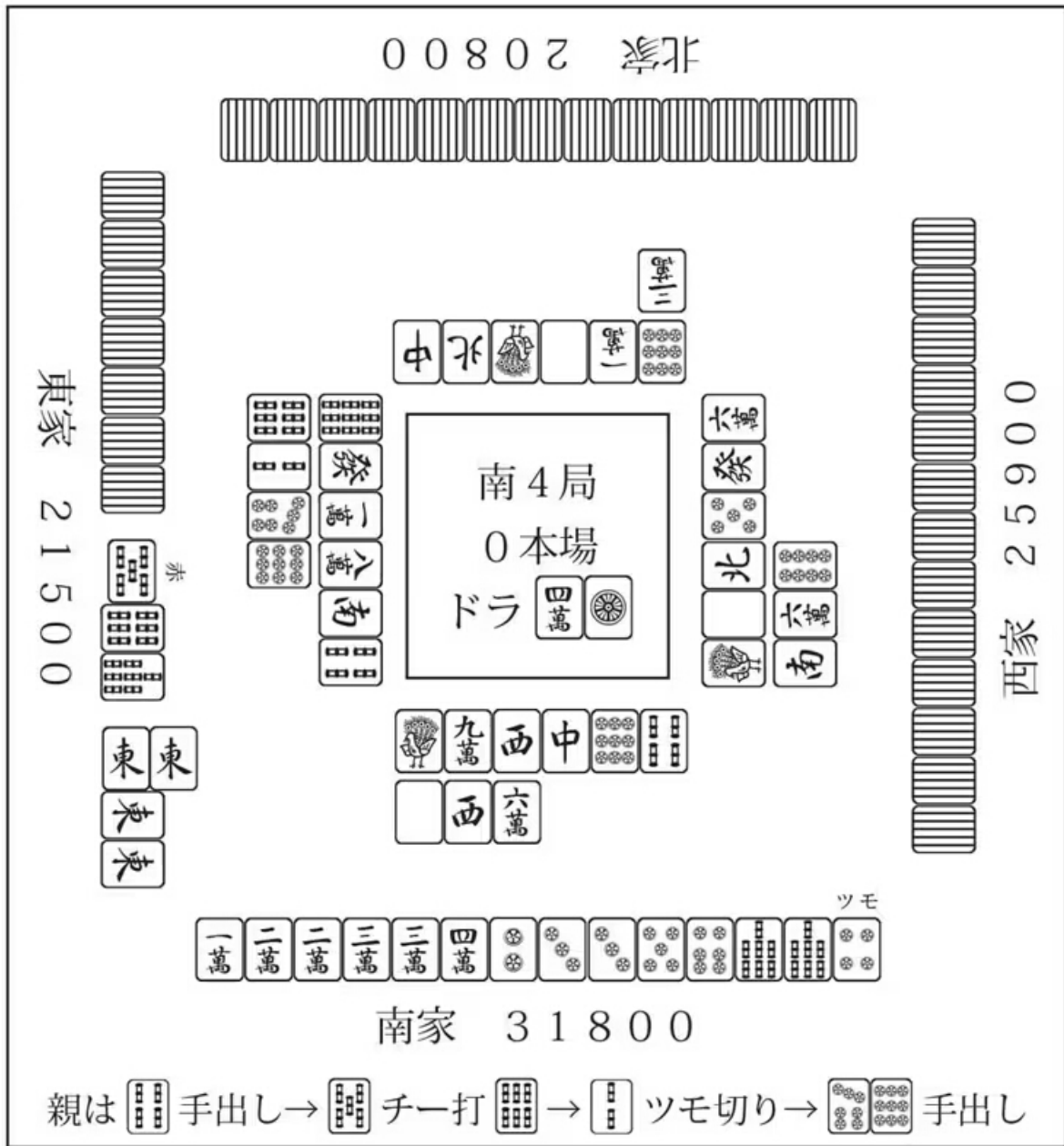
Additionally, in the case where 455s is drawn and 3s is discarded after drawing 3s, in the case of a player in

Tenpai, it's uncertain whether the block around 5s is completed, but if they're waiting for 3s, it's known that a set is completed (and it's very likely they won't want the surrounding tiles).

Moreover, in a hand aiming for All Simple, there won't be any honor tiles or 1s and 9s, so reading tiles like this is also useful. The tiles discarded by the player before a meld without choosing to call can also serve as hints. Compared to Tenpai, there's an overwhelming amount of information that can be used, which is crucial. The next section will explain how to use this information to read melded hands.

point: By using theories related to reading tiles, you can predict the composition of opponents' hands to some extent.

2.4 Chapter 15 Reading Melded Hands



Let's take a look at the diagram above. In the scenario of All Last and reaching Tenpai, but with the dealer already having 2 melds, the East Dora 1 is confirmed at 3900 points, and there's also a kan Dora. For your own hand, the situation with points is quite delicate: you'll lose 7700 points if you concede with a hand worth 3, and 12000 points if you concede with a hand worth 4. So, should you discard this 3p? Let's think it over.

First, consider the dealer's speed: discarding two melds in the second row and having discarded tiles twice

more, based on the Vigilance for Melds section, this should be treated as Tenpai. Although there's a possibility of being just one tile away from Tenpai, it's precisely because of the delicate point situation in All Last that caution is warranted.

Next, consider the dealer's hand composition. Since all the honor tiles have been seen twice or more, the likelihood of having any more honor tiles in their hand is quite low.

Given that they called 46s after discarding 46s from 4667s, it's unlikely that they have any Sou tiles remaining in their hand. Firstly, pairs or concealed sets of 1s or 2s can be ruled out based on discards. Next, consider sequences. If they have 567s, the shape before discarding 4s would be 4566677s, and if they have 345s, the original shape would be 3445667s. Having such consecutive shapes and then discarding 4s from 79p is unlikely. Even if this step isn't considered, it's okay to remember that the likelihood of keeping a suit that has been discarded many times is very low. This is because tighter suits have less restricted shapes and are therefore more likely to be kept in hand.

Next, consider the Characters. If there are waiting tiles on one side of the Characters, then 1p to 6p would all be dangerous. If we reverse the discard order of 79p, it's possible that it was taken from 6779p, making 8p also dangerous. However, in this situation, 8p can be considered relatively safe.

Lastly, consider the Bamboos. Based on the discards, it seems like 2m to 7m are all dangerous, but in reality, this might not be the case. Firstly, the 3m discarded by the player to the left is not claimed by the player to the right. The discards of the players who melded are an indispensable element in reading melded hands, so be sure to pay attention.

It's essential to note situations where you're waiting for two consecutive tiles. If you have 3456m without a pair, then naturally, you won't call 3m. However, this time, you can already see 4 tiles of 3m, so this possibility is also negated.

Moreover, the fact that you can see 4 tiles of 3m also means that 2m won't be dangerous on both sides. If you draw 2m, you can also see 3 tiles, so even a double-pon is unlikely, and it becomes a tile that can be discarded.

From the above content, it can be summarized that the possible waiting tiles in the Bamboos are only pairs of 47m and 4m or 5m (6m can be seen as 3 tiles, so a double-pon is impossible, and the foolish shape of 7m is unlikely because 8m was discarded early).

Now, let's summarize all the information. First, we can see that there are two blocks: 345s and the East Dora. There are still three blocks in the hand. If the Sou tiles are excluded, there are only a few possibilities left: Characters 2, Bamboos 1, Characters 1, Bamboos 2, Characters 3, or Bamboos 3. However, the available Bamboos are only from 4m to 7m, and since you can already see 6m's tiles, the possibility of having three blocks of Bamboos is almost non-existent.

On the contrary, the lower part of the Bamboos is like a blank. Comparing these two, it's more likely that there are more Bamboos in hand. Basically, it's Bamboos 2, Characters 1, or in a small probability, it could be Bamboos 3.

You might think it's pointless to read hand compositions if you don't know the wait tiles, you might think. But the wait tiles must be one of these three blocks, and if chosen randomly, the probability that the wait tiles are on the side with two blocks of Bamboos is higher.

Furthermore, if the blocks are made up of 1p to 6p, then there are no double-dangerous tiles, and only 3p might be dangerous as the last tile. If you think about these things beforehand, you can immediately assess the danger of the tiles you draw later.

In conclusion, although the decision to discard this 3p depends on the position points, generally, such a dangerous tile like 3p would not be discarded. The best option here would be to discard 7s and play it safe.

Point: By combining the reading of hand compositions and the game state, a player can extract a lot of information from melded hands.

## 2.5 Chapter 16: Unraveling One Chance

In the Danger Ranking section of the basic guide, the concept of one chance was not mentioned. One chance refers to the situation where, when you can see 3 tiles of a particular suit, the next higher tiles in that suit become more likely to complete a sequence. Although this is a concept many people have heard of, I haven't included it in the ranking table.

The reason for this omission is that the danger level of one chance varies greatly depending on the game state. For example, a common question is whether a tile with one chance or a tile with potential sequences (known as suji) is safer. If you simply remember which one is safer in certain situations, you'll encounter too many exceptions. Therefore, in this section, I'll specifically discuss the danger level of one chance tiles.

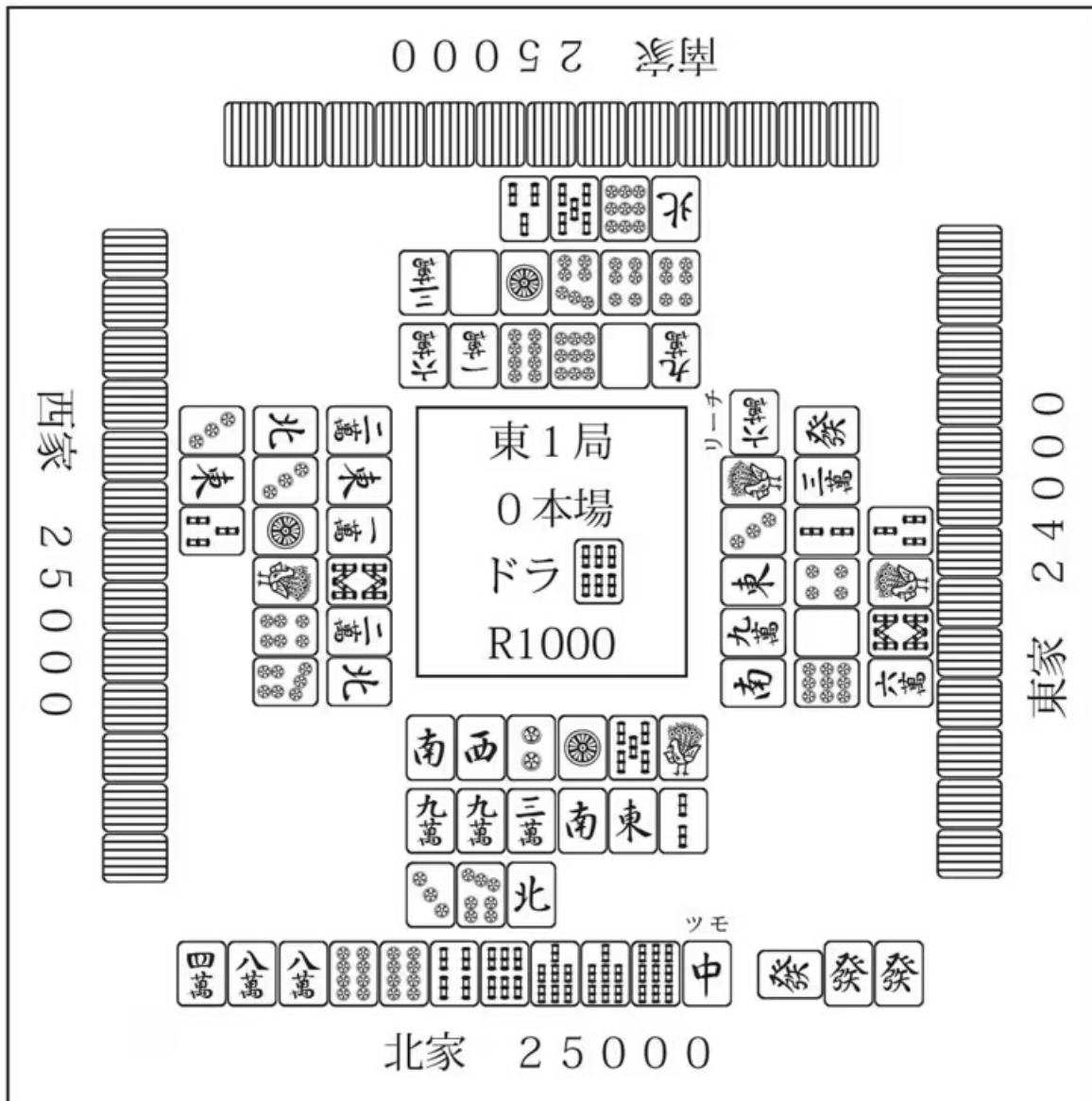
First, it's important to note that, on average, suji tiles are safer than one chance tiles. When you can see 3 tiles of a suit, 7m and 8m will only be dangerous if the opponent is holding the last tile. However, once 4m is discarded, there's a 100% chance that the 7m suji tile won't be dangerous. From this perspective, suji tiles are generally safer than one chance tiles. On the other hand, suji tiles are useless when the opponent is in a foolish wait, while when 6m is a one chance tile, the probability of 7m being dangerous as a pair is reduced, but the probability of 8m being dangerous as a pair remains the same. Therefore, the danger levels of 7m and 8m when 6m is a one chance tile are significantly different. This is one reason why it's not possible to summarize the concept of one chance in a single sentence.

However, if 6m was discarded before reaching Tenpai, it's highly unlikely that 8m will be waiting to complete the sequence. The situation where you have 679m and discard 6m is almost nonexistent.

Moreover, it's rare for 6m to be discarded from 668m or 677m, so the probability of 7m or 7m as a pair is also very low. In a situation where you can see 3 tiles of 6m, and one of them was discarded before reaching Tenpai, 7m and 8m are often more reliable than suji tiles.

In general, one chance tiles are slightly more dangerous than suji tiles, but in situations where a foolish wait is denied (which suji tiles cannot deny), one chance tiles are safer than suji tiles. However, it's essential not to blindly trust statements like because it's a suji tile or because it's a one chance tile. It's crucial to analyze the opponent's hand shape when considering the danger of discarding a particular tile and whether it contradicts or feels incongruent with their discards.

Another point to consider regarding one chance is where the three visible tiles are located. For example, if your opponent reaches Tenpai with three visible 6m tiles on the board, 7m becomes safer than 8m, and there's supporting data for this.



Now, let's look at the diagram. When the player opposite you reaches Tenpai and discards a safe tile, your hand's safe tiles are all discarded. What should you discard here?

6m and 6p7p are both visible three times, making 8m and 8p in your hand one chance tiles. At first glance, 8p seems to be the safest tile, so let's reason about the remaining hiding places for the other two 6p7p tiles.

After the player opposite you reached Tenpai, both your opponents discarded suji tiles and safe tiles successively, indicating they are in a state of waiting. However, it's a bit strange that the two 6p7p tiles are still partially hidden.

Especially considering that the player opposite you discarded two suji tiles of 5s last round. From this, it can be inferred that they have no safer tiles than 5s, or no visible tiles left, which is natural.

After the player to your right discarded North, although they only discarded suji tile 1p and a safe tile, given a choice between discarding 6p7p and a tile from the set of visible tiles, it makes no sense to prioritize discarding a bamboo tile. Therefore, it's more likely that they didn't originally have 6p7p in their hand. As a result, the remaining 6p7p tiles are either in the remaining tiles of the wall, with around 20 tiles left, or in the hand of the player opposite you.

Let's take a look at this chun tile. At first glance, it seems dangerous because it's a live tile. However, precisely because of this, it's not surprising that the remaining chun tile is held by the opponents across and to the right. Due to the extra 26 tiles in the wall, the probability of the chun tile being in the dealer's hand decreases. Therefore, discarding the chun tile here is the correct choice.

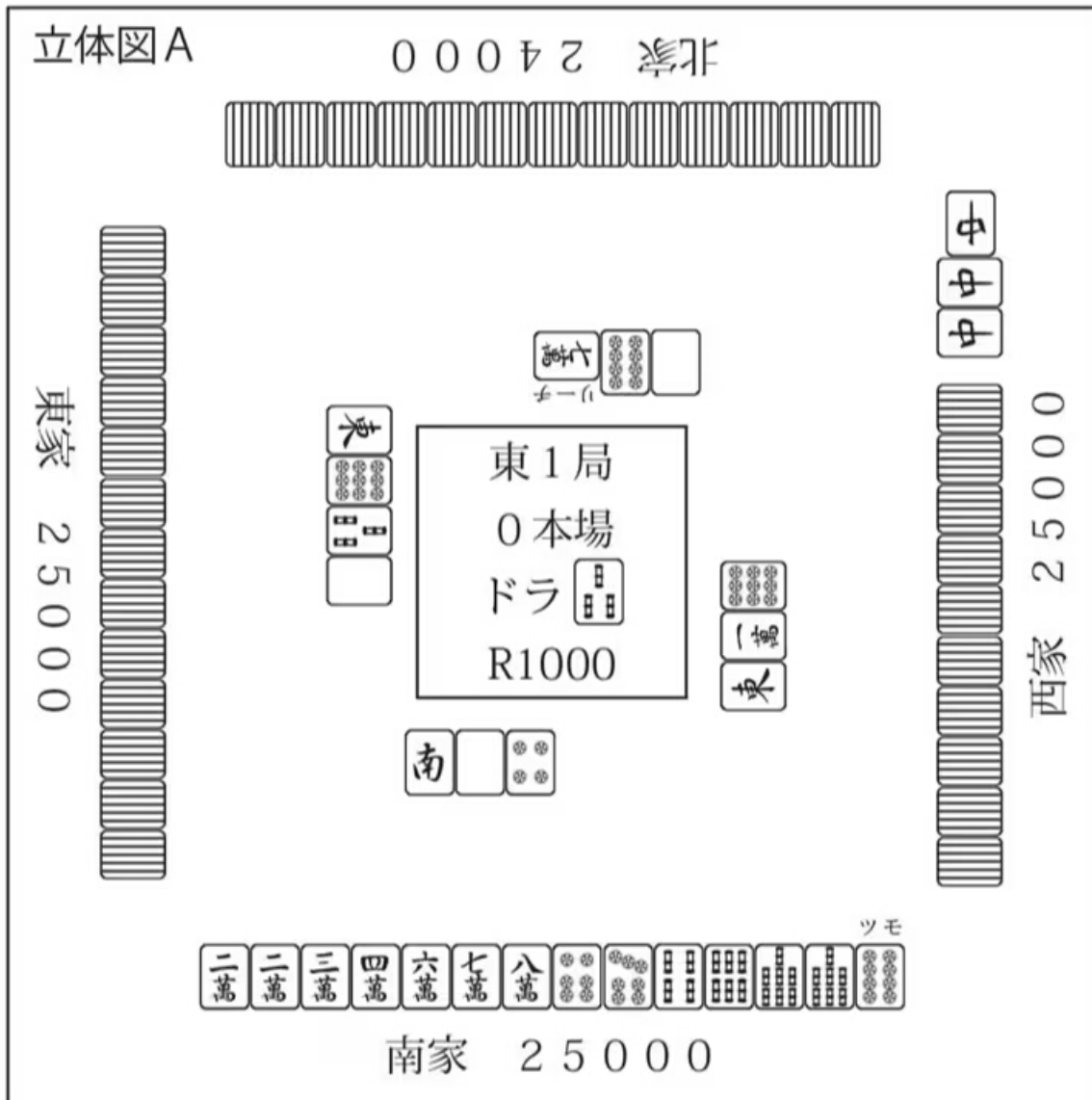
For questions like Where is the remaining one chance tile in the endgame?, a considerable portion of them can actually be reasoned out. In such situations, statistical data on danger levels are unreliable. There are cases where just because it's a one chance tile, it's even more dangerous, so don't use it's a one chance tile as an excuse to stop thinking critically. Analyze the danger level carefully.

Point: The danger level of one chance tiles lies between tile pairs with connected numbers and single tiles, and it can vary greatly depending on the situation.

## 2.6 Chapter 17 Exceptions in Attack and Defense Judgment

Chapter 1 introduced exceptions in attack and defense judgment, where you attack even if not tenpai, and you defend even when tenpai.

However, ultimately, judgments are made based on the hand situation. Here, let's introduce exceptions related to higher-level situations.



For example, consider the stereogram A above. It's not wise for the dealer to pursue riichi with only 2600 points. However, discarding tiles like the 7m or 8p, which are live tiles, might seem a bit regrettable.

The risk of deciding to riichi and potentially losing is enormous, but passively waiting for someone else to win can also lead to losing points. Therefore, the correct move here is to silently listen while discarding the 2m.

In situations like this where you fall into a passive position, choosing to silently listen has the benefit of being able to defend when drawing a dangerous tile later. Now, what specific tile should you discard when you draw?

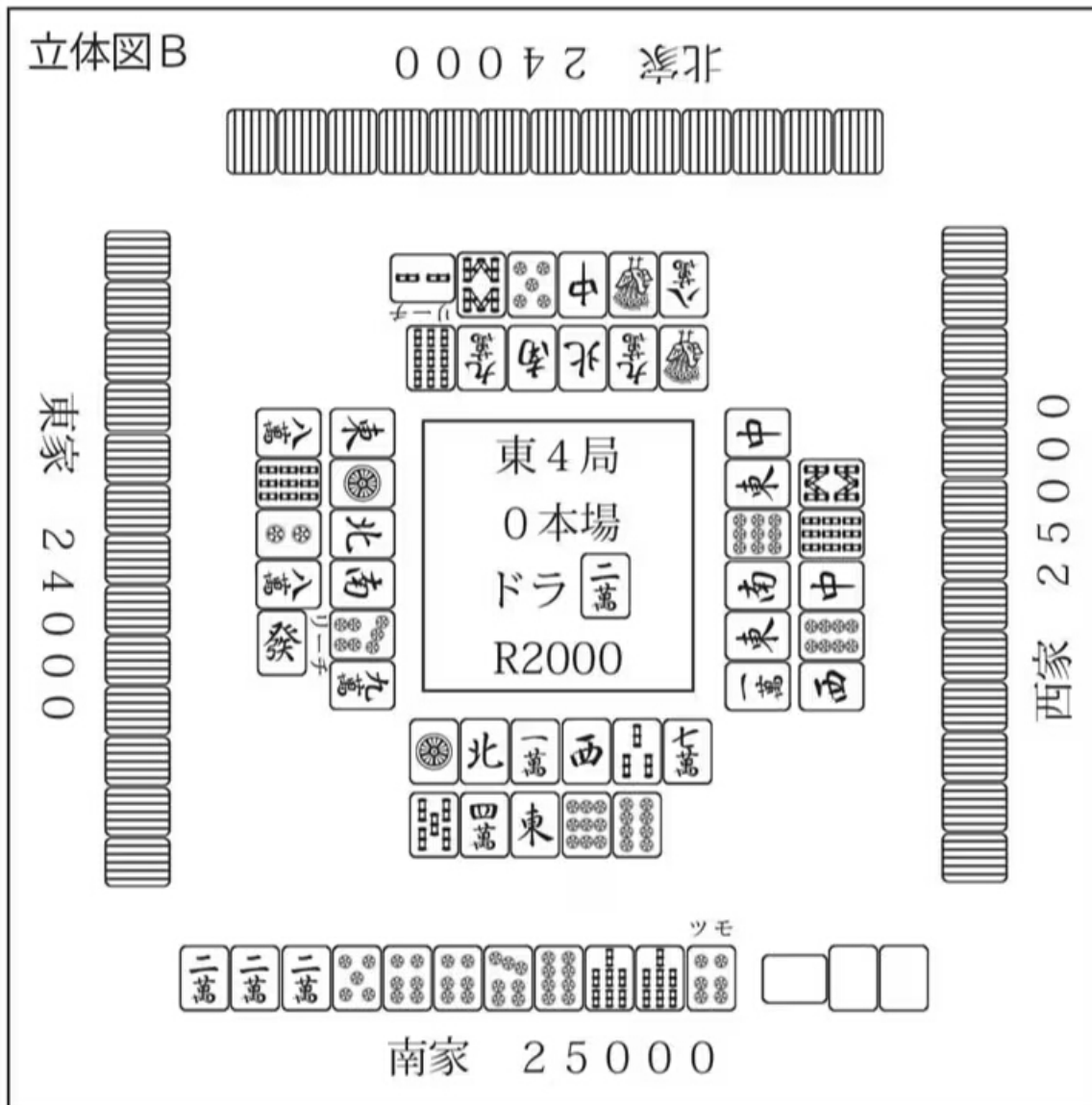
One key aspect to consider is the number of suji (connected tiles).

In mahjong, each suit has 6 suji, totaling 18 suji. Currently, only the 58p and 47m suji have been eliminated, leaving 16 suji. Assuming the opponent is waiting on two sides, the probability of the 2m being dangerous is  $1/16$ . Of course, in reality, the opponent may not be waiting on both sides, and as mentioned earlier, the danger level between tiles varies depending on the specific discards. Here, let's use the number of eliminated suji as a reference point.

One important aspect of this theory is that if the 2m is drawn and discarded, the probability of the next tile being dangerous increases to  $1/15$ .

Of course, the dealer's discard or another player's riichi declaration will increase the number of eliminated suji, further increasing the probability of the next tile being dangerous. This consideration is crucial. Even if tiles are ranked at the same danger level on the danger table, there may be situations where, although it was right to gamble earlier, it's right to defend now.

So, at what specific probability should you gamble? Unfortunately, this is related to various other conditions, and there is no clear answer. For a hand like the one in the diagram where direct confrontation with riichi is not advisable, it's not wise to gamble on a tile with a danger probability higher than  $1/10$ . For the dealer, it's advisable to fold when the probability reaches about  $1/12$ .



Please consider stereogram B above. Generally, you wouldn't fold a two-sided wait hand with a full points worth. But in the end, this is just a general rule, and naturally, exceptions exist. That's the case here.

Firstly, two players have already declared riichi, and both of them are in danger from the 6p. Specifically, the opponent has eliminated 8 suji, leaving 10, making the 6p a double-suji tile, thus having a 1/5 probability. The player to the right has 12 suji left, making it a 1/6 probability. If only one player had declared riichi, or if the 6p was potentially safe for one of the players, it might be okay to take a risk.

However, since the 6p is a high-risk tile for both players, it's time to consider folding.

Moreover, one of the riichi declarers is the dealer, and it's also the first turn for both of these players. In this case, the 6p should not be discarded.

It's better to discard the 8p, which is a safer tile that maintains the tenpai. If a safe tile is not drawn in the next turn, then discard the 5p, eliminating two suji.

Comparing two players declaring riichi with one player declaring riichi, it's evident that the danger level of the tiles is higher, and it's easier to defend or shift strategies, making folding more advantageous. It's essential to recognize this.

Point: Be cautious when facing a riichi that eliminates many suji.

## 2.7 Chapter 18 Tile Efficiency and Tile Logic

The term tile logic does exist. Tile efficiency basically refers to choosing the most efficient tile to progress towards tenpai, but in actual gameplay, other factors such as point value, discard order of honor tiles, future tenpai possibilities, etc., need to be considered alongside tile efficiency. This playing style, which includes factors beyond tenpai progression, is referred to as tile logic.

To improve in mahjong, you first need to learn about tile efficiency, but once you've grasped tile efficiency, you must start learning about tile logic.

For example, consider the following tile shape:



From a tile efficiency perspective, tile 7s should be discarded in shape A. This is what's called a completely one-sided wait, with the maximum number of possible winning tiles, 134p256s, totaling 20 tiles. Although discarding 2p also creates a completely one-sided wait, the 5s being in a double-side wait makes discarding 7s more advantageous.

However, the correct move from a tile logic perspective is to discard 2p. While discarding 7s has more winning tiles, it lacks in point value.

The hand with 7s discarded has potential yaku such as riichi, pinfu, and dora, with the latter two being uncertain.

In contrast, the hand with 2p discarded has potential yaku such as riichi, pinfu, tanyao, iipeikou, and dora. Although the yaku besides riichi are also uncertain, the possibility of tanyao and iipeikou increases the average point value. Additionally, although it's a small difference, the probability of dora also increases.

Discarding 7s would lead to a tenpai with 14p when drawing a 5s next. However, discarding 2p would lead to a tenpai with 25s when drawing a 5s next. This means there's another chance for dora and iipeikou, thus increasing the probability of winning with dora.

While double-side waits are generally disadvantageous in tile efficiency, in cases like this where dora is involved, a reversal in evaluation is possible.



Shape B involves a situation where there's a double-side wait for dora. Wanting to draw two dora is too strong here, and the optimal move in terms of tile efficiency, cutting 67p, would be a loss in tile logic.

The correct move for this hand is to discard 3p. Although adopting a delayed selection strategy for face-loaded tile shapes like this is generally considered outdated, this is an exception. The advantage of discarding 67p is

the additional winning tiles of 8m and 3p, but these tiles cannot utilize dora and only contribute to a dull riichi nomi. It's indeed regrettable for this hand.

When 14m is discarded many times, especially when 4m is discarded two or more times on the field, discarding 67p may not be better than discarding 2m. This is also possible.

By leaving the double-side wait for dora intact and confirming tanyao, along with the potential for a three-colored sequence of 678, this can be considered the best discard for average point value.



So, what's the correct move in tile logic for shape C? If playing according to tile efficiency, it would be to discard 3m or 5p. However, in this case, the value of floating tiles is higher than usual middle tiles like 3-7, and in the early game, it's better to break up edge tiles to move towards tenpai. This differs from the previous question and is unrelated to point value; it's purely considering the ease of reaching tenpai.

On a side note, the value of floating tiles is determined by both point value and tenpai potential. Shapes like 2334m or 5678p are easier to form into both sides than typical floating tiles.

When the tenpai potential is the same, of course, a dora 3p is more valuable than a non-dora 3s. Comparing edge tiles with floating tiles, it can be said that only in the early game and with two high-value floating tiles should edge tiles be discarded.



Exceptions occur in cases like shape D, where there are neither dora nor easy transitions into a foolish shape worth 1300 points. In situations where you're hesitant to riichi even with a foolish shape worth 1300 points, it's better to discard edge tiles and leave single tiles, aiming for pinfu and drawing dora.



Taking all of the above into account, what should be done with shape E? Usually, 9p is lower in value than 3-7, so discarding 9p to leave edge tiles would be the move.

However, there's a potential for a three-colored sequence here, making 9p a valuable floating tile.

Therefore, meeting the condition of having two high-value floating tiles, if it's the early game, discard 12s.

So, tile efficiency only considers the progression towards tenpai, while tile logic may suggest reversing towards tenpai in certain situations.

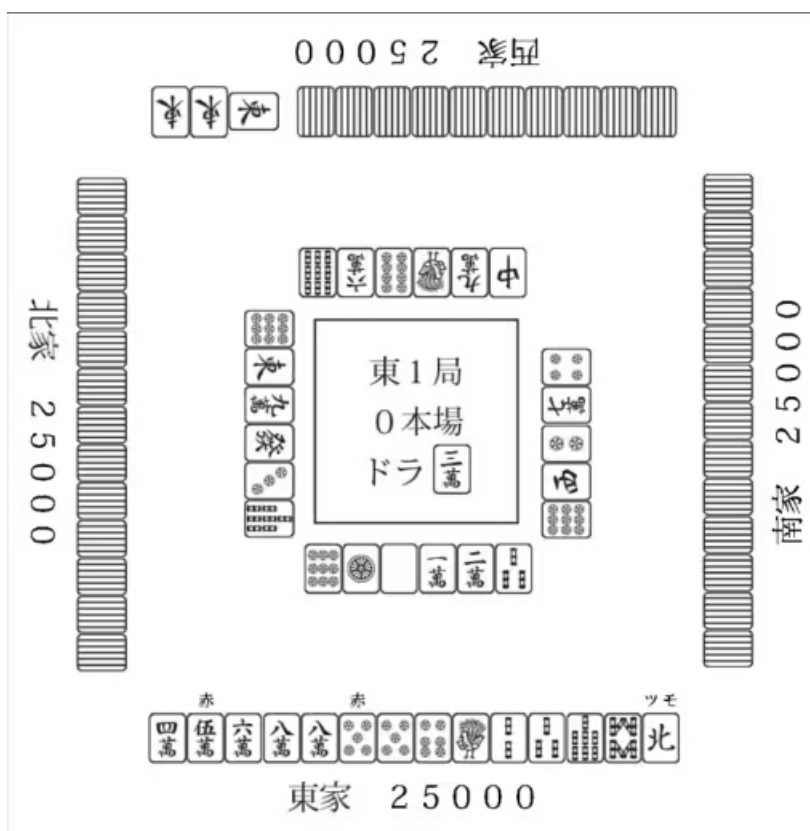
Point: Master not only tile efficiency but also tile logic.



middle tiles may represent a concealed hand, such as kokushi musou, seven pairs, or honitsu. In most cases, such discards also represent a slower hand. In the case of honitsu, there may be a possibility of a faster hand, but in most cases of honitsu, there will be declared melds, so it's not so difficult to correlate discards with the hand.

Next, as written before, the speed of the hand read in this way ultimately represents a certain tendency. For example, sometimes your hand is widely spread and you plan to form some yaku, but as a result, the discards appear to be fast. Such situations also occur. Moreover, even if you're one away from tenpai, it's not uncommon to reach tenpai only by drawing on the 7th or 8th turn.

It cannot be overstated that reading hands requires both mastering the method of reading and knowing when to apply it. If you're not sure how reliable your hand-reading is, such hand-reading might even have adverse effects.



Next, take a look at the image above. Should you discard 5p or North in a completely one-away from tenpai situation like this? In recent books, the idea of maximizing the number of winning tiles prevails. However, when observing strong players, there are also cases where 5p is discarded first.

Of course, there can be various reasons. For me, in this situation, I would discard 5p. The discards of all three players seem relatively fast, so I would prioritize getting rid of 5p, which is dangerous for all three players.

Although you can't accurately gauge the speed of any individual player, if all three players seem to be moving quickly, then the possibility of one of them suddenly reaching tenpai is high.

My hand has two red dora tiles, 0m and 0p, so I wouldn't easily fold even if my opponent reaches tenpai first.

If I can catch up, I would choose to declare riichi.

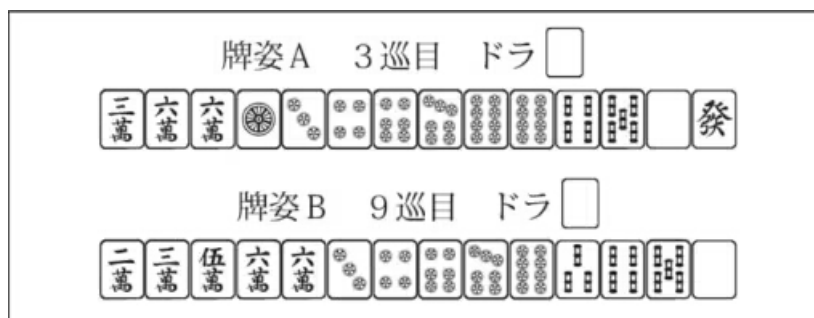
Valuable hands like this, when there's a chance of your opponent reaching tenpai first, rather than aiming to improve the chance of reaching tenpai by just one turn, it's better to retain a hand that can catch up within a few turns if the opponent reaches tenpai first. In this way, the overall win rate may be higher.

Point:

When multiple opponents discard tiles quickly, special attention is needed.

## 2.9 Chapter 20 Manifesting the Gap in Skill Levels

I used to work in a mahjong parlor, and many customers would say, If you're going to discard the dora tile, do it early.



For example, in the hand shape shown above, with Hand A, instead of discarding Green Dragon, I would discard the white dora tile first. Determining when to discard the dora tile is quite a difficult problem to establish a relevant theory for. However, personally, compared to others, I tend to discard the dora tile earlier.

The main reason, and the following premise, is that even discarding the dora tile just one turn earlier will make it harder for others to draw it. With the current hand, aiming for yakuhai or closed straight waits, even without the dora tile, you can still have decent scoring potential. Hands like this should aim to discard the dora tile as soon as possible before dealing in.

Another reason is for ease of development. Many players won't discard the dora tile until their hand has developed significantly. By not discarding the dora tile myself, sometimes I naturally find myself in the middle game without seeing anyone discard it.

For instance, if my hand has progressed to the level of Hand B, I decide to discard the white dora tile. At this point, if the white dora tile is called, it would create a very difficult situation to assess. In terms of rounds, the likelihood of a direct reach is relatively low, meaning the likelihood of calling riichi or making a meld before the opponent reaches tenpai is higher. In this case, both the information about waiting tiles and the timing for reaching tenpai increase, making it easier to read the situation and reducing the likelihood of making mistakes in my own strategy. Moreover, if I cannot form a hand that can compete with the player who called the dora tile, then early folding is also an option.

Some think, 'Even if the dora tile is called, I can still form a hand to compete with it. So, it's not too late to discard the dora tile later.' However, since it's a hand that can compete, it's also acceptable to discard the dora tile earlier. If a hand cannot be formed to compete with it, as long as careful management is maintained, there's no risk of dealing in. This aspect of strategy will be elaborated on in detail in the chapter 'Beware of Declared Melds' in this book.

Next, this paragraph is also important: The expected value of mahjong changes according to the players' skills. Perhaps the outcome ends with someone drawing their own winning tile, but in terms of expected value, the difference between those who excel at Beware of Declared Melds and those who don't will be manifested at the moment the dora tile is called.

Now, you've learned some basic hand-reading methods regarding the waiting rounds and understood the risk of going for 1000-point foolish waits against opponents who call the dora tile in the middle game. On the other hand, players who excel at Beware of Declared Melds are fewer compared to those who handle riichi well. If



## 2.10 Chapter 21 Is San Shoku Doujun a Rare Yaku?

San Shoku Doujun is a rare yaku. I wonder if you've heard such a statement before. Nowadays, mainstream mahjong tactics mainly prioritize speed. Yaku such as San Shoku or Ittsu are generally only considered when the hand can aim for them. On the other hand, there used to be a saying, If you get a suitable tile, prioritize forming San Shoku Doujun.

Having the ability to seek out yaku like this was seen as a demonstration of skill. The significant changes in mahjong tactics can be seen from this.



Next, take a look at the diagram. The black balls closer to the left represent a greater emphasis on point scoring, while those closer to the right represent a greater emphasis on speed. There used to be rules without red dora tiles, and in some rules, there weren't even ura dora or akadora. In such rules, it's not surprising that techniques focusing on point scoring would become theoretical.

On the other hand, the number of dora tiles in modern mahjong has increased, and the essence of mahjong, only the player who declares victory first within the maximum of 18 rounds can score points, has been unearthed. Therefore, tactics that prioritize speed have become the correct theory. Tactics emphasizing speed such as reckless riichi and tanyao have begun to emerge, and in the past decade or so, books expounding the importance of speed have sprung up like mushrooms after the rain. These books have their merits, and I referred to many of them when writing this book.

But on the other hand, does prioritizing speed also have its drawbacks?



There are likely many players who adopt tactics that extremely prioritize speed, as shown in the diagram.



The correct balance point is depicted in the diagram.

The tactics of players who focus solely on speed, without considering any other factors, differ greatly from the correct approach to mahjong shown in the diagram. Of course, players who extremely prioritize speed are closer to the correct balance point than those who originally focused excessively on point scoring, and naturally, their performance will be better than those of the latter tactics.

Especially for players who are just starting to learn tactics now, it is impossible to reach the correct balance point all at once. Therefore, they should first try to master the techniques for achieving the fastest wins and hand completions.

And if you want to achieve better results, that is, to get closer to the correct solution in mahjong, it is necessary to prioritize point scoring more in certain situations.



For example, how would slightly more delicate hand B be played?

With a tenpai like Hand A that doesn't contain a Dora tile, some might choose to discard the 1m. Although discarding the 1m gives the widest range of tile draws, an early riichi with a weak shape and only one yaku isn't ideal. Here, you should aim for a better shape or valuable yaku, such as Pinfu, Sanshoku, or Ittsuu, and discard the 6p.

Hand B lacks Ittsu, so compared to hand A, playing 1m is not necessarily advantageous. Depending on the situation and rules (such as the number of red dora tiles), the choice may vary, but generally, playing 6p is preferred. The value of a floating tile 6p is relatively low because the reckless riichi for 1300 points is not so crucial.

How about hand C then? Based solely on its shape, playing 7s in a situation like the consecutive shape of 23445p is very basic because this kind of reach is overwhelmingly broad. However, here, if you discard 89s, you can first confirm the absence of terminals, and you can also see San Shoku, leading to a significant difference in point scoring. It's quite exceptional to choose to play 8s to solidify the pair.

For the hand types that prioritize yaku as mentioned above, it is important to note the distance between the actual yaku and the perception of it.

Regarding this point, please look at hand D. At first glance, discarding 68s seems to lead to San Shoku, but here, playing 2m is the correct move. In reality, this hand can only achieve San Shoku if 4s is drawn, with only about a 50% chance of getting San Shoku upon winning. The value of a 2-fan hand with a 50% chance is unchanged compared to the 1-fan value of a dora tile, and there is also the possibility of drawing another dora tile or forming a sequence or joint with 5m or 5s. Compared to the reckless riichi for 1300 points with the possibility of drawing 1s, playing 2m here ensures a riichi worth more than 2600 points. The value of yaku such as San Shoku or Ittsu is lower due to the existence of low-value tiles. Because ignoring yaku and focusing on advancement is more common overall, being able to see yaku from hands like A and C is more important to improve performance.

Point:

Rather than saying San Shoku Doujun is a rare yaku, it's better to say San Shoku Doujun should be targeted, but there aren't as many hands that can target it.

## 2.11 Chapter 22 Exceptions to Reckless Riichi



In the previous section, we discussed choices regarding point scoring. The theme of this section, however, is riichi judgments.

Does hand A need to declare riichi? We've seen this question enough! Many might think so. Even with a reckless riichi strategy, it has become quite common knowledge that declaring riichi as soon as possible is the correct move.

So, what about hand B? Isn't it the same? Those who think so are a bit naive. Indeed, even with a reckless riichi strategy, declaring riichi is usually the correct move as long as it's done first. However, there are, of course, exceptions to this. One common scenario where not declaring riichi is chosen is when rejecting a tile significantly boosts the point potential. In other words, hand B should discard 1m to reject riichi.

As mentioned in previous sections and earlier chapters, those who believe reckless riichi is always the way to go are quite rare. Instead, it's common to find people who underestimate point scoring and pursue the quickest riichi. The impact of point scoring on expected value is stronger than the number of waiting tiles. If point scoring can increase significantly, rejecting riichi is actually a common choice. A skilled player who believes the highest expected value is the correct move would see hand B as a type of hand that should reject riichi as the correct choice.

So, what about hand C? For hand B, discarding 1m can target tiles for Tanyao, Pinfu, and potentially a Iipekou, while hand C can only target a Iipekou. However, the Iipekou in hand C is uncertain, so the point increase from rejecting riichi is very limited. Therefore, hand C would choose to declare riichi.

As shown, even subtle differences can lead to changes in riichi judgments. If hand B chooses to declare riichi, the loss isn't actually that significant (compared to not declaring riichi for hand A or hand C). Therefore, for players who lack confidence in this aspect of judgment, it's probably best to declare riichi in all cases. Even so, it's still possible to achieve decent results. However, to reach a higher level, such as aiming to become a player ranked above Hachidan in Tenhou, better choices need to be made in this regard. Currently, a hand worth 2600 points, if it can be increased to 8000 points, will lead to better results in both avoiding fourth place and competing for first.

So, to make good riichi judgments, let's take a look at some more specific hands.



Up to this point, the reasons for rejecting riichi have all been to increase point potential. If that's the case, how would hand D choose? Hand D has the same shape as hand B, but this time, 8m is a dora tile. In mahjong, going from 2 han to 4 han will double the points, but going from 4 han to 6 han will only increase the points by 1.5 times. Here, the increase in point potential from rejecting riichi is not significant, so declaring riichi is chosen. What's important isn't whether the hand has low or high point potential, but rather comparing the point potential of declaring riichi and rejecting riichi.

Next is hand E. As mentioned before, the quality of the waiting tiles isn't as important as how easy it is to get another chance to declare riichi after rejecting riichi. If there are few better waiting tile configurations than the current one, it's still better to declare riichi. For a hand like hand E, which lacks easily improvable shapes like four consecutive tiles or middle tiles, and doesn't have any point increases from yaku or dora tiles, declaring riichi is basically the correct choice. It's better to focus on finding point scoring opportunities or better shapes before becoming a waiting hand like hand F, which evolved from hand G. If hand G discards 1m, it will lose the potential for high point hands like hand F.

Returning to the topic of riichi judgments. Besides the conditions mentioned above, the number of rounds is also a very important factor in riichi judgments. Rejecting riichi will temporarily reduce the chances of winning, so from the mid-game onwards, it's better to declare riichi. Riichi judgments heavily depend on the game situation, making it quite difficult to establish a standard. However, starting from the second row (the 7th round), declaring riichi might not be worse than rejecting riichi.

Point:

There are situations where rejecting riichi is chosen, especially when there's a significant increase in point potential. column: Playing Style

The idiosyncrasies or style of play of a particular individual are generally referred to as their playing style in mahjong. Ten people will have ten different playing styles, but there is typically only one correct move in mahjong. Of course, people may not yet understand or prove the superiority or inferiority between different playing styles, but if you delve deep enough, there will always be differences in expected value between different playing styles.

If everyone could choose the correct move, they would always discard the same tiles for the same hand, and concepts like playing style would cease to exist. However, even the top pros or Tenhou ranked players, the top players under the same rules, have a variety of playing styles. Why is that?

For example, during exam preparation, some excel in Mandarin while others excel in mathematics. This is akin to playing style. If the passing score is 50 points, then regardless of which subject gets full marks (100 points) and which gets zero, the person still passes. But if the passing score is 90 points, then almost perfection is required in both subjects to pass. The higher the level, the smaller the differences in playing style or personality.

However, whether they are top pros or Tenhou ranked players, they all have their own playing styles. Doesn't this mean that the passing score for our mahjong skills is set too low?

## 3 Third part: Techniques and Considerations for Avoiding Riichi Bets, Tenhou Edition

### 3.1 Chapter 23 Introduction: What is Tenhou?

Note: From this section onwards, we enter the third chapter: Examination of Avoiding Fourth Techniques - Tenhou Edition.

Up to this point, most of the techniques for reducing fourth-place rates have revolved around not giving unnecessary points to opponents and trying to declare victory as soon as possible. Regardless of the rules, these two points are essential basics of mahjong. However, even if one can do these two points very well, there are still many people who stop at the seventh dan in Tenhou.

From here on, I will elaborate on some exceptional techniques that I feel are necessary when playing on Tenhou, precisely because they are exceptions required on Tenhou. Among them, there may be some choices that are not entirely correct or are quite subjective based on the rules, deviating from the basics.

When I was writing this book, there were only nine people who had reached the pinnacle of Tenhou - Tenhoui. Everyone had various rates of calling tiles and rates of being hit by opponents. In other words, since there is no such thing as this play style is the strongest! and there is no premise of a unique style, we began to explore it.

The content to be conveyed next is from me, who has reached the tenth dan, about how to master the current Tenhou, especially some views on playing in the South wind. I welcome readers to absorb the content that suits them. I sincerely hope that this content can provide some tips and help to players aiming for the eighth dan, ninth dan, or even further.

First, let's examine the characteristics of Tenhou rules:

1. Tenhou is played in seat order.
2. Unique mechanism for obtaining points (pt) based on seat order.
3. Different tables for battles depending on the rank.

These are the main differences between Tenhou rules and general rules. Let's consider how these differences affect tactics.

Firstly, the impact of playing in seat order, which is also the most important difference. This is because most of the modern theories discussed so far are based on increasing points through tile efficiency.

'Kan Zhang Ji Li' and 'Push or Fold' are strategies derived from the principle of game-point management

However, in Tenhou, where the acquisition of pt is not related to the final raw score, there will be more situations where new theories need to be introduced beyond profit and loss theory - the theories introduced so far. This is one of the reasons why mastering only the previous theories cannot guarantee victory.

For example, in a typical profit and loss battle, winning many hands and avoiding dealing into opponents' hands are important, and related tactics are based on these two principles. But under the unique rules of Tenhou, where only fourth place will lose pt, situations where there is no point in winning (if there is risk involved) and dealing into specific opponents' hands is acceptable will increase. If a neutral situation involves relatively fewer points movements and can be played like the theories discussed earlier, the frequency of neutral situations in Tenhou will decrease significantly due to the reasons mentioned above. Specifically, considering that the South wind is basically not a neutral situation, it becomes necessary to judge the point situation. Even in the East wind, if you have more than 30,000 points, your judgment may differ from usual cases. For example, when

facing an opponent's riichi and you have a foolish wait on a 2 as the dora, theoretically, it's possible to continue playing. But if you have over 30,000 points, compared to a profit and loss battle, the likelihood of choosing to fold will significantly increase.

The last point is that depending on the rank, the tables for battles will also differ. The highest level Tenhou tables, the Hou tables, can only be entered by players with ranks of seven dan or higher. Players who reach seven dan have mostly mastered the basic theories. In other words, to advance beyond seven dan, you need to defeat opponents who have already mastered the basic theories, which depends on how well you handle the exceptional situations. Because these opponents are all strong, many effective tactics can also be discovered from them.



7th turn.

For example, consider the hand mentioned in the basic section, where there isn't much difference in the winning percentage between keeping a double pair wait on 3p and a two-sided wait on 2p. But what if you discarded 5p in the previous turns?

If you discard 5p and then declare riichi on a hand sequence of 5p → 2p, 1p becomes the waiting tile. Reading the tiles to this extent is effortless for players at the Hou tables. For opponents who haven't been through selection, or rather naive opponents, relying solely on data to make choices is enough. But if you're at the Hou tables, compared to the data (the average of all situations), the winning percentage will decrease. On the other hand, if you discard 5p and then go for a hand sequence of 5p → 3p, it seems like a simple break of the 35p tile pair. Even if you're careful about declaring 3p as the dora, the waiting tile will still only be 14p. Considering that 2p is a tile pair to 5p, its winning percentage will be much higher than the data (average), so declaring riichi on 3p here is actually more powerful.

In the basic section, I've mentioned that the key to victory is basic risk assessment and reading discards based on that. But if you're at the Hou tables, it's necessary to assume that opponents will also read discards and make choices accordingly.

Point:

Basic judgment is certainly important, but the precision of judgment in exceptional situations is the key to reaching eighth dan or higher.



tiles like 1 and 9 would be excellent waiting tiles. However, if the opponents carefully read the discard river, the range of choices will expand.



For example, consider your hand and discards as shown in the diagram above. For such a discard pattern, if you declare riichi after discarding 5m, a 9m becomes a very good waiting tile. This is not only because the 7m was discarded earlier, but also because in the introductory section on reading discards, the 556778m pattern where 5m is discarded and waiting on 69m, or the 56789m pattern where 5m is discarded and waiting on 69m can be largely ruled out. Therefore, a 9m appears to be an easy tile to pass. Of course, there are still many situations where 9m can result in a loss, but under rules like those in Tenhou where risk management is crucial, confidence in your wait influences your riichi decision. Additionally, if there are many potential single wait tiles that could be excellent waiting tiles based on your discards, sometimes waiting for a better tile before declaring riichi can be more advantageous than declaring an immediate riichi.

Point:

Because of Phoenix, camouflage is very effective while minimizing the loss of tile efficiency.

### 3.3 Chapter 25: Understanding the Meaning of Expected Value

In mahjong tactics, expected value is used to evaluate various choices.

Because we don't know what will be drawn next, and we don't know what the opponent will wait for if they declare riichi (though we can predict to some extent), it's necessary to consider things from a probabilistic standpoint rather than focusing on individual outcomes. However, this concept of expected value also comes with its pitfalls.

- (1) 50% chance of winning with a mangan hand, 50% chance of dealing into a mangan hand;
- (2) 0% chance of winning, 0% chance of dealing into a hand;
- (3) 20% chance of winning with a mangan hand, 0% chance of dealing into a hand, but an 80% chance of losing 2000 points to a mangan hand drawn by another player.

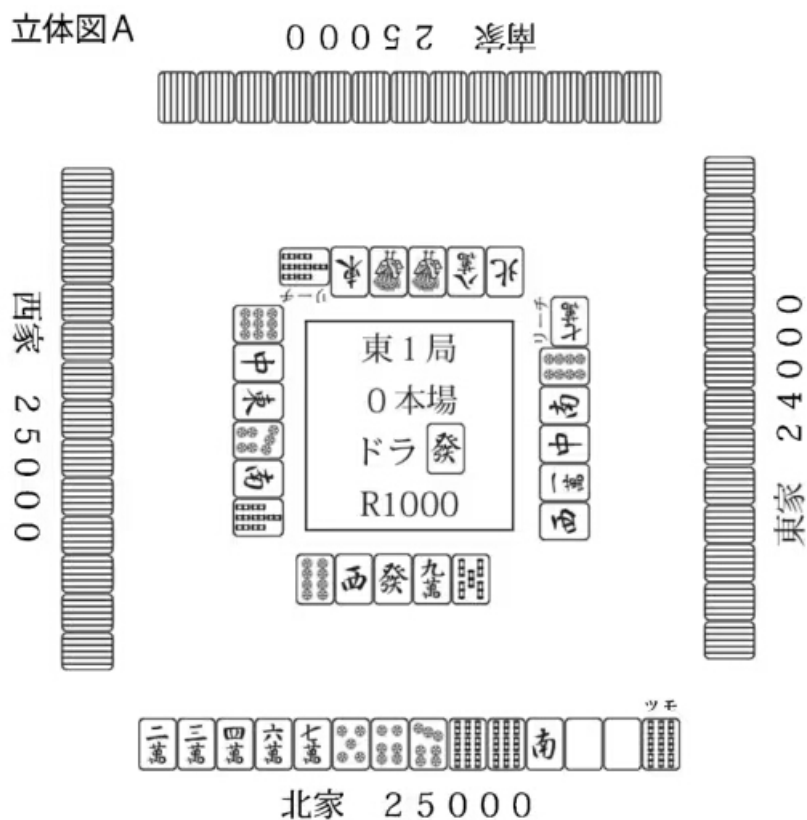
Consider the above three simple examples. Assuming no draws and no events beyond the described ones.

The expected values for these three choices are all the same, which is 0 points. If there's no concept of positional points, then it doesn't matter if the evaluation of these three choices is the same.

However, the win rates in fourth position will change depending on the choice.

Considering that Phoenix is a positional game and the positional points in Phoenix are not distributed uniformly, a player who chooses 50% first position rate and 50% fourth position rate can only be considered a beginner.

For example, in situations where it's necessary to compare high-scoring low winning percentage hands with low-scoring high winning percentage hands when declaring riichi, if the difference in expected value isn't significant, then choosing the latter is more advantageous. Additionally, attacking itself is unfavorable compared to other rules.



For instance, consider the diagram A above. Generally, discarding a safe tile and waiting for both sides is not a bad choice.

But what about in Phoenix? Although the risk of dealing into a hand isn't that high in theory, one still doesn't want to risk dealing into a riichi hand, especially if there are two riichi players, who are essentially candidates for dealing into each other's hands. In this case, wouldn't it be better to passively wait for both riichi players to move deal in?

In particular, strategies that make it troublesome for the player in fourth position have permeated the Phoenix Table. Although any of the three players may deal into your hand, being recognized as the player in fourth position if you deal into a hand would be somewhat disadvantageous. Here, one would just hope that one of the two riichi players will become the player in fourth position.

Although this is the case, if there is no attack at all, then there's no way to win. Therefore, judgments should still be based on the theory of expected value.

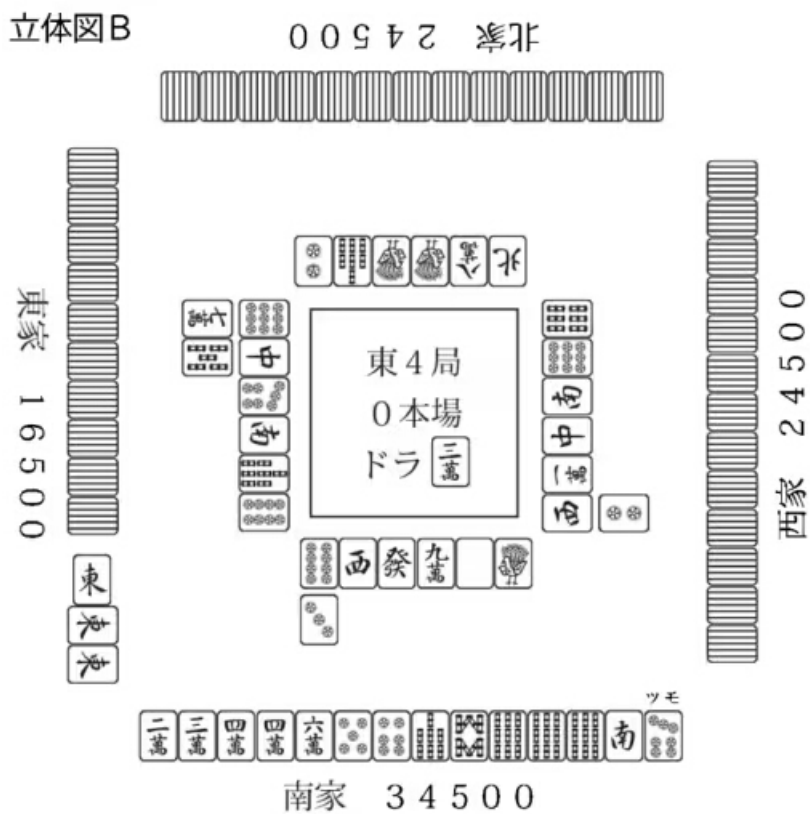
For example, in terms of expected value (point balance), the difference between chasing riichi or not when both you and your opponent are in the dealer position lies in whether your hand is a fool's wait to a fool's wait worth 2 han.

In other words, a fool's wait is generally not chased, while a fool's wait worth 2 han is generally chased. This is what's referred to as theory.

I would raise this standard a bit further, meaning I wouldn't chase a fool's wait worth 2 han and would chase a fool's wait worth 3 han. Of course, I'm not sure how much this difference in perspective would shift based on

the Phoenix rules, but I believe there will be some degree of change at this level.

If you're in the leading position, the difference isn't that significant. But if the points change, then it's a different story.



For example, in diagram B, although it's in the East round, I don't think this can be considered a neutral situation anymore. For such difficult-to-win fool's waits, I wouldn't choose to declare riichi.

Point:

In Phoenix, pay special attention to choosing options that may have slight disadvantages when attacking.

### 3.4 Chapter 26: Recommendation for Menzen (Concealed) Hands

This time, let's talk about discarding tiles in mahjong. In modern mahjong, going first is extremely important, making tile discarding an essential technique. During the early days of Phoenix or even before that, mahjong was primarily dominated by East-round games, and there were many players who enjoyed calling tiles.



Originally, my call rate exceeded 40%, but in the hundreds of games before reaching Ten-Dan rank, I changed my playstyle, reducing my call rate to about 32%. I thought, perhaps leaning more towards menzen might be better for winning in the south round of Phoenix?

For example, in Phoenix, there are players who will declare a chi on the 6th turn with a hand like hand A. Although I know the remaining shape isn't good, I could consider it this way: It's already the 6th turn, if I don't advance to tenpai (ready hand) now, I won't be able to take the initiative, and I don't want to fall behind and be preempted by someone else.

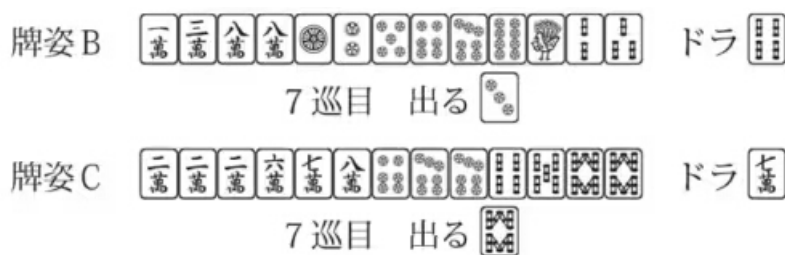
I used to think along the lines of prioritizing going first based on such principles, but now, when faced with such a hand, I won't declare anything. I would choose to cautiously build a menzen hand of sanshoku or utilize a hand like four connected tiles or the tile 7s to aim for a balanced hand. There are also those who think, Taking time to build a hand like this will inevitably result in falling behind, right? Therefore, it's important to first compare the expected value between declaring a tile and passing, so let's discuss this crucial factor.

Suppose after declaring a chi on 1s, you draw a tile on the next turn that puts you one step near tenpai. But such a hand doesn't exert much pressure on opponents who are close to tenpai. However, in Phoenix, there aren't many players who would declare riichi (ready hand) with a hand that is poor and discards 3p. In such a situation, it's likely to develop into a situation where you're either in a riichi battle or competing with a high-value declared hand. At that point, the expected value of declaring tiles would also change depending on the accuracy of your attacking judgment.

Research on the appropriate level of aggression when declaring tiles for profit and loss judgment is already underway. But if we don't consider profit and loss and instead consider Phoenix's positional point efficiency, current data streams can't provide an answer. Moreover, even in profit and loss judgment, the choices for low-scoring declared hands during an attack are mostly subtle and heavily influenced by the situation and rules. Apart from relying on one's own intuition, there's no other way to judge, making it somewhat of a black box.

Declaring tiles and attacking with such a hand is like stepping into a black box. For players who are confident in their attacking judgment, this isn't a problem, but for ordinary players, even if they successfully reach tenpai, they may face difficult decisions or unnecessary risks if they can't win (because they have fewer tiles in their hand).

However, if you're in a menzen state, you won't be forced to face difficult decisions. In other words, if you have the basics down, you won't make major mistakes or losses. For average players like me who want to win, adopting a menzen strategy will be easier.



So how about hand B? Here, you would choose to declare a chi on 3p. Unlike before, if you choose to declare a chi here (assuming no one declares riichi at that moment), it's a definite first to tenpai, rather than developing into the most tricky situation of facing a riichi with a 1000-point foolish wait.

Furthermore, even if the sequence on the dot tiles extends, it would only become a foolish wait worth 1300 points, which isn't a pleasing change. In other words, for this hand, the three suits are the clear final form. Therefore, if you don't choose to declare a chi and go for tenpai, your speed will be overwhelmingly insufficient. If you maintain a menzen state like this, it will not only harm yourself but also force you to face difficult decisions or unnecessary risks.

So how about hand C? For this hand, under normal rules, from entering the second row onwards, choosing to declare a tile would yield a higher expected value. But if it's in Phoenix, I would pass until around the 11th turn (the number of turns varies depending on the situation).

Although the expected value of declaring a tile is higher, the difference is actually minimal. I believe that under Phoenix's rules, where minimizing differences in attacking is preferred, declaring tiles is not a good choice.

On the other hand, if you can aim for tenpai while maintaining a menzen state, even if you're preempted by a riichi, you would still definitely choose to pursue tenpai. Therefore, you won't make incorrect choices. Unlike hand B, hand C is a hand where you can see that tenpai is possible in a menzen state, so there's no need to add unnecessary difficulty to yourself and face difficult decisions.

How does it feel? However, research results have shown that there isn't a high correlation between the rate of declaring tiles and performance. Therefore, I don't think it's possible to determine whether declaring a tile or passing is the correct answer based solely on the hand. Especially in Phoenix, where risk management is crucial, it's dangerous to target hands that have low attacking value.

Of course, there are also skilled players who excel in attacking judgment and tile reading, achieving excellent results with a high rate of tile declarations. However, for players who still can't beat the current Phoenix Table, reducing risky attacks is necessary if they want to win more easily. Choose the simpler path that unfolds after making subtle tile declaration judgments!

Point:

Be careful when declaring tiles with a foolish wait worth less than 3900 points and with two tiles to complete.

### 3.5 Chapter 27: Is a 2600-point Foolish Wait Iron-Riichi?

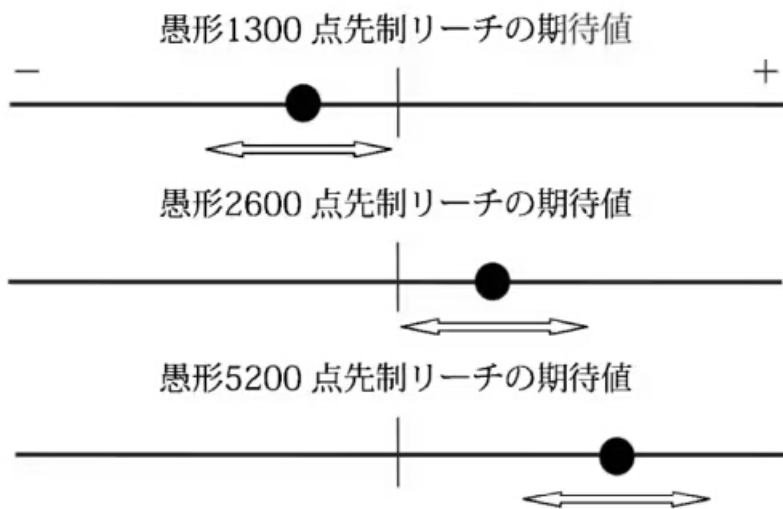


In this hand, what should you discard? Choosing to simply discard 7p should be the most common decision. Under most rules, I would also choose to discard 7p, but I believe that if it's in Phoenix, there's also the option to discard 5m.

Discarding 5m allows you to see potential hands like san-shoku, Junchan, or iipeikou (pure double sequence), and also opens up possibilities for better shapes. How does that feel? Does it seem somewhat counterintuitive in terms of tile efficiency?

Whenever there's at least one dora tile, the goal is to reach tenpai as quickly as possible, and even foolish waits aim for tenpai immediately. Even under Phoenix rules, this is a fundamental way of thinking. This conclusion is based on considering the value of a 2600-point foolish wait riichi.

Indeed, there is data supporting that the expected value of a first riichi with a 2600-point foolish wait is quite good. But have you all carefully considered the meaning of this expected value?



The expected value obtained through statistical methods includes the average value under various circumstances. Depending on the situation or other information, of course, the expected value may be lower or higher than the data. Please refer to the diagram. The center of the straight line represents an expected value of 0, and the expected value of a first riichi with a foolish wait of various point values is represented by black balls. However, in practice, by reading the tile discards, you can obtain information about the strength of your waiting tiles and the speed of your opponents, among other things. Therefore, if the expected values are distinguished based on various situations, different numerical values should be obtained.

This is the meaning of the arrows below the black balls. Of course, the length of these arrows is based on my intuition, not on correct data, but there is always some degree of variation in accordance with the situation. In simpler terms, expected value varies depending on the situation.

There are many players who choose not to declare riichi with a bad shape for 1300 points but would declare riichi with a bad shape for 2600 points. However, I believe that if you consider the range of this fluctuation, then declaring riichi with a bad shape for 2600 points, which is close to the left side of the spectrum, might also involve taking on the risk similar to declaring riichi with a bad shape for 1300 points. Given the nature of Tenhou's ranking points, one should be sensitive to this high-risk situation.

If opponents haven't been selected, or if such positional points haven't existed before, even without considering such minor issues, they would be averaged out over more encounters and ultimately lead to victory.

But if you want to win on the Phoenix Table, this won't cut it. Therefore, it's necessary to consider that a 2600-point foolish wait is not always iron-riichi.

Of course, the ideal situation is to correctly judge the situation and only declare a riichi with good 2600-point waits. But this isn't so simple. For example, if your opponent has discarded both East tiles and someone else has already declared chiis, but you can't see any dora tiles, you can't even confirm if you're the first to tenpai. To what extent can the expected value of a first riichi with a 2600-point foolish wait match the prediction in such a situation...? It's a difficult question indeed.

On the other hand, if you have a 5200-point or higher foolish wait or a good wait and choose to declare a riichi, even if the waiting tiles aren't ideal considering the situation or if your opponent's discards seem fast, compared to the theory of average first riichi with a 2600-point foolish wait, I don't think this is a bad choice.



Now let's look at the hand above. Indeed, in terms of the flat expected value, discarding 7p is the better choice. However, this hand is one that is on average ten or more turns away from tenpai. If you're preempted at that time, you're very likely to be faced with the difficult decisions mentioned earlier. If you make the wrong choice then, it will become a mistake in high-level games, and these accumulated mistakes will manifest in your performance.

So, here we choose to discard 5m, aiming at better waits or higher-scoring tiles, thereby reducing the probability of future difficult decisions = fatal mistakes. Isn't this choice also good? That's my thought.

Of course, please don't misunderstand me. If the gap in expected values on the flat surface is significant, then you should still make choices based on the basics. For example, if it's already the 7th turn, then you should choose to simply discard 7p. Situations where you refuse to tenpai, such as the one mentioned in the previous chapter, are actually quite rare when you've already reached a 2600-point foolish wait. For an early tenpai wait, precisely because there are options for discarding, you should choose a method that makes future decisions easier, ultimately raising your average point of choice, which is also the main point of this chapter.

Point:

Although a first riichi with a 2600-point foolish wait is good, sometimes it's just a minor difference. In Phoenix, this also comes with risks.

### 3.6 Chapter 28: How to Use Silent Tenpai (Part 1)

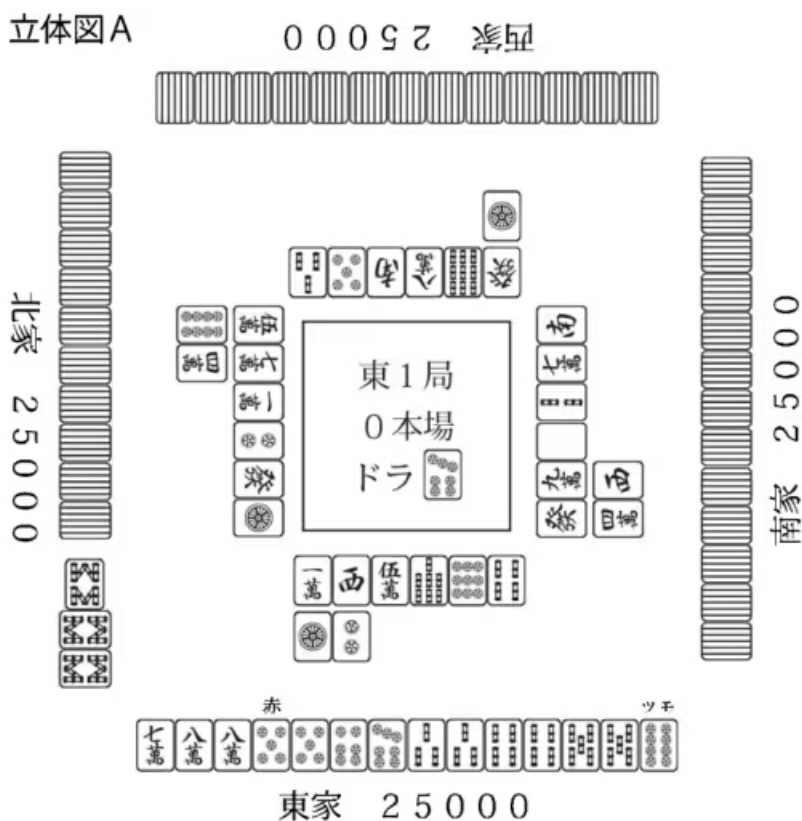
I often hear discussions about the timing for silent tenpai from those who have played on Tenhou.

Indeed, in standard rules, in most cases, if you reach tenpai, declaring riichi is the correct choice. However, in Tenhou rules, there are many complex situations where silent tenpai is necessary. This time, I'd like to explain my criteria for silent tenpai.

Firstly, there are generally two reasons for choosing silent tenpai:

- (1) To increase the win rate:
  - (i) The gap between the win rate of riichi and silent tenpai is significant.
  - (ii) It's a decision for the second half of the game (which greatly affects the positional points), and you really want to win.
- (2) To avoid risk (if opponents attack, you'll choose to fold).

So let's discuss them specifically. First, let's talk about (1) for increasing the win rate, which includes (i) and (ii) scenarios.



Regarding (i), please refer to the above diagram A. In this diagram, there are three points to note.

First is the point value. As explained in the basic and advanced sections, the importance of point value has been emphasized. Generally, in a flat situation, compared to the increase in win rate from silent tenpai, the

increase in point value from riichi is more important.

Therefore, it's necessary to prioritize tiles with relatively small increases in point value from riichi, such as those above 5200 points, and ideally above 8000 points. In the theory of net point gain, even for such point values, there are many riichi-worthy hands. However, considering the possibility of reaching the fourth position, hitting opponents directly can widen the point difference by two-fold, making silent tenpai a powerful choice for increasing the win rate.

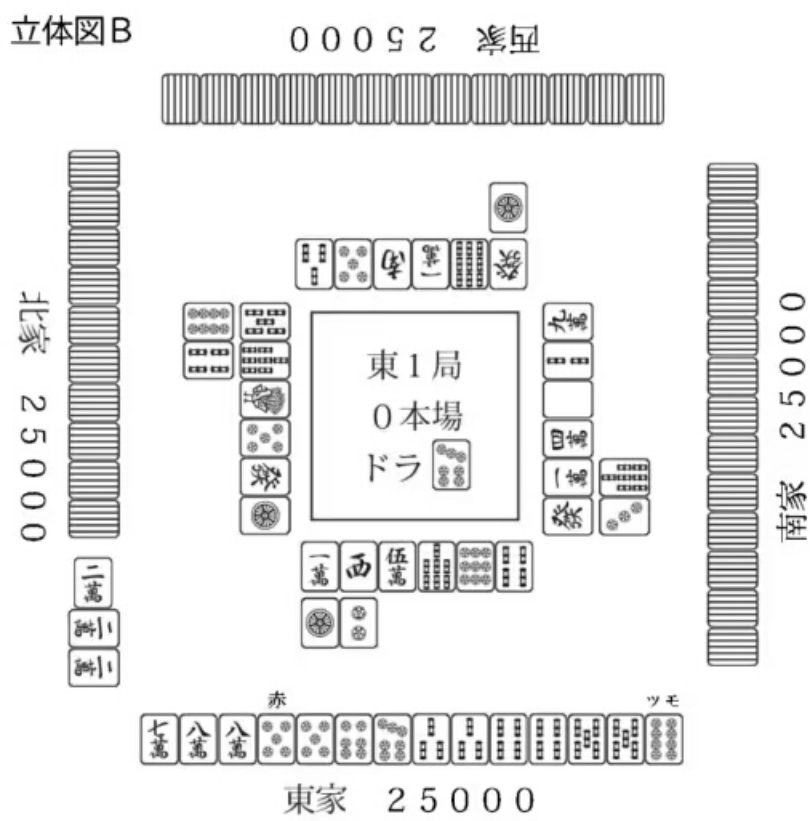
Second is the strength of the 6-9m waiting tiles in terms of the situation. It appears that the player ahead is working on a sanshoku, and everyone has discarded the upper end of the characters in the early game. According to the interpretation of situations explained in the advanced section, the upper end of characters is a very good waiting tile depending on the situation.

But even with this, declaring riichi is still an option. Choosing riichi doesn't change the current situation, where the waiting tiles are favorable. Therefore, if opponents draw a 6-9m that they can't use, there are only two options: to fold or to deal in.

Therefore, there's also a third point to note here, that your own discards might easily raise suspicion about the 6-9m waiting tile.

If you've discarded 5m early in the game, followed by many other middle tiles, and finally declare riichi with 8m, then 6-9m is the main waiting tile. Of course, tiles like the middle of dots or other tiles could also be dangerous, but especially in the Phoenix, opponents won't easily discard 6-9m if they suspect it's your main waiting tile.

In situations like these, the difference between silent tenpai seems likely to win and it seems difficult to win after declaring riichi is crucial.



For example, consider diagram B above. Your own discards are the same as in diagram A, but the situation for the 6-9m waiting tiles is completely different.

In such a case, the difference between choosing silent tenpai and declaring riichi isn't as significant, so it's okay to make judgments based on net point gain theory. For this hand, as it's still in the middle game, declaring riichi is also a good choice.

The following sentence isn't just limited to this discussion: ultimately, mahjong choices are just that — choices. In this case, it's comparing the situation of declaring riichi and silent tenpai and choosing the better one. Not only should you consider information from the tile discards, such as the situation seems favorable or the situation seems poor, but also consider your own discards, compare the gap in win rates, and draw conclusions.

Point:

If it's high point value and an excellent waiting tile considering the situation, and it's a waiting tile that's likely to be declared as the main tile based on your own discards, then choose silent tenpai.

### 3.7 Chapter 29: How to Use Silent Tenpai (Part 2)

In this section, we continue from the previous part to further discuss the theory of silent tenpai.

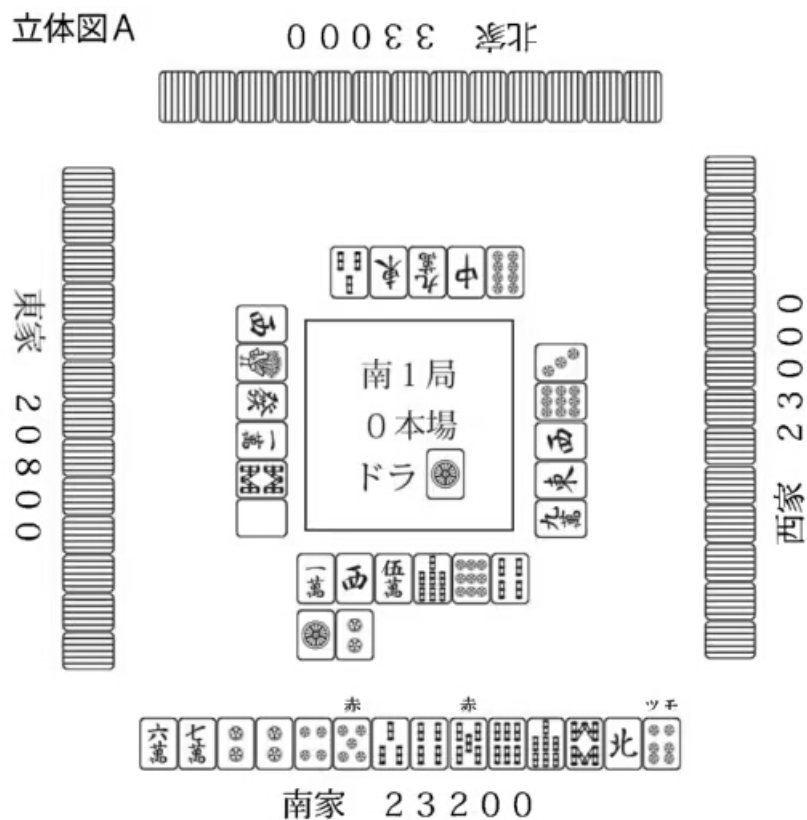
Next, I'll explain to increase the win rate in the context of ii) It's a decision for the second half of the game (which greatly affects the positional points).

In the previous part, we mainly focused on the difference in win rate. However, if winning would significantly affect the final standings, even if silent tenpai only slightly increases the win rate, it's still worth choosing silent tenpai.

And the impact of winning on the final standings becomes greater the closer it gets to all last.

For example, if four players of the same skill level are competing, the player's likelihood of being in first place is 25%. However, if you can win to 1000 points in the East 1 round, the likelihood of being in first place increases to 28%.

And for a win that guarantees first place, after winning 1000 points, the likelihood of being in first place increases to 100%. Although winning 1000 points is the same, as you approach all last, the value also changes. Of course, a confirmed 1000 points (for a pure positional battle like in Tenhou) has no value, so the impact of winning on the final standings is a better reflection of the value of the hand than points.



Now, please refer to the above diagram A.

First, choosing to stay silent for this reason typically occurs in the south round. I believe that from South 1

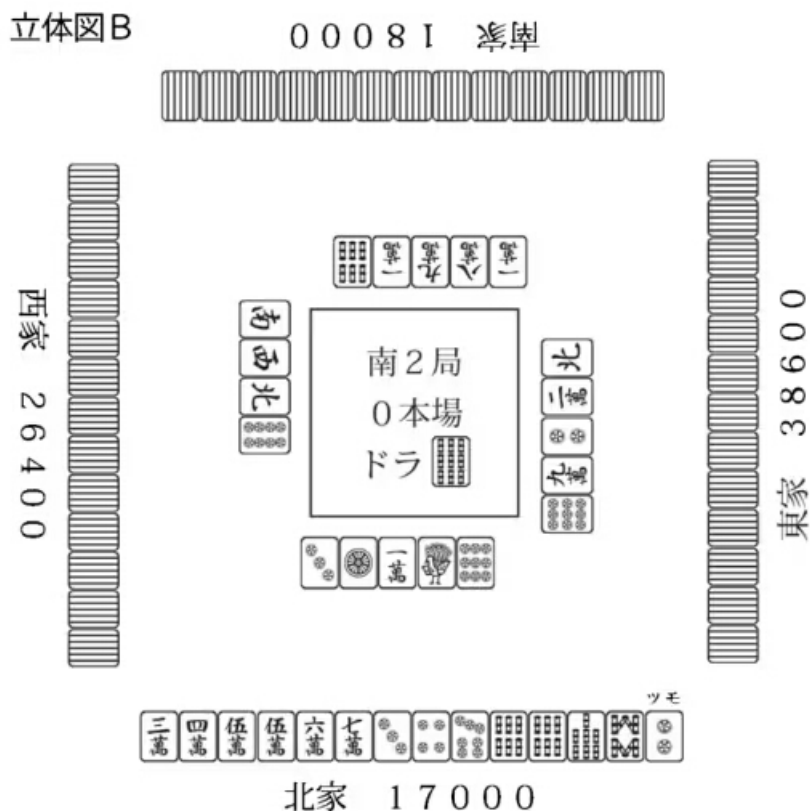
to South 3, if reaching tenpai means you don't have to worry about ending up in fourth place, then you can choose to stay silent.

And not worrying about becoming fourth place means:

- (1) Winning hands that can become second place;
- (2) Winning hands that can create a point difference of over 8000 points with fourth place.

This is the criterion for the value of a winning hand.

If you're in third place, then fourth place only needs to win once for you to possibly be reversed. However, if you're in second place, it's impossible for you to become fourth place with just one win. Similarly, there's indeed a possibility of being reversed by a single win with a point difference less than a mangan. But if you can meet the above two criteria, the possibility of being reversed in the remaining 2 or 3 rounds will be greatly reduced. If you can meet both of these in South 1 round or South 2 round, or meet one of them in South 3 round, then you should choose silent tenpai.



Now, please refer to the above diagram B. This is a scene I observed while watching a match on the Tenhou table, where the player chose silent tenpai.

Indeed, if you can win the hand, you can escape from fourth place, and your waiting tiles include a 69s with 3 visible tiles, with one of them being the dora. It's not a very good waiting tile. If you can improve the consecutive tiles in the characters, you can also aim for a riichi with a closed hand, which may also be a consideration.

In actual gameplay, it's necessary to consider the quality of the waiting tiles and other information, making it a very complex issue. In theory, players should make decisions considering all equilibrium points, but it's difficult to do so within the designated time. Therefore, I recommend using the following system for consideration:

- (1) First, consider judgments under a flat situation (i.e., basic);
- (2) Next, consider the criterion for the value of winning hands as mentioned above (i.e., exceptions).

According to the theory of a flat situation, this hand should be declared riichi. Although the waiting tiles aren't satisfactory, waiting for improvements with silent tenpai would incur clear losses. Based on this, let's consider exceptions to decide whether silent tenpai should be chosen, as mentioned in the previous section and this one.

Even if you win, you can't become second place, and the point difference with fourth place isn't optimistic. Also, considering the win rate, it doesn't meet the criteria mentioned in the previous section, so here it's a case where choosing riichi, as per theory, is the correct decision.

Point:

In South 1 round and South 2 round, choose silent tenpai to avoid becoming fourth place, and declare riichi to enter the safe zone.

### 3.8 Chapter 30: How to Use Silent Tenpai (Part 3)

Riichi inherently comes with risks. After declaring riichi, you can only discard tiles you draw yourself, which means if others decide to engage in an offensive play, you face the risk of dealing into their winning hand.

Although this risk is quite common and is already factored into the expected value in a neutral situation, it is not usually a significant concern. However, since Tenhou is a ranking battle where avoiding fourth place is crucial, it's important to pay attention to the following points when needing to avoid risk:

- (1) If avoiding risk (i.e., not dealing into someone's hand) leads to a stable situation;
- (2) If the game situation suggests a high likelihood of opponents engaging in offensive play.

Among these, point (1) is particularly important. For example, consider the following hand A.

牌姿A 南3局 ドラ 

|    |    |    |    |    |    |   |   |   |   |   |   |   |   |
|----|----|----|----|----|----|---|---|---|---|---|---|---|---|
| 一萬 | 二萬 | 二萬 | 三萬 | 三萬 | 四萬 |  |  |  |  |  | 西 | 西 | 北 |
|----|----|----|----|----|----|---|---|---|---|---|---|---|---|

|    |           |    |                |
|----|-----------|----|----------------|
| 東家 | 1 0 0 0 0 | 南家 | 3 9 0 0 0      |
| 西家 | 1 9 0 0 0 | 北家 | 3 2 0 0 0 (自分) |

Currently, it's South 3, and you're second place in north seat. According to theory, in this point situation, a riichi should be declared for a flat, non-dealer hand. However, if not dealing into opponents' hands ensures reaching all last in second place, and even if you win with a riichi, it's unlikely to reach first place, then declaring riichi here would involve unnecessary risk.

Especially in this point situation, the dealer, who is in fourth place, is likely to attack.

Declaring riichi here and dealing into the dealer's hand, risking points, is indeed a rare situation in terms of probability. But I believe avoiding such situations is also a display of skill and something to reflect upon.

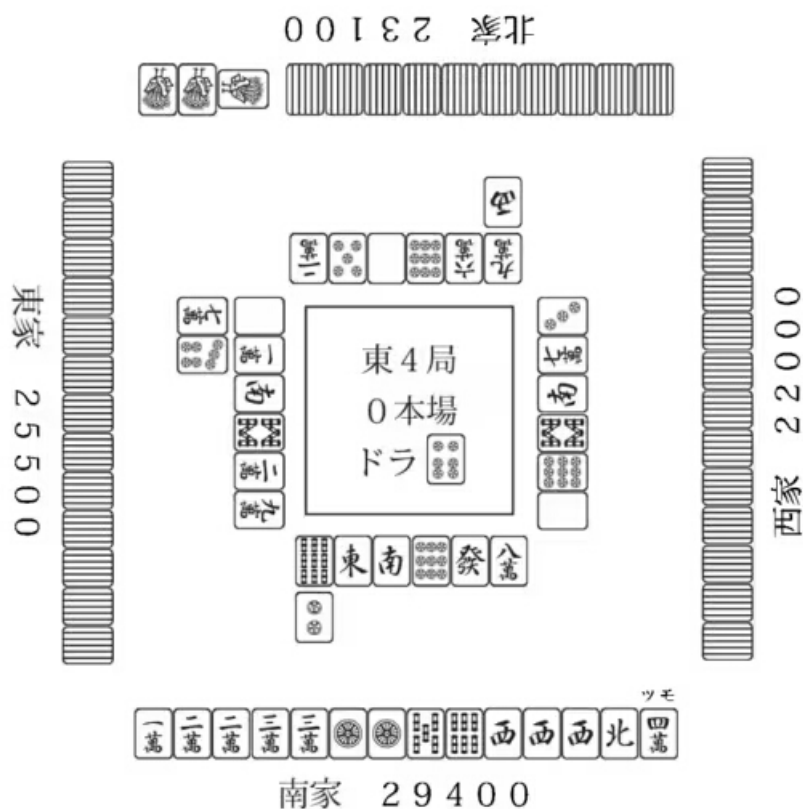
When determining whether declaring riichi is safe and stable without dealing into someone's hand, you should first consider "who is certain to counterattack" and then think about your own ranking if you were to deal a mangan to them.

Next, regarding "(2) the situation where a counterattack is likely to occur."

In the advanced section, relative speed was already introduced. If the opponent's speed is very fast, the likelihood of them choosing to counterattack is high.

People who think "even though I declared riichi first, I still can't win" or "the rate of dealing into others' hands after riichi is very high" need to carefully consider the following points.

Of course, as mentioned earlier, relative speed cannot be accurately gauged, and it's not really possible to determine exactly how fast an opponent is. However, I believe that in Tenhou, where the loss from dealing into others' hands has a greater impact on your rank than the points gained from winning, relative speed, even though it is somewhat uncertain, should still be used to manage risk.



For example, consider the diagram above. Although you're waiting on two possible tiles, the opponent seems to be forming a flush in bamboo, making the waiting situation subtle. The point situation is relatively average, and a skilled player might also choose to attack.

Now, let's consider the opponent's speed here.

Both the players to your left and right have discarded several 3-7 number tiles after discarding honor tiles, which is typical of a fast hand. Although it can't be said that the opponent across from you has reached tenpai, neither the drawn tile nor the dora has been seen, so if they reach tenpai later, the likelihood of them choosing to attack is also high.

From your perspective, you can't see any doras. Considering that the 6p is an easy-to-use dora, the possibility of the opponent having a high-scoring hand is also quite high.

Up to this point, all the tile reading has been to some extent only, meaning that only certain tendencies cannot be confirmed. When it comes to declaring riichi, if all opponents discard into your hand and you're the only one enjoying the game, it's also possible.

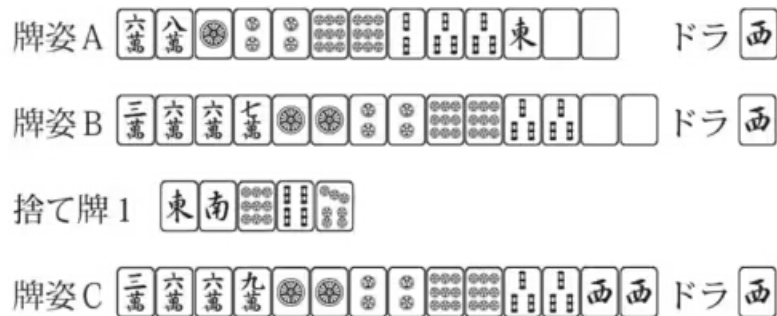
But considering factors such as point situation, speed, and scoring potential, it can be inferred that three opponents will choose to attack. Even if we consider the possibility of inaccuracies in tile reading, it's easy to imagine that approximately one opponent will quickly reach tenpai and choose to attack. Under the rule of avoiding fourth place in the positional game, choosing a slightly defensive approach is a good reason.

Moreover, even if this hand could win, the rewards aren't that great, and considering that you're temporarily in first place, the benefits of choosing silent tenpai here are even more obvious.

Point:

When your hand's potential reward is low and there's a possibility of multiple opponents attacking, choose a slightly defensive playstyle.

### 3.9 31: Rules of Engagement for Seven Pairs Hands



In Tenhou, the criteria for calling tiles should be very strict. Calling tiles is a choice made when it's challenging to maintain a closed hand, and if maintaining a closed hand is also difficult, and calling tiles doesn't offer significant benefits, then there's no choice other than to fold.

This is where considering seven pairs becomes relevant. For example, in a flat situation, it's better to pursue seven pairs rather than calling tiles, even for a pair of white dragons. Of course, if a pair becomes a concealed triplet or if a 7m tile is drawn, then considering calling tiles could be warranted. However, the basic route is to discard 6/8m tiles and retain safe tiles.

Next, let's discuss the riichi judgment for seven pairs. Should you declare riichi with hand B, which has this type of waiting shape?

For the usual scoring battles, declaring riichi is a good choice.

Some players wait for excellent waiting shapes before declaring riichi. Generally, good waiting shapes include honor tiles, terminal tiles, and double-sided tiles. For example, if your remaining tiles are like discard 1, then they consist of west, north, red dragon, green dragon, 1/9m, and 1/7s. During actual play, these tiles may be discarded or melded into triplets, further reducing the number of good waiting tiles, a situation commonly seen.

If the improvement is only to this extent, then it's generally fine to declare riichi.

However, in Tenhou, I choose to discard 3m and wait silently. This decision considers the tactic of avoiding dealing into opponents' hands and emphasizing the winning rate.

In a flat situation, winning 1600 points from a silent win with 7m is wasteful in a scoring battle, but I believe it's acceptable in Tenhou.

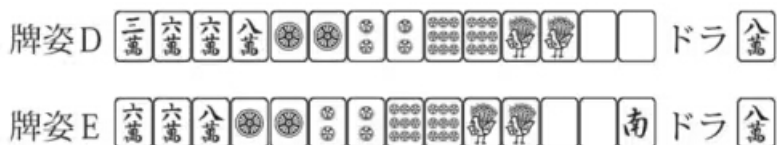
Another reason is mentioned in the Strategies Specific to Tenhou section: there are many potential waiting tiles. Not limited to honor or terminal tiles, any tiles better than the information-less 3-7 number tiles can be selected for riichi. Therefore, it won't take too many turns to draw improvements.

How about hand C? With two doras and sufficient scoring potential.

If the point value is only 1600, I would choose silent tenpai. If the waiting tiles are numbered 3-7, I would also choose not to declare riichi, but this time I'm waiting on 9-man. Here, I also choose silent tenpai. If I have two dora tiles, I would raise the standard for the waiting tiles, opting for those with a significantly higher win rate, regardless of whether I choose riichi or silent tenpai afterward.

Specifically, edge waits like on 3-7 are easily guarded against, while middle waits like on 4-5-6 are often used by other players, so in many cases, I would choose silent tenpai for these waits. However, from an expected value

perspective, declaring riichi is clearly the better choice, so if the waiting tiles are favorable, then go for riichi.



Finally, let's consider hands D and E, which are single-tile waits on a dora. For hand D, I would obviously discard the 3-man, but I would not choose to declare riichi. As a result, I drew a live tile, the South wind, transforming my hand into hand E. What should be done here?

I would choose to declare riichi on a South wind wait. As a premise, the change in expected value between silent tenpai and riichi for a single-tile wait on a dora is not that significant. Therefore, in Tenhou, I would naturally choose the lower-risk option of silent tenpai.

Next, comparing silent tenpai on a single-tile dora wait with riichi on a single honor tile wait, the expected values of these two are also not greatly different.

The point values are different, but the expected values are the same because the win rates also differ. Although declaring riichi decreases my win rate, I would consider riichi here to reduce my chance of losing points, hence I would choose riichi.

In summary, the decision to declare riichi with Seven Pairs is as follows:

(1) In the case of Seven Pairs without dora:

Consider discards and other factors, and wait for better tiles (at least non-suji 2-8) before declaring riichi.

(2) In the case of having two dora:

I would generally choose silent tenpai. If I draw an extremely good wait such as an honor tile, I would choose to declare riichi.

(3) In the case of a single-tile wait on a dora:

I would generally choose silent tenpai. If I draw an extremely good wait such as an honor tile, I would choose to discard the dora and declare riichi.

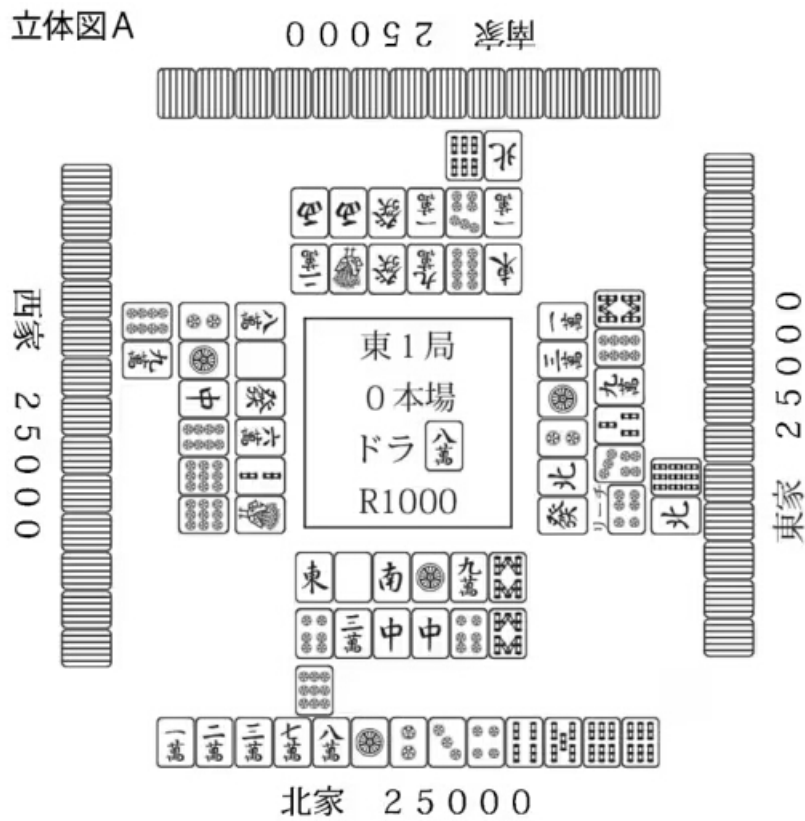
Of course, the decision to declare riichi also changes based on the point situation. For example, if I am the dealer in fourth place and the opponents are folding, or if I am dissatisfied with the point value of silent tenpai, I can choose to declare riichi even if the above conditions are not met.

When engaging in a direct battle with Seven Pairs, it often puts you at a disadvantage, so whether the opponent will fold is a very important factor. Seven Pairs doesn't always require an immediate riichi; consider choosing the lower-risk option!

Point:

The strategy of declaring riichi immediately with seven pairs doesn't apply in Tenhou.

### 3.10 Chapter 32: Sense of Balance in Shaping the Hand



In recent years, one technique that has received considerable attention is keiten (shaping the hand). Take a look at the diagram A above. The player in the East seat has declared riichi as the dealer, and the player in the west seat has discarded 9m. Choosing to chi the 9m would allow them to shape the hand.

The criteria for choosing whether to shape the hand or not are, of course, the number of turns. Being aware of the number of turns is a significant characteristic of modern mahjong. For example, in this hand, even though it's a calm one-away from tenpai, if it were to reach tenpai, the value of this hand would drop sharply due to the turn count. This is the theory behind choosing to chi the 9m for keiten in recent years.

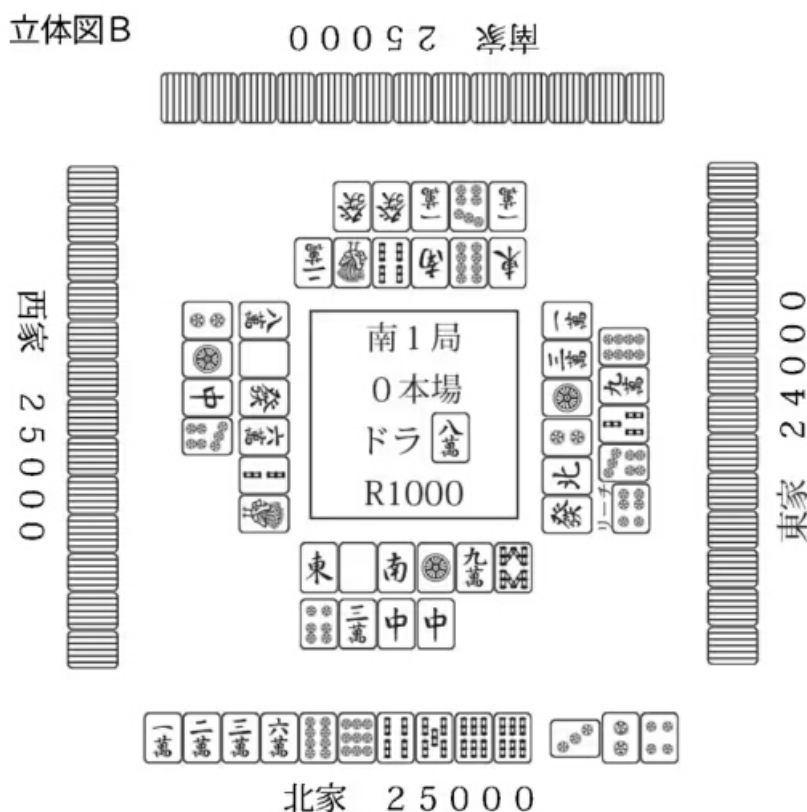
The criteria for choosing whether to shape the hand or not is when the discards reach the third row. Even if dangerous tiles are drawn, if you can discard a safe tile like 6s that won't cause any worries about being discarded into tenpai at the 13th turn, don't hesitate to chi.

If you want to achieve keiten by the time the discards reach the third row, then it's necessary to be in a one-away state by this point. For example—



Hands like this can be shaped into a one-away state by the time the discards reach the second row. If there's no hope of winning with your hand, it's more important to prepare to achieve keiten by the third row rather than consider keiten from the third row.

The awareness of abandoning the winning hand early on and shifting to shaping the hand has been emphasized in recent years as an important technique. However, people who have just become aware of this sometimes make some unreasonable tile calls.



For example, in the diagram B above. There's no hope of winning with this hand, at most, they can aim for keiten in a drawn game. At this point, the player's discard of 7p is crucial for achieving tenpai. Additionally, after chi-ing 7p, the subsequent discard of 6m will be in a two-sided weight. Since the sequence of 3m→1m in the opponent's discards suggests that the probability of the opponent having 6m is low, it's a relatively safe tile.

They have chi-ed a crucial tile and only need to discard a safe tile to achieve tenpai. Some might think this is a sure win, but I believe it's better to pass here. Firstly, after chi-ing, they still have six draws. If they draw an upper tile of bamboo or characters during this time, they would have to choose between 1m or 3m to discard.

It's very rare to encounter a situation where all drawn tiles are safe, leading to a drawn game. It's a good choice to aim for tenpai as soon as possible with a hand that can potentially win, but keiten is about whether you can achieve tenpai at the moment of a drawn game, and aiming for tenpai early doesn't make sense.

Moreover, in this hand, the 8-pin is a safe tile, and the 9-pin is a key tile. Choosing to pass here and subsequently discarding the 8-9 pin makes it easier to utilize the manzu and souzu tiles, increasing the probability of being in

tenpai at the end of the hand. Since the discardable tiles are all safe tiles, advancing to one away from tenpai doesn't quite qualify as a good tenpai technique. Let's consider whether this hand can reach a good tenpai state by the end of the  $x$ th turn.

Although the standard for good tenpai is when the discards enter the third row, the ideal scenario is to reach good tenpai at the last moment before the end of the hand. If you draw a dangerous tile that can be discarded while maintaining tenpai (such as the 6-sou in Diagram A), you can reach good tenpai by the 12th or 13th turn. However, Diagram B does not present such a situation, so passing is also an option in such cases.

Point:

The key to keiten is the sense of distance from a drawn game.



you can discard the 9p pair and avoid dealing into opponents' hands. It doesn't matter if a tile is claimed, as long as you don't deal into it is the modern approach. The mentality of if a tile is claimed, take responsibility is unnecessary in mahjong.

But what about in Tenhou? Some might think that in the realm of online mahjong, known as the domain of data-oriented players, nobody cares about disrupting opponents' hands. If it's in the South wind seat, I would disrupt the dealer's hand by discarding 2p and keeping the 9p.

Next, let's go through the reasons why disrupting the dealer's hand might not be necessary, as mentioned earlier.

(1) We don't know if the discarded tile will actually be claimed:

Before discarding a tile, we don't know for sure if it will be claimed. However, what matters is the probability. For example, if there's a 30% chance that a discarded tile will be claimed, then playing that tile would effectively advance the opponent's hand by 0.3 shanten. Whether a tile is claimed or not is not black and white, so it's important to consider it from a probabilistic perspective.

In this scenario, the tiles you don't need are 8m, 2p, and green dragon. Considering what we know from reading discards, if the dealer who discarded 7p still needs circle tiles, they're likely looking for the lower end of 7p, and 2p is adjacent to the dora tiles.

Additionally, discarding 7p before 9m suggests that 8m might also be a tile the dealer needs. And because the green dragon is still a live tile, if it gets claimed, the dealer will be in tenpai with a potential value of 3 han, making it difficult for you to win. So, it's challenging to discard all these tiles.

(2) Even if you don't discard, if another player does, disrupting their hand becomes irrelevant:

While this is indeed true for yakuhai (honor tiles), it's important to consider that when the player to your right declares a meld, your own tiles may also become targets for being claimed.

(3) Even if a tile you discard gets claimed, if you don't deal into it, you won't lose points:

This is the most significant aspect of Tenhou's avoidance of fourth place rule. First, let's observe the discards of the other two players. Using the concept of relative discard speed mentioned in the previous section, it appears that both the player opposite and the player to your left are still discarding terminal tiles and honor tiles, indicating a relatively slow discard pace. For instance, if you discard 2p and the dealer claims it to complete a sequence with 3p4p, what happens? The minimum value for a dealer's hand with double East as yakuhai is 5,800 points, and their hand seems close to ready judging by the state of the tile river. Combined with the slow pace of discarding from the other two players, it's unlikely that anyone can catch up to the dealer.

Given this situation, it's preferable to break the 9p pair and wait for progress in the hands of the player to your left and the player opposite. When they start discarding tiles closer to the center of the suit, even if the dealer claims your tile, the other two players, whose hands have advanced, might also become aggressive. This sets the stage for a horizontal shift.

Of course, this is an ideal scenario, and it's uncertain if it will actually unfold this way. However, compared to immediately dealing into the dealer's hand, the probability of achieving a horizontal shift is indeed higher, leading to better long-term outcomes.

Especially in Tenhou, once a horizontal shift occurs, it becomes easier for the player who dealt into the hand to become fourth place, making it crucial to create situations conducive to horizontal shifts. Since your hand is already unlikely to win, even increasing the probability of a horizontal shift slightly is beneficial.

In the Showa era, most attempts at disrupting opponents' hands were meaningless, as they were aimed at preventing opponents from winning. However, disrupting opponents' hands with the goal of observing the situation and controlling the flow of the game was meaningful.

Point:

If the player to your right declares a high-scoring meld early on, it's better to abandon winning yourself and instead increase the probability of a horizontal shift.

### 3.12 Chapter 34 Feeding and Telegraphing Techniques (1)

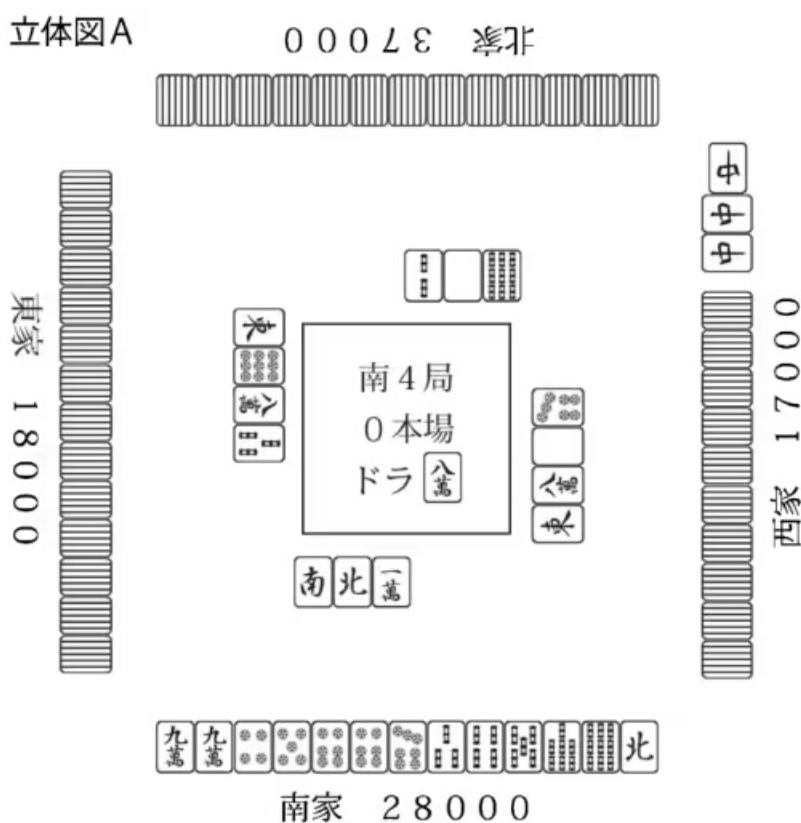
In these two sections, let's discuss the techniques of feeding and telegraphing. Feeding is the deliberate discarding of tiles to prompt a specific player to declare a meld, while telegraphing involves discarding tiles to facilitate dealing into a specific player's hand.

The key points of feeding are:

- (1) When to feed;
- (2) What tiles to feed.

Of these two, (1) is more important. Feeding is a technique that often goes overlooked in the battle of gains and losses, even among relatively strong players. Being able to recognize situations where feeding is necessary is crucial.

The judgment criterion for determining when feeding is necessary is from the second South round onwards, in situations where it would be troublesome if the player to your right or the player opposite wins.

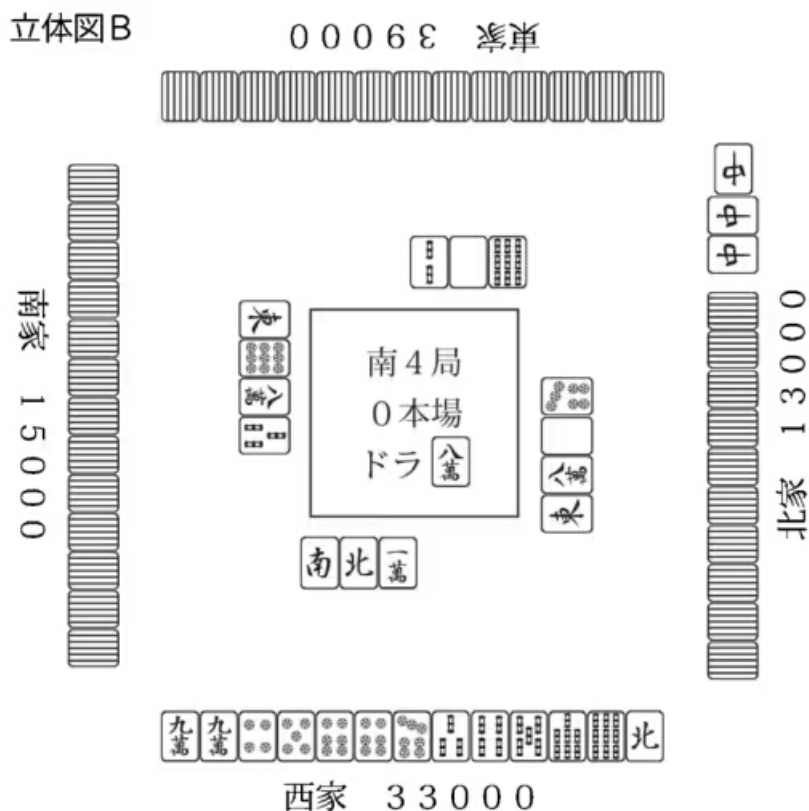


Please look at Diagram A above. My hand is an incomplete one-shanten at turn 4, seemingly capable of reaching tenpai first. However, let's carefully observe the point situation and the discard river.

If I win, a mangan tsumo or a 5200 direct hit on the opposite player will secure first place; otherwise, I remain in second place. To achieve a mangan tsumo with this hand, I definitely need ura-dora tiles. Of course, sometimes a riichi with a requirement for at least one ura-dora (note: in this situation, one ura-dora is not enough, possibly

due to a missing red dora in the original diagram) can be viable, but here, if I deal into the dealer's hand, I could end up in third or even fourth place, necessitating another round.

On the other hand, if the player to my left wins, I will finish in second place. This means the outcome of my win is essential. Given this, it's better to let the player to my left take the risk of dealing into the dealer's hand. Therefore, I choose to feed tiles. Incidentally, there is little information on what tiles to discard, so discarding any middle tile other than the dealer's safe 3-sou won't make much difference.



Now, what about Diagram B? The hand and the game situation are the same as before, but the dealer's rank and point situation have changed.

First, due to the point change, just a riichi tsumo of 1000/2000 is enough to secure first place (note: the original text says this, possibly missing a red dora in the diagram). Unlike before, winning myself and letting the player to my left win results in different final rankings.

Secondly, the dealer's points has also changed. Regardless of who I deal into, I will basically finish in second place. This means that if the player across from me or the player to my left wins, I will be in a difficult position, and counterattacking myself doesn't carry too much risk.

Therefore, I would not choose to feed tiles here. If the player across or to my left declares riichi, I should also choose to fully attack. This hand is quite well-formed, but even if the hand were less organized, I would still try to seize any small chance to win if there's a possibility of a turnaround.

Sometimes I see the statement I can't seem to win, so I choose to feed tiles. While this can be a reason, more important are the point situation and the dealer's rank. Specifically:

(1) Consider the value of winning for myself (the difference between me winning and the player to my left winning);

(2) The loss I would incur if the player across or to my left wins (drop in rank or increased likelihood of finishing in fourth place if it's the last round);

(3) The risk I take while trying to win (which opponents will definitely attack, and how my rank would change if I deal into their hand).

Considering these points, choose the strategies that slightly increase your rank (or lower the likelihood of finishing in fourth place).

Point:

Whether to feed depends more on the balance between the value and risk of winning for yourself.

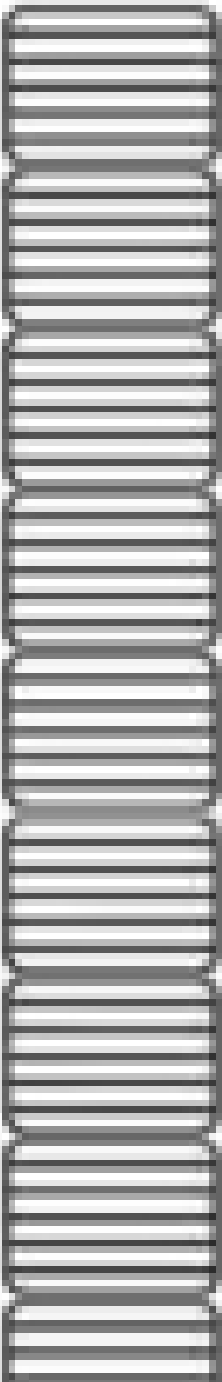
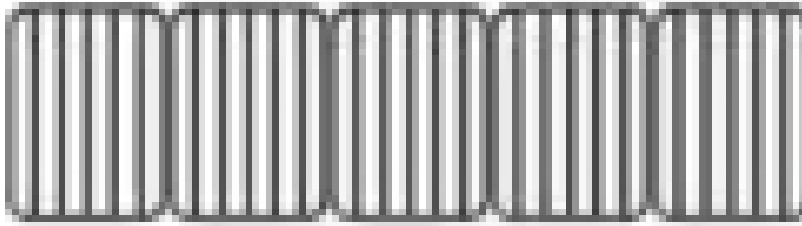
### 3.13 Chapter 35 Feeding Techniques (2)

Continuing from the previous discussion on feeding, in this section, we'll delve into some more nuanced aspects. In the previous section, we emphasized the importance of when to feed, while what tiles to feed when choosing to feed isn't as crucial.

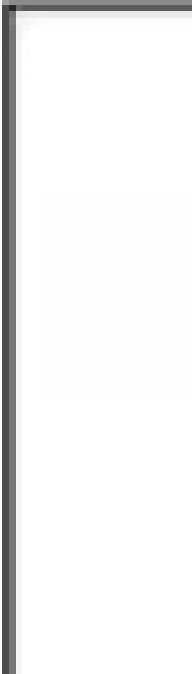
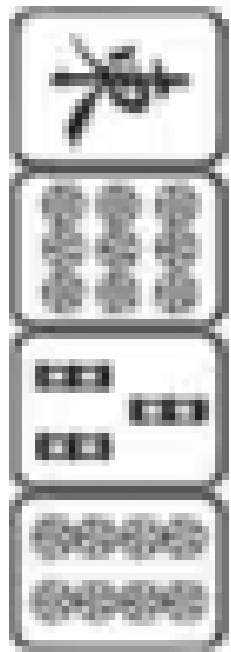
Why is this the case? It's because when deciding to feed, even if the discarded tile isn't declared, you can discard other tiles in the next turn. While it's not always possible to feed perfectly, as long as you discard many appropriate middle tiles, it will benefit your hand's development regardless of which tile is declared.

The basic thought process is as follows, but occasionally, there are situations where not reading the opponents' tiles for feeding won't work. Take the following diagram, for example:

00



北家 170



\*The player to your right declares a red dragon pon and discards 8m, chi of 1p, and discards 2s; the player to your left declares a chi of 7s and discards 8p.

Although from the point standpoint, achieving a self-draw worth 4000-all would yield first place, your hand only has one set and is progressing slowly. The point difference to fourth place is 5000 points. Under the rule of prioritizing avoiding fourth place in Tenhou, the player in fourth position chooses to declare a meld.

Since the player's right-hand opponent starts declaring melds from both sides, it means they've already met the point condition.

The most crucial aspect is the movement of the player in first place. From the perspective of the player in first place, they should be most wary of the dealer winning. Losing one han from a first place to 4000-all is certain, but if they continue to deal into low-scoring tiles, their position in the next round is uncertain. Therefore, they would hope for someone other than themselves or the dealer to win as soon as possible.

However, they certainly wouldn't want to risk dealing into the dealer's hand. Thus, this perfectly fits the conditions of situations where feeding is necessary.

The player opposite has already started feeding the player in fourth position, but your hand can't keep up with the pace. So, here you choose to feed the player to right, who already has two melds and is eager to win. This situation resembles a team battle of feeding wars, a scenario unique to Tenhou.

Considering that the player to my left is also feeding tiles, this becomes a race against time. If the tile intended for the player across ends up dealing into the hand of the player to my left, it would be the worst-case scenario. Therefore, the outcome needs to be decided within the next 1-2 turns. This is indeed a situation that requires careful feeding of tiles.

The top priority substitute is 7m. The player to your right has previously discarded 8m3m, indicating a potential need for 47m. Next, you can consider discarding 6p because the player to your right has previously discarded 7p, making it likely that they need the lower end of the bamboo suit. Since you have two 6p tiles, if the player to your right needs 6p as their next tile after this, you can discard another 6p, which is an advantage of 6p.



However, I would recommend discarding 5s. Firstly, the player opposite previously discarded 7p3m and then 2s, indicating a connection between 2s and their hand. There are many shapes associated with 2s, and here we consider the point situation from the player opposite's perspective. As long as the player opposite doesn't deal into someone else's hand, they won't finish in fourth place. Since the player opposite is already in second place, there's no need to take unnecessary risks to declare two melds, so I believe their probability of being one away from ready after declaring two melds is quite high. Strictly speaking, this isn't a situation requiring feeding but rather a situation requiring telegraphing.

Under this premise, as mentioned in Chi-Ten-Ten, the likelihood of the player opposite being one away from ready in the character tiles is quite high.

The most likely shape associated with 2s is from 223s, discarding 2s and waiting for 14s, but since you don't have 14s, this option is disregarded. Secondly, 233s is not possible without waiting for a pair with both sides open. If discarding 2s and waiting for a pair with both sides open, then 224s would be more likely since you can see a 3s already on the board. Next, discarding 2s and waiting for a pair with one more tile than the current hand is more likely from 246s or discarding 2s and waiting for a pair from 245667s, a shape with two sides and a block. I believe 5s is the most suitable tile to feed (telegraph) for both of these shapes.

Therefore, the order of discarding should be 5s  $\rightarrow$  6p  $\rightarrow$  7m. By the way, would you become the fourth place if you deal into someone's hand? Some may wonder about this. However, the player to your right has previously discarded the dora tile, and you can see two dora tiles, so in this situation, it's quite rare to have a hand capable of achieving mangan.

Point:

When time is tight, it's necessary to read the declared melds for feeding. Column: The Moment of Breakthrough

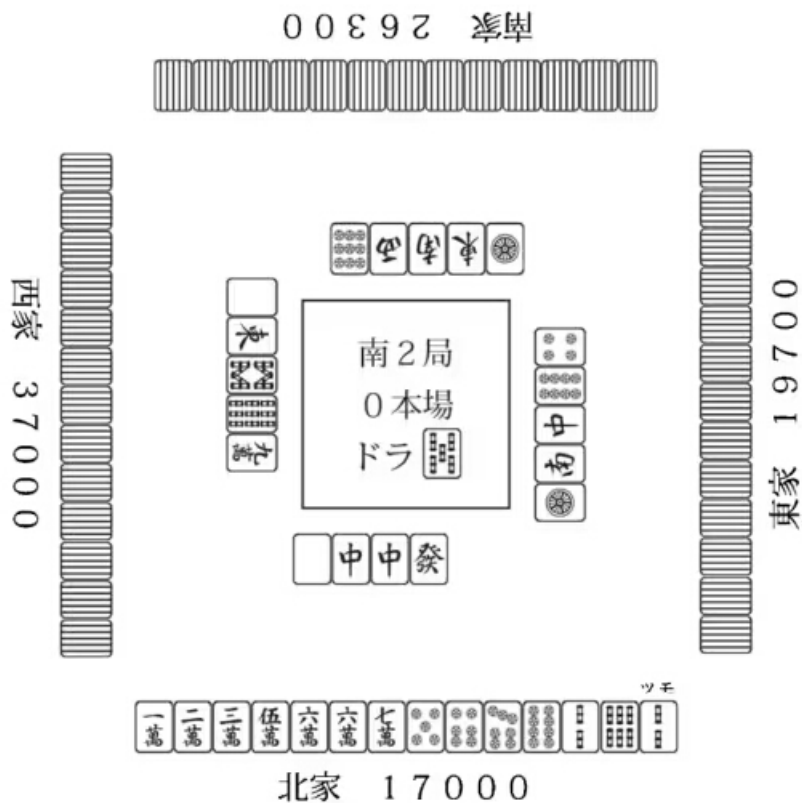
I believe there are still many choices with significant differences that we either don't know about or think we know. At least I think there are many choices with significant differences that even I myself fail to notice, and this is beyond doubt.

Several years ago, I went to Tokyo with this mindset and started working at a mahjong parlor. At that time, my playing style was to faithfully follow the content of the tactical books I had read, regardless of the current situation, which is what we call mass-produced data flow. Looking back now, this was quite a crude way of playing, but at that time, I believed it was correct. At least I believed that people stronger than me were those who could implement it with higher precision under the same playing style as mine.

However, it was only when I started working at the mahjong parlor and saw many customers and other employees that I realized there were strong players who did not rely on yakuhai or riichi, and often chose to wait passively. They had fundamentally different ways of thinking from mine at that time. I noticed that the so-called data flow was not always the correct answer. That was the moment my perspective broadened. Since then, I began to engage in techniques that emphasized reading opponents' tiles and calculating points, actively learning techniques that I had not been aware of before, and eventually reached the rank of Tenhou 10th dan.

## 4 Fourth part: Techniques and Considerations for Avoiding Riichi Bets, Practical Edition

### 4.1 Practical Examination 1: Efficiency of Tiles and Point Selection



If you want to broaden your potential waits, of course, you should discard 6s. However, in that case, you won't be able to use the dora, and the sanshoku (sanshoku) opportunity will be lost.

As the South 2nd turn, slightly trailing player in the fourth position, what should you choose?

Answer:

These practical examinations aim to understand what logic strong players use to make individual judgments that are difficult to explain with theory. To this end, I invited three Tenhou rank players and listened directly to their thought processes to provide answers.

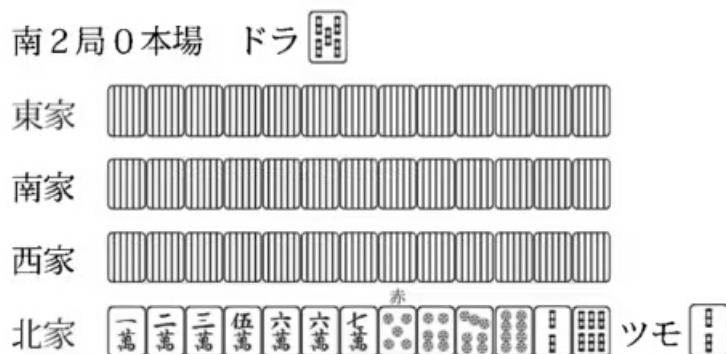
The first question is selected from my practical records. Readers who have come this far may already have guessed that I would choose to discard 8p to maximize my point potential. While it's important to aim for a ready hand, this hand has no value in drawing 6m or 358p to complete a winning hand, and it's just barely ready with a one-away tile.

Some may think the fourth position player should aim to complete their hand as soon as possible, but even if this hand were to win with a self-drawn tile (700/1300), in the next two rounds, it would desperately want to

win another hand, hardly putting it in a safe position. Therefore, for this one-away hand that has the potential to see a mangan, it's better to develop towards a sure mangan.

After discarding 8p, if you draw 4s, immediately declare riichi. If you draw 6m, discard it. If you draw 6s, continue to discard until the 7th draw. Only drawing 8s would be troublesome. Depending on the situation when you draw 8s, the majority of the time, you should choose to declare riichi.

By the way, I would also discard 8p in a flat situation in the East 1st turn. The discarded tiles from the player to your right seem to be moving quickly, and the dora is 5s, so even if you draw 3589p to complete a ready hand, it would be difficult to confidently declare riichi.



Comment from Suzume Crazy:

Discard 8p.

Although discarding 6s would open up more possibilities for completing the hand, the allure of the 567 sanshoku is still strong, and I don't want to discard it.


Comparing the shapes of 5667m and 5678p, the former is more appealing (it would be annoying to discard 6m and draw 358p), so I discard 8p.


Among 6m, 8p, and 6s, it's not about what is the correct answer or what is not the correct answer; each has its strengths and weaknesses. Make the choice you prefer and pray for luck to come your way.


Response:

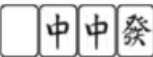
Although our answers are the same, I believe discarding 8p is the correct answer, while Mr. Suzume believes it's a matter of preference. Choosing the right move is not just about which tile to discard but should also involve quantitative analysis. I think this is an area that should be emphasized more in learning.

### 捨て牌と持ち点

東家 (19700) 

南家 (26300) 

西家 (37000) 

北家 (17000) 

Comment from Doku:

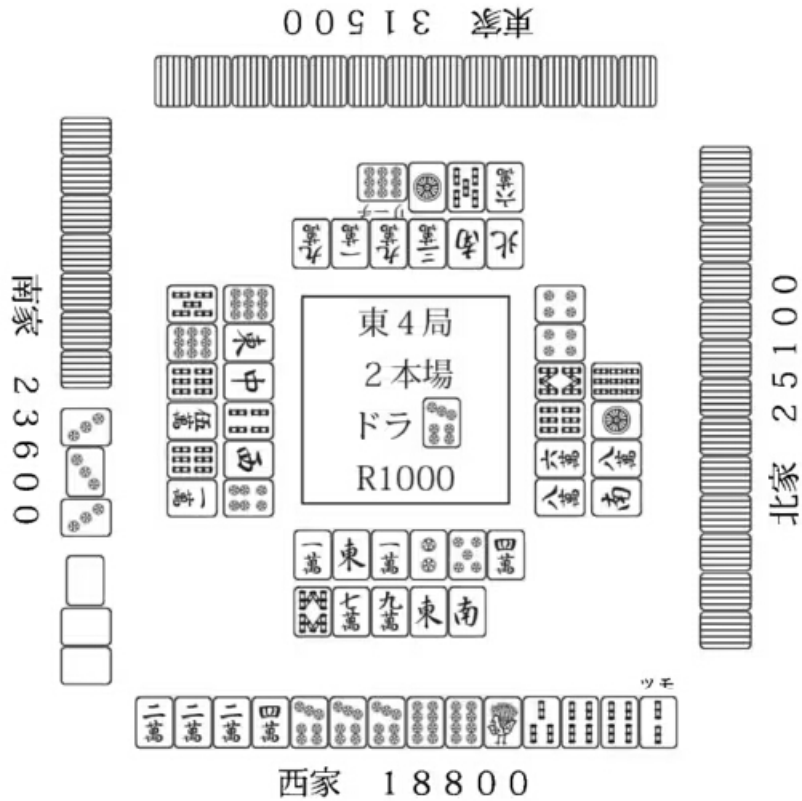
Discard 8p. Compare the three tiles of 6m, 8p, and 6s, considering their potential waits. When comparing potential waits like this, don't just consider the number of tiles but also consider the pleasant potential waits.

If you discard 6m, there are a total of 6 potential waits for ryanmen (4769p57s); if you discard 8p, there are a total of 6 potential waits (4758m57s); if you discard 6s, there are a total of 8 potential waits (4758m4769p). From the perspective of potential waits, discarding 6s has the most, but now it's already the South 2nd turn, and you don't have the South seat, so it's a situation where you need to score points. Although there is a difference of 4 tiles, being able to see a pinfu or a single yakuhai, and being able to use the dora for a sanshoku, discarding 8p is the best choice.

Response:

A difference of 4 tiles is indeed a turning point. It's not about whether speed or scoring points is more important; the most important thing is to maintain a good balance. The most suitable balance point will change depending on the situation.

## 4.2 Real Battle Examination 2: Judgment of Chasing Riichi



Although still in the East round, I have a great chance of leaving fourth place.

If I just stand by and do nothing, I could easily stay in fourth place.

So, should I go for riichi? Or maybe...?

Answer:

I would discard 2m. I judge that 4m is not very dangerous. Then why choose not to go for tenpai? It's because I have no possibility of winning.

The opponent has declared riichi with 9p. Since I already hold 3 7p, the shapes associated with 9p are likely to be 799p, 899p, or 889p. But because the dora is 7p, and 2 9p tiles have already been discarded, the actual chance of retaining a 9p tile shape is quite low. In other words, it's either 899p or 889p, and the opponent's average holding of 8p is 1.5 tiles. The next or previous player also has the possibility of holding 8p, so the average number of 8p tiles in the deck is less than 0.5.

Next is that the previous player has already discarded one 4s. Considering the front opponent, they have discarded 19p, with at least one joint in both the upper and lower sections of pins, totaling 2-3 joints. In the cracks, there's probably one joint around 6m. In other words, there are probably 1-2 joint on the bamboo side.

The next player seems to have a hand that's about to change, and straightforwardly, it seems they have 1-2 joints in the lower section of characters, the lower section of bamboo, and the upper section of circles. Because 6s is already gone, the opponent and the next player probably have 2-4 joints of bamboo in their hands, making

the chance of having 4s quite high. So, my tenpai is missing even a single tile on average from the deck, which is why I judge that attacking the dealer in the East fourth round is not a good choice.



Comment: (Step Alone):

Riichi with 4m. In Tenhou, only the fourth position loses points. I have 18,000 points as the fourth position, and one player has already declared riichi. If we separate the conditions related to this issue, I think if my point difference with the second and third positions is not that big, there's no need to force myself to attack. Of course, if I don't have any scoring potential, there's no value in attacking. But my hand has a concealed triplet of the dora, and if I draw it myself, I can even have three concealed triplets, which could lead me to victory in one go. If I run away here, I can't guarantee getting such good tiles in the next four rounds, so this is a situation where I really want to take the offensive.

Comment back:

Although if I don't have any scoring potential, there's no value in attacking, I judge the value from the perspective of having a very poor tenpai. It's just that my scoring potential is visible, while the number of tiles in the deck is hidden, so it's possible that I'm overly considering the number of tiles in the deck...?

Comment: (Kani Majin):

Although having a wait for a pair of numbered tiles is not good, even the lowest scoring potential in my hand is a mangan, and the returns are quite lucrative.

Secondly, looking at my points, I don't have the leeway to discard the hand. I think riichi with 4m is the correct move.

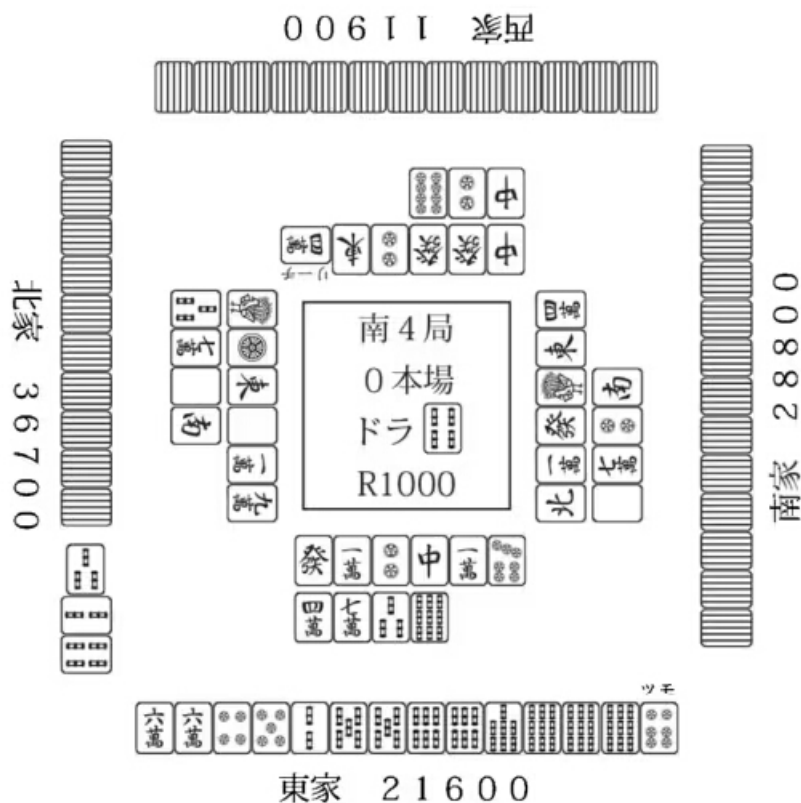
Note that for such a hand that decides the game, it's not important to read what the opponent is waiting for. Or rather, don't read what the opponent is waiting for.

Indeed, starting with 3m, then breaking up the joint of 9m, and finally discarding 6m could potentially lead to waiting for 47m. But if you choose to discard the hand because of this, it's being overly cautious.

Comment back:

The response here is also riichi. From the perspective of offense and defense, my hand is a decisive hand. What the opponent is waiting for doesn't matter. I may have overly considered the influence of the number of tiles I'm waiting for.

### 4.3 Real Battle Examination 3: Information and Choices to Reduce Fourth Position Rate



All last. Although currently in third position, the fourth position has already declared riichi.

So, should I go for riichi? Or silently wait for an opportunity to attack? Or should I discard and wait? I believe all choices are viable, but which one has the lowest fourth position rate?

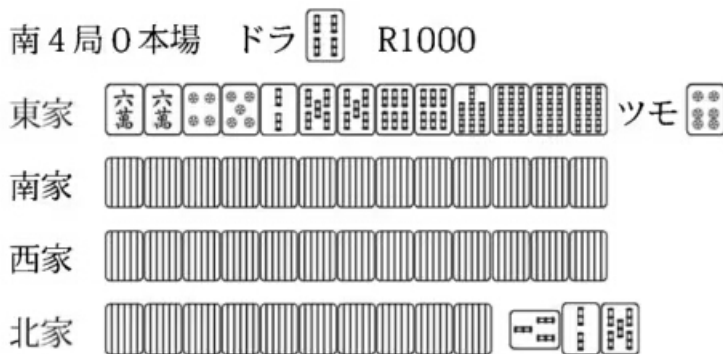
Answer:

This is an all-last situation for offense and defense judgment. Since there were no safe tiles, I broke up the 9-sou kong and folded, but then I reached tenpai. The next move is one of those **specific situations** where statistical data can't provide an answer. This is actually from my own game record, and I wasn't sure what the best move was, so I asked for the opinion of a top Tenhou player.

First, my response: I would not choose to declare riichi here. Although I can't see any dora tiles, it's a situation where a mangan tsumo is possible, and with only three safe tiles, the risk of failing to successfully fold is quite high.

This leaves the options of folding or silent tenpai for a counterattack. I would choose to discard the 2-sou and silently wait for a counterattack. Firstly, there are only five groups of suji tiles left, so the 2-sou isn't that dangerous. Given this, it's better to choose the side that can tsumo or win by ron with the 7-sou. Then, if there were more groups of suji tiles, I would choose to fold, but if the discard pile enters the third row, folding might be better even without additional suji tiles. That's my thinking.

If the opponent's win rate is very high and I have to defeat him, I would choose riichi; if the opponent's win rate is very low, aiming for a draw by folding is better. However, this turn is quite delicate. In the case of silent tenpai, my win rate is actually very low, so what about just folding directly? That's another thought. So, what did the top Tenhou player say?



Comment Suzume Crazy:

Discard 9s.

Observing the discards of the player across, he discarded a pair of green dragons and the dora indicator tile, indicating that he seems to have met the conditions for a comeback. Since Genki discarded the 9-sou in the previous turn instead of the 2-sou, continuing to discard the 9-sou here is a natural choice.

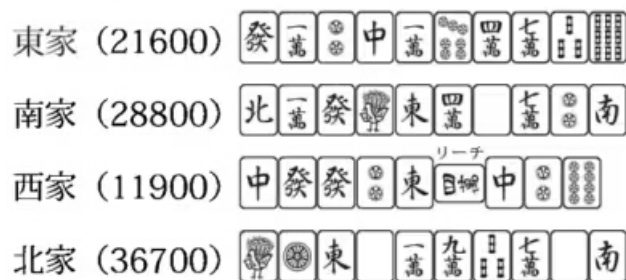
If it were me playing, after discarding 2s the previous turn, I would silently declare a kan with 9s and riichi. But this is indeed a very difficult problem.

Discard 96s, then take the opponent's last discard, and then pray for a draw.

Comment back:

The information I mainly focused on was already tenpai, while Mr. Suzume focused on the information that the number of safe tiles has increased. Indeed, what to discard the previous turn is also a very difficult problem.

捨て牌と持ち点



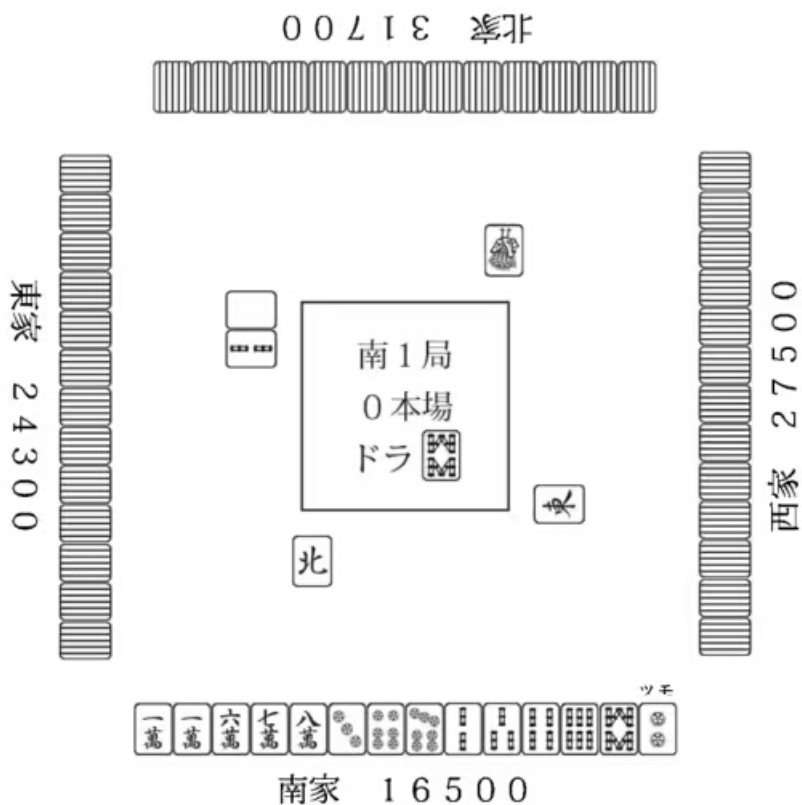
Comment: Step Alone (Doku):

Silently discard 2s. Although the urge to declare riichi arose the moment I saw this hand, let's endure it here. There are mainly two reasons for not choosing to chase riichi. First is the comeback condition for the fourth position. Currently, the point difference, including the round wind bonus, is 8700 points, meaning a self-drawn win of 1600\*3200 or less cannot reverse the situation. However, if I declare riichi, the opponent only needs a self-drawn win of 1300\*2600 to reverse the situation. The other reason is the current situation. If I choose to chase riichi here, the previous and next players will definitely choose to discard and wait, turning it into a showdown with the opponent. If I endure it here, I can choose not to win in the final round, so I should choose not to declare riichi here.

Comment back:

In all last, there are also many conditions necessary for a comeback with riichi, and it's necessary to consider how the conditions for a comeback change with the riichi stick.

#### 4.4 Real Battle Examination 4: Decision Based on Point Situation



Encountering a troublesome start in the East round, I welcome the South 1st round as the fourth position.

Dealt with a very troublesome 2p.

Although I don't like the shape of 68s, there's a difference of 3 han between the two choices. However, it's still the South 1st round, and I do want to take the initiative and gain some points.

So, what should I do?

Answer:

This is also from my real battle record, where I chose to discard 6s. In order to take the initiative, I chose the most expansive tile to discard, although the dora 8s won't be discarded until I'm tenpai. This extreme move was to compensate for points.

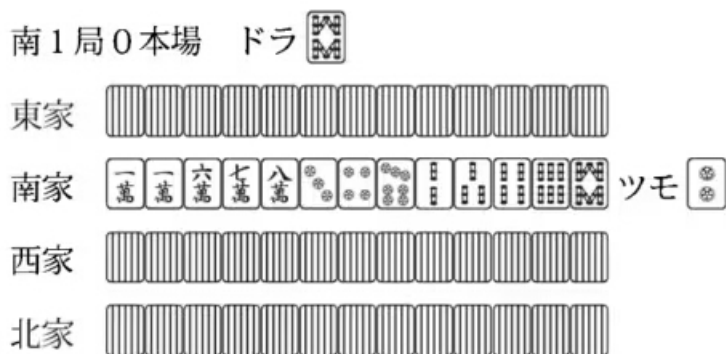
Then, I actually drew 7s. Originally, if I, as the fourth position, had declared riichi, everyone would basically choose to discard, so I kept the potential wait of 78s and discarded 23p. Later, I drew 8p and declared riichi, but it ended in a draw. I ended up eating 4th.

Although it resulted in failure, I seriously reflected after the match and still think discarding 6s was better. Although during the match, I compared the merits of 23p and 68s, now I'm thinking, under this turn and point situation, would discarding 1m be better?

Although it feels like overthinking, considering the potential final form, including a single wait for the dora, can

reach over 5200 points, it has a higher average point value compared to declaring riichi with a potential 2600 points by discarding 2-pin or 3-pin.

If it were already the 5th turn, then discarding 1m would be a poor choice. But it's only the 2nd turn now, and under this point situation, wouldn't it be good to aim for a hand that can catch up in points? That's what I'm thinking.



Comment Suzume Crazy:

Discard 6s.

With a point difference of nearly 8000 points, and it's only the 2nd turn, I really want to discard 23p to aim for bigger hands. But I still chose to securely discard 6s.

There are still 4 rounds to go, and with a point difference of about 8000 points, the value of a riichi with a plain hand is not small. Even if after declaring riichi, there's only a self-drawn win, it can still reduce the point difference with the third position by 4000 points.

All the doras and three red dora can also be utilized, so there's a high possibility of increasing the points.

Comment back:

In the South 1st round, are we considering another chance to win or do we think this is the decisive moment? For this part, I feel it's better to refer to the opinions of stronger players rather than just data.

捨て牌と持ち点

|            |   |
|------------|---|
| 東家 (24300) |  |
| 南家 (16500) |  |
| 西家 (27500) |  |
| 北家 (31700) |  |

Comment Kani Majin:

Considering the number of available tiles and the corresponding points, this is a quite complex problem.

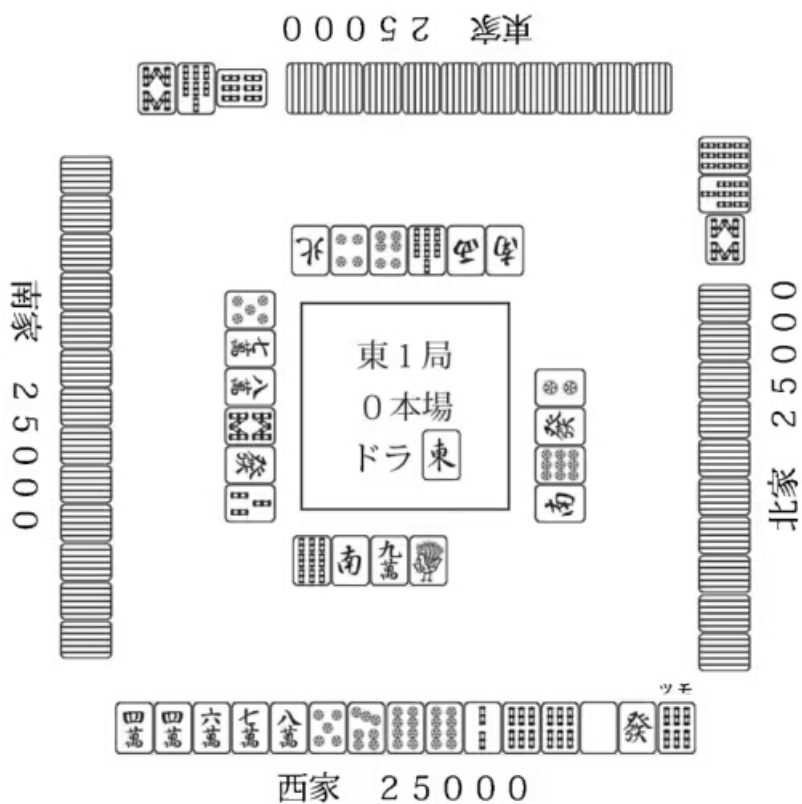
Although it's possible to calculate data on a computer, most people can't make decisive decisions in real battles. Here, the choice is between an uncertain + needing to draw the dora + utilizing the dora three colors, or a certain plain hand. It's as simple as that.

Now, being the only one lagging behind in the fourth position, aiming for a self-drawn win to catch up, but our choice is to discard 6s. The reason is to ensure the availability of the strong final form with two-sided wait. The strong final form has such value.

Comment back:

The idea is the same as Mr. Suzume's. Indeed, if it's the South 1st round, it's better to consider a reliable win. Considering the three colors are uncertain, I think it's unreasonable to discard 23p.

## 4.5 Real Battle Examination 5: Judgment when in a trailing position



In the East 1st round, both my right and across opponents have already made melds, and the discard speed of my left opponent also seems fast.

I have a shape with two-sided wait, what should I discard?

Answer:

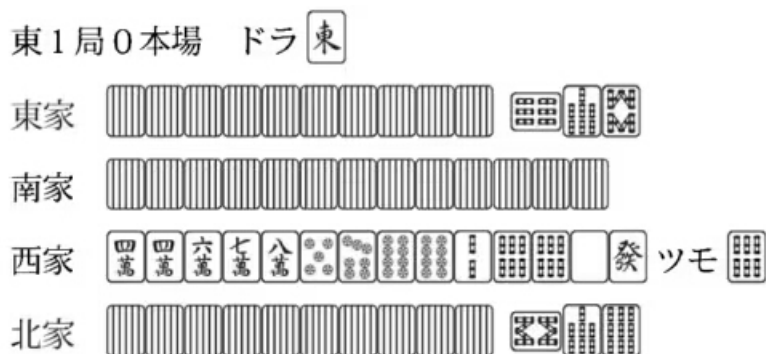
Firstly, it's worth noting the hand of my across opponent. He discarded 7s after calling 6s from 778s, then later split the 64p pair. Although it's highly likely that my across opponent is in a one-away state, it wouldn't be surprising if he's tenpai. Moreover, if he has the East wind tile, he could also have a high-scoring hand.

Although I don't know for sure if my opponents have the East wind tile, it's possible that either my left opponent, who started melding early with good tiles, or my right opponent, who melded early with honor tiles, might have the East pair or concealed triplet. My hand isn't capable of determining the outcome of the game. Although it's still early in the game, I'm not keen on discarding 2s or white dragon. While the probability of 2s dealing at this moment is low, my hand isn't worth taking such a low-probability risk.

While I'm generally inclined towards discarding defensively, I won't discard at this point. There isn't much information available on characters or bamboos, so the only option for discarding from my hand for now is the circles. If my front opponent, who discarded 64p, is waiting on the circles, it's likely to be a two-sided wait with 25p or a pair with 2p or other tiles, but since 2p has already been discarded, all circle tiles are easily passable. If my left opponent is aiming for a 789 sanshoku, I want to provoke them into attacking, so I'll discard 78p,

which could potentially be fed.

Considering the possibility of my left opponent having a later concealed hand, discarding white dragon is also an option, but if it's melded into, it would be unfavorable, and there's also a small chance of it becoming a discard that leads to a loss. Therefore, let's stick to discarding circles.



Comment Suzume Crazy:

Discard 6s.

The right opponent called a two-sided wait early on, and their discards are intimidating. I judge this as something to be wary of.

If my across opponent's hand is only worth 1500 or 2900 points, at least they should make an effort while in an open hand state.

Considering the worst-case scenario of my across opponent holding a concealed East pair, I'll discard 6s following the 3s discard from the player to my right.

My hand is a two-sided wait with low scoring potential. If I give up a win here, it'll be difficult later on. Let's keep the east wind tile as a safe discard.

Comment back:

Even at this juncture, giving up against an opponent's discard is possible in Tenhou. Therefore, being aware of this can lead to significant improvements in performance.

### 捨て牌と持ち点

|            |    |    |   |   |   |
|------------|----|----|---|---|---|
| 東家 (25000) | 南  | 西  | 南 | 南 | 北 |
| 南家 (25000) | 七萬 | 八萬 | 南 | 南 | 南 |
| 西家 (25000) | 南  | 南  | 南 | 南 | 南 |
| 北家 (25000) | 南  | 南  | 南 | 南 | 南 |

Comment Kani Majin:

Although it's still the early game in the East 1st round, the situation is quite painful given the distinct melds and discards from all players. Additionally, this hand has three joints and a kan, making the shape also difficult.

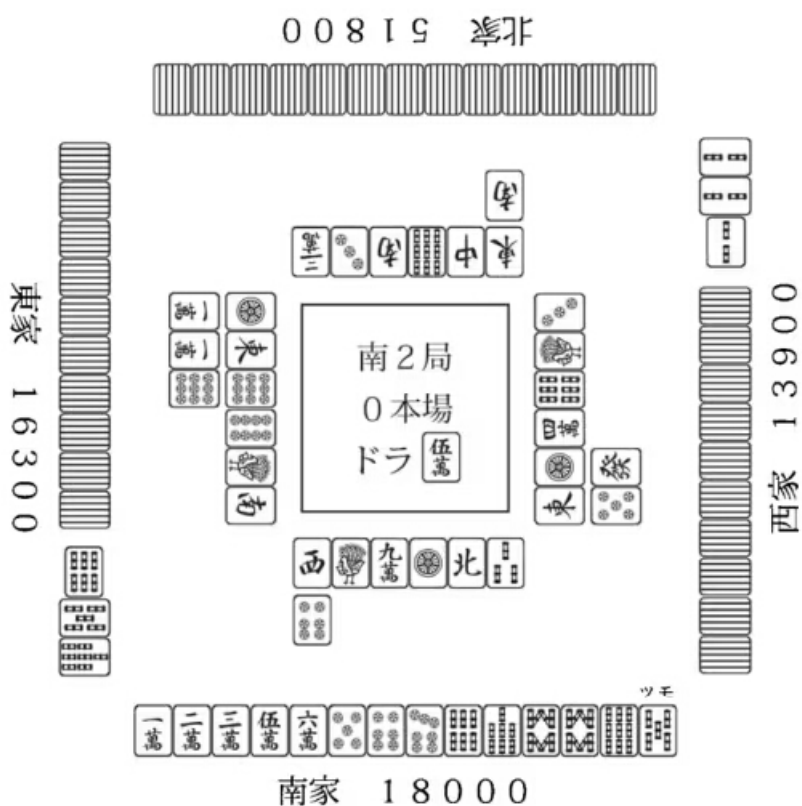
In such cases, it's not acceptable to passively play to catch up in speed. A hand with a two-sided wait and a shape like this is one of the top three taboos on Tenhou's list.

Here, with the premise of discarding defensively, my choice is to discard white dragon. This white dragon could be what my left opponent needs. If my left opponent can confront the dealer, then I can discard 6s and observe, then simply follow with a defensive discard.

Comment back:

Although everyone's discard choices are different, the evaluation of the hand and the sense of offense and defense are similar. Indeed, with such a scattered hand, one cannot win by being aggressive on Tenhou.

## 4.6 Real Battle Examination 6: Harsh Choices Emphasizing Turn Order



In the South 2nd round, with the points of all players closely entangled, I find myself in tenpai. Although the high-end of the hand has the potential for a mangan win, the low-end is only worth 2000 points.

While I'm eager to win big, I absolutely don't want to deal into anyone's hand.

In a showdown situation, it would be straightforward to just declare riichi, but what about in Tenhou?

Answer:

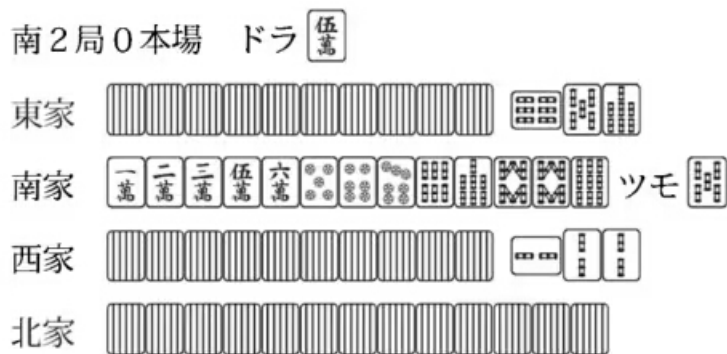
I chose to declare riichi in the actual game. Referring to the baseline mentioned in Chapter 3 Theory of Silent Listening (2), even though I'm currently in second place, the point difference with the fourth place is still within 8000 points, which doesn't meet the conditions for silent listening.

Moreover, in a silent listening scenario, one must also consider the danger of what tiles can be discarded and how the next player will attack. Regardless of whether I win or not, I'll be facing an all last situation with very delicate point differentials in the future, and the choices then will become quite harsh. Even a single mistake at that time could negate the advantages brought by silent listening. Therefore, I believe it's better to declare riichi here, which is a simpler choice.

However, reconsidering it now, I believe that silent tenpai is the better choice. The advantage of silent tenpai is that you can choose to fold later, and the win rate is also higher. The player to my left's open melds were accompanied by discards of 1-man, 1-man, and 9-pin, which just looks very troublesome. Therefore, both I and the leading player across from me will be more wary of finishing in fourth place. In this case, a safe tile like

4-man for the player to my left would likely be discarded easily.

On the other hand, if I declare riichi, both the player to my left, who is not in tenpai, and the leading player across from me will probably choose to fold. This aligns with the situation described in "theory of silent tenpai (1)" where the win rates differ greatly. Additionally, if I win, it naturally prevents the player to my left from winning, which has a value greater than the 2000-point difference in score.



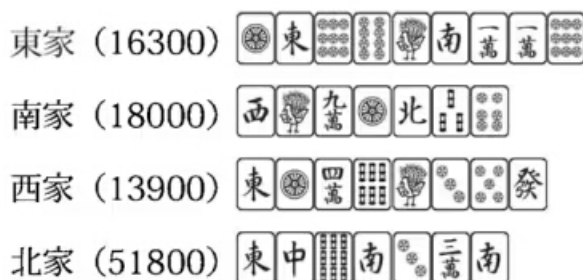
Comment by Step Alone:

Discard 9s and choose silent tenpai. Are you serious? someone might say, but silent listening is better in this situation. Firstly, consider the point situation. Although the difference isn't large, I'm still in second place, and first place is quite far away. If possible, I'd like to maintain my second place calmly. Next, consider the state of the tile river. Both my dealer and my right opponent have already melded once. But my dealer's hand sequence is slow, starting from south, splitting 1s joints, and then 9p. Conversely, the tile river of the fourth player is strongly suggestive of being tenpai. In this situation, if I choose silent listening, then both my dealer and my right opponent will be more inclined to consider how to deal with the fourth player. Therefore, rather than the desperate move of competing with the fourth player, silent listening is better.

Comment back:

Although my answer is the same, if I choose silent listening here, when would I choose to not win? Such choices occur every turn. Perhaps the Tenhou player is someone who can make all these choices correctly.

捨て牌と持ち点



Comment by Kani Majin:

It's already the South 2nd round. Although winning a mangan score is still only second place, it seems like a situation where avoiding fourth is possible. There are two choices in front of me: declare riichi or silent listening.

The opponents competing with me for fourth place, my dealer and my next player, have already melded, and 47m is a cross wait for the dora. It's not an easy tile to discard.

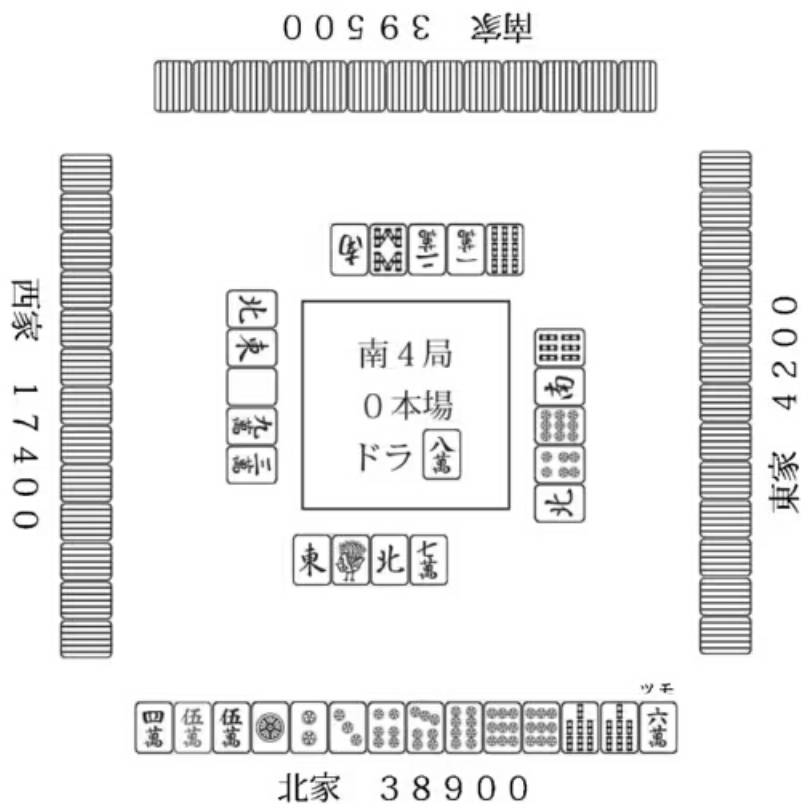
In other words, the advantage of declaring riichi is stronger, and the advantage of silent listening is weaker. Based on this judgment, I choose to declare riichi on 9s.

In Tenhou, where avoiding fourth place is a priority, the intimidating effect of declaring riichi is particularly significant, which is also an important factor in this decision.

Comment back:

I thought 4m was the fourth player's genbutsu, so I thought it would be easily discarded, but Mr. Kani Majin made the opposite assessment, thinking that 4m wouldn't be easily discarded. How to handle the information you see is a difficult part of mahjong.

#### 4.7 Real Battle Examination 7: A Strike Aware of the Expected Value of Points



No need to worry about declaring riichi and becoming fourth in an all-last situation.

From the point situation, I'm a slightly behind second place, far from third, and aiming to strike first place. But it would be troublesome if the dealer in fourth place was in riichi.

What's the choice with a higher expected value of points?

Answer:



In the actual game, I chose to declare riichi and discard 5m. Then, the automatically drawn tile was melded by the dealer, and in the end, I dealt into a 12,000-point hand with a concealed kandora.





The dealer in fourth place will definitely make fast hands. If their hand can meld tiles, then when the player across me declares riichi, it's as if they can draw twice the number of tiles. Moreover, the dealer's hand seems fast, with a high possibility of attacking. Thinking this way, declaring riichi is risky... but I still believe it's the right choice for this hand. Assuming I pass the riichi stick and deal into the dealer's 12,000-point hand, the point situation would be as follows:





- Player 1 (across): 39,500 points;
- Player 2 (myself): 25,900 points;
- Player 3 (dealer's right): 17,400 points;

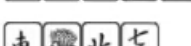
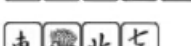
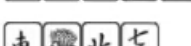


### 捨て牌と持ち点

東家 (4200) 北  南 

南家 (39500)  一萬  二萬  南 

西家 (17400) 北  東  九萬  三萬 

北家 (38900) 東  北  七萬 

Comment by Kani Majin:

An all-last where nobody has the intention to fold is actually a relatively rare situation.

Encountering such a scenario in real games, just in case, it's still preferable to aim for a mangan win or silently listen for the hand to complete in one go.

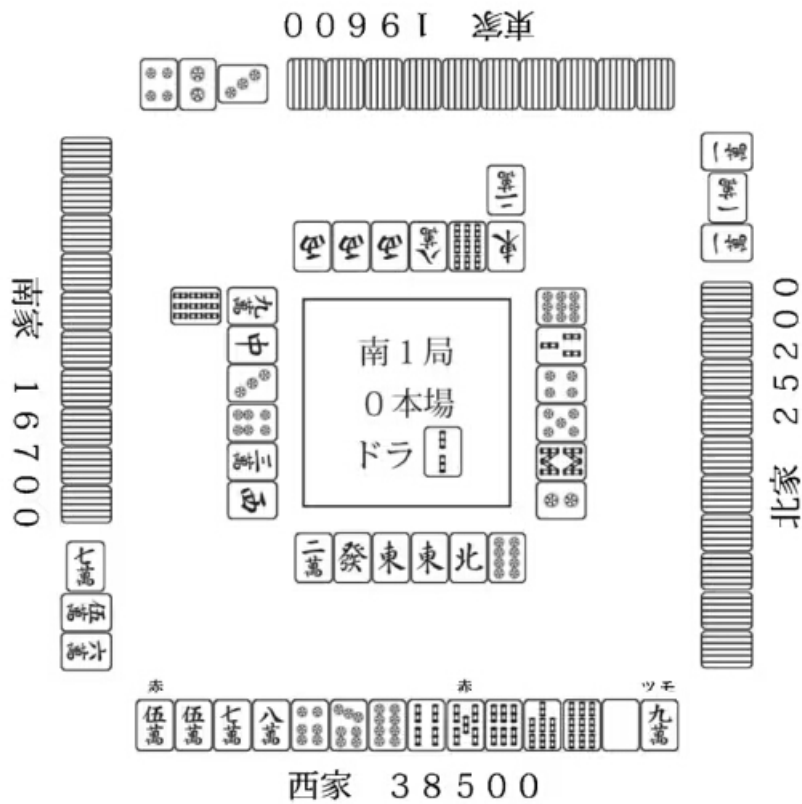
But in this case, since nobody will fold, tiles that can be won on will be more easily discarded, which is unprecedented in normal situations.

For the player across from me, they will also send signals. In that case, don't hesitate, choose to declare riichi immediately, especially with the double pon of 9p already discarded.

Comment back:

Purely considering the win rate, declaring riichi is still the only choice. Facing a riichi, considering the signals is also a characteristic of Tenhou. In reality, what will happen depends on the player across from me, but this factor is something I should consider.

#### 4.8 Real Battle Examination 8: Choosing Based on Development and Tactics



As Player 1, I welcome the start of South 1. Everyone has already made melds, and looking at the remaining tiles, it seems we're nearing the endgame.

At this point, my hand tenpai with two dora. If I can win on this tile, my chances of being in first place will be high. But I need to discard the white dragon. Should I discard it? And should I declare riichi?

Answer:

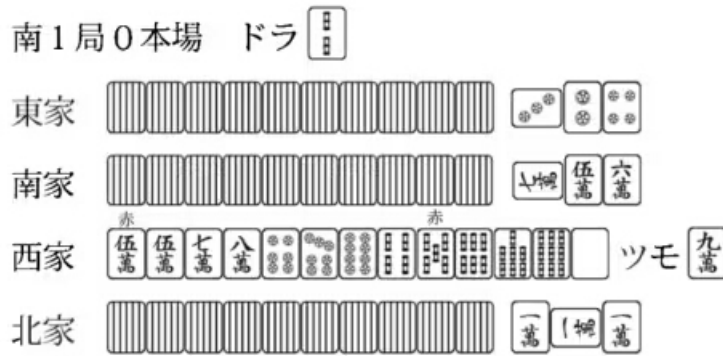
First, I will discard the white dragon. The player to my right is going for a mixed suit, and it seems they haven't reached tenpai yet. The player across from me has melded a pair of west tiles, so the white dragon could potentially be useful for them too. Although the yaku, points, and speed of the player to my left are still unclear, I am already in tenpai, and their melds do not intimidate me into folding.

The question now is whether to declare riichi. If I do, the player to my right, who hasn't discarded any honor tiles yet, seems likely to fold. The dealer, considering the point situation, also has a high chance of folding. Therefore, the only one likely to attack will be the player to my left. However, as we are in South 1 and the point gap with the dealer is small, it's unlikely for them to aggressively attack with just a one-away tenpai. Considering these factors, it seems declaring riichi is a good option.

However, the suspense lies in the tile discarded by the player to my left: 9s. If they have at least a pair of 8s, winning on this tile will be quite difficult, and if they attack me, it will be a troublesome situation. Furthermore, I am already in a comfortable lead as Player 1. In South 1 of Tenhou, even with this level of lead, it's not

considered a neutral game anymore, and I should think more conservatively.

But as mentioned earlier, it will be difficult for anyone to attack, so the risks mentioned above are not very high. Therefore, it's valuable to suppress the player to my right, who seems to be making distant and large melds. If I stay silent, they will likely meld the white dragon, but if I declare riichi, they will likely discard it, which is worth considering given the current point situation.



Comment by Suzume Crazy:

Discard the white dragon and stay silent.

Optimistic thoughts like There are still 8s in the mountain, and everyone will fold if I declare riichi are unnecessary and unreliable.

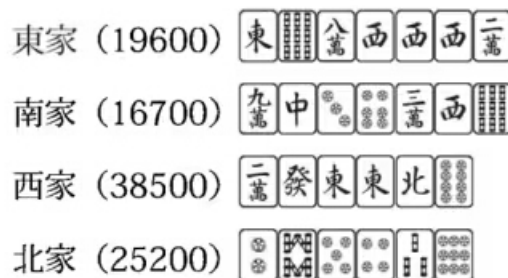
Players who cannot determine victory with their hand will choose to fold when faced with a riichi, but if their hand can determine victory, it's common for them to engage in a one-on-one situation.

And I believe that allowing more players to participate in the battle, increasing the chances of winning or horizontally shifting the lead rate when the hand's point value is low, is a good strategy for first place.

Comment back:

Although reading the tiles is necessary, being first place is more certain information, and judgments should be made based on that. This is quite convincing. Silent waiting indeed seems to be the better option here.

### 捨て牌と持ち点



Comment by Kani Majin:

All players have already melded, and as Player 1, I am the sole leader with a two-away tenpai with the remaining dora. So, should I declare riichi or stay silent?

My choice is to discard the white dragon and stay silent.

One reason is that there are three possible improvements with two or more sides, and drawing a 9p could also reveal a sanshoku.

Another reason is that, in this point situation, there's no need to take unnecessary risks to increase points. Later on, if I draw a 3s, I will choose to declare riichi, and if I draw 56s, I will continue to stay silent.

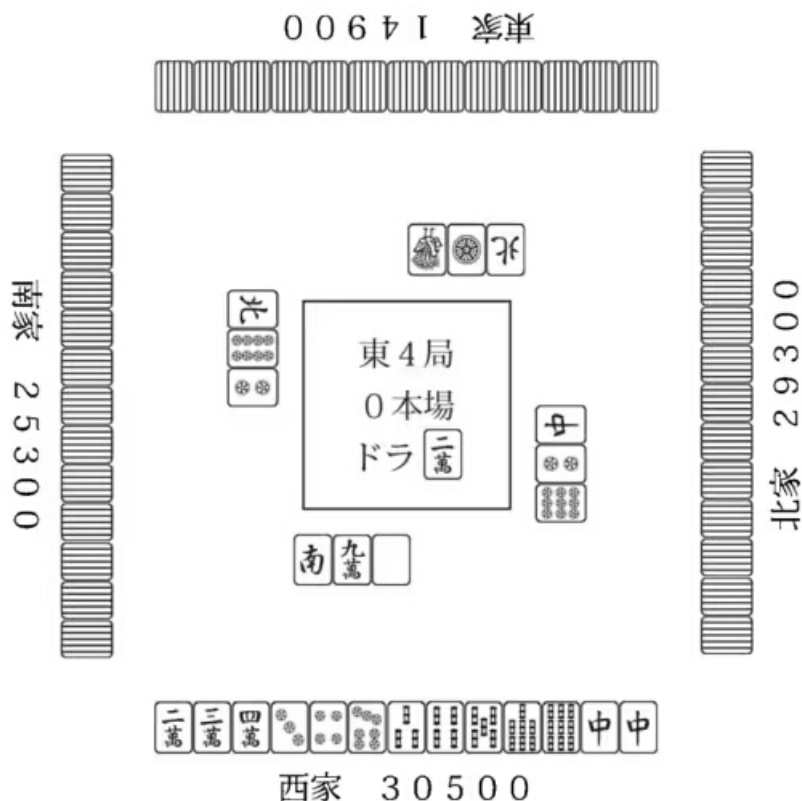
Comment back:

Staying silent it is. Indeed, there's no need to bear unnecessary risks when it's not necessary to win. Being able to judge this situation is the most important factor.

## 4.9 Real Battle Examination 9: The Dilemma of Calling on a Pair

As a slight leader, I welcome East 4. The current issue is whether to call on a pair.

Choosing to meld tiles will increase the chance of winning. But how will it fare in Tenhou?



Answer:

This issue resembles the one confirmed in the Recommendation for Keeping a Closed Hand section, but here I will choose to call.

In the aforementioned section, the conditions for passing are believed to be:

- A hand that, even if melded, can be quickly overtaken by others.
- A hand that can determine victory even in a closed state.

And now both of these conditions are met.

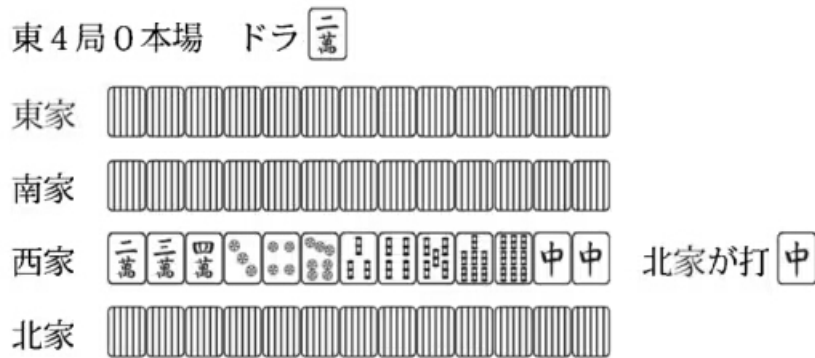
For this hand, if I call on the pair, it will become a one-away tenpai with seven possible winning tiles. With this level of speed difference, it means I can create time to only listen to my own tiles. In this way, there is value in having a preemptive tenpai.

More importantly, this hand is very strict even in a closed state. If I draw a double-sided tile, I will listen to the kanchan of 8s, and the point value is only 2600.

Considering the point situation, we are already in East 4, so let's directly call on the red dragon to seek a win. If the bamboo tiles have two sides and I can see a sanshoku shape, like in the diagram below:



If the shape is like this, the hand's value in a closed state will be lower compared to keeping it closed, so I choose to pass.



Comment by Suzume Crazy:

Call on the pair.

I used to never choose to call, but lately, I've been calling on hands like this.

In a closed hand situation, even if the hand develops into a riichi with a kanchan of 8s, it won't be very satisfying.

This hand is already worth 2000 points, and although there's a possibility of it being higher than 2000 points, there's nothing to complain about.

Unless I have a shape with two sets of double-sided tiles, I'll call and try to digest the hand.

Comment back:

捨て牌と持ち点

|            |  |  |  |
|------------|--|--|--|
| 東家 (14900) |  |  |  |
| 南家 (25300) |  |  |  |
| 西家 (30500) |  |  |  |
| 北家 (29300) |  |  |  |

Perhaps Mr. Suzume would pass? I briefly thought so, but Mr. Suzume still chose to call. Just as written earlier, if there are two sets of double-sided tiles, I will still choose to pass. Please clarify this boundary.

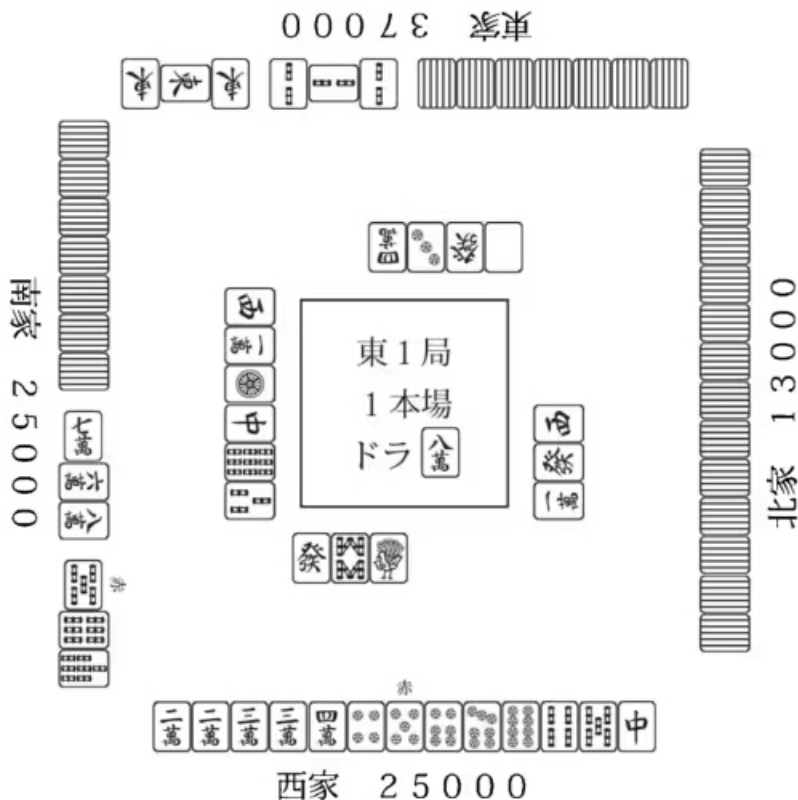
Comment by Step Alone:

Meld tiles. For tiles like this, if you choose to pass, there must be advantages in the situation when you pass. In simple terms, (1) there are many potential winning tiles in the situation when you pass, even with a good shape; (2) the defensive capability will be greatly reduced when melding tiles, and some other situations. But here, if you choose to pass, only drawing a kanchan of 8s or 25p can make you tenpai, while after melding tiles, drawing any of the seven types of tiles, 2534p789s, can make you tenpai. Even if you're temporarily tenpai on a single tile, you can change your listening at any time. Faced with a hand like this, choosing to pass first is not a good choice. As the rounds progress, the risks you face will also increase. Remember, when you have to meld tiles, meld them first.

Comment back:

Some people might say, 'Because it's Tenhou, I'll pass,' and indeed, such hands are also discussed in this book. As a comparison, I tried to provide an example of a hand that should also be open in Tenhou.

#### 4.10 Real Battle Examination 10: The Dilemma of Matching the Opponent's Speed



I welcome East 4 as a two-away tenpai with a good shape, but both the dealer and the player across have already melded two sets of tiles.

Melding tiles would lower the potential points of my hand. Should I call the 3s from the player across?

Answer:

This is a question about melding tiles. My hand appears to be a two-away tenpai with the potential to determine victory in a closed hand situation, but with two players already melding two sets of tiles, I'm already at a disadvantage in terms of relative speed. Choosing to call to catch up in speed would lower the potential points of my hand, but after calling, it would become a one-away tenpai that can either call or meld.

My choice is to pass.

As mentioned in the Recommendation for Keeping a Closed Hand section, even if I choose to meld tiles, I cannot expect the advantage of being the first—the time when only I am tenpai, so this is a difficult choice.

Of course, it's necessary to catch up in relative speed for hands where there is some improvement in potential points or the possibility of winning after melding. But for a hand that will only be a one-away tenpai after melding, the decision is difficult, and the potential payoff for melding is very weak.

Furthermore, the possible draws now include 12345m3456789p3456s and the 3s. This is a wide range of possible



However, it's better to endure here. If I choose to meld tiles here, I will waste the highest potential points for a self-drawn hand, possibly fixing the points at 2000 depending on the riichi and the dora. This is truly a waste. In other words, my choice is to pass.

For hands with many possible draws and born for keeping a closed hand, it's best to ignore the progress of others' hands and focus on developing my own hand.

Comment back:

The answer here is also to pass. In comparison to the Showa era, the modern choice is to prioritize the effectiveness of melding tiles. *The Birth of AI: What Does it Bring?*

#### 4.11 The birth of AI: what does it bring?

There is currently a buzz surrounding the artificial intelligence (AI) known as Baku-Da on Tenhou. Developed as part of a research project by a student at the University of Tokyo Graduate School, this AI earned qualification to participate in the highest level of online mahjong, the Tenhou platform, achieving the rank of 7-dan with a rating of 2000R in December 2015.

However, what's interesting is that upon observing Baku-Da in action, its gameplay appears chaotic. At times, it makes seemingly inexplicable decisions, such as declaring riichi without any yaku or prioritizing the discard of common safe tiles when folding. Despite this, its long-term performance is on par with top players on Tenhou.

Previous columns have discussed errors in choices that humans might overlook, where seemingly weak decisions are actually strong in disguise. In the case of Baku-Da, there may be hidden secrets in the disparity between its appearance of weakness and its actual strength. This suggests that there are strengths in Baku-Da that we are unaware of due to our inability to comprehend them, hence why we fail to recognize its power. That's how I see it.

Utilizing AI, statistics, simulations, and the intuition or experience of top players, I aim to delve deeper into the truth of mahjong, employing every tool at my disposal.

## 5 Tenhou discusión panel

Special Feature: Tianfeng Discussion Panel

Guests:

Third-generation Tianfeng Rank: Stand Alone(Doku).

Fourth-generation Tianfeng Rank: Suzume Crazy.

Eighth-generation Tianfeng Rank: Kani Majin.

This discussion panel is adapted from the live broadcast content of Zen'nihon mājan kyōkai chan'neru EX on Nico Live on August 30, 2015.

Hirasawa Genki (Host): Please introduce yourselves briefly.

Stand Alone: Hello, everyone. I'm Stand Alone, the third-generation Tianfeng Rank. Today, I've been asked many questions related to mahjong, recalling everything I've done so far while coming to this discussion panel. However, it's been a long time since I've had a simple conversation like this, and there are also many things I can't talk about. Anyway, please guide me.

Kani Majin: I'm Kani Majin, the eighth-generation Tianfeng Rank. I'm honored to participate in this discussion panel with several other Tianfeng Ranks today. I've been playing mahjong for a long time, but I still want to talk about the similarities between us here.

Suzume Crazy: Hello, everyone. I'm Suzume Crazy, the fourth-generation Tianfeng Rank. I'm not very good at talking, so I might trouble Mr. Stand Alone and others. Please guide me.

Hirasawa: Today's theme is the differences in the trajectories of the three of you on the path to becoming Tianfeng Ranks. Speaking of which, I've talked to many players from various mahjong parlors and asked questions like Do stronger players have more practical experience? or Do parlor staff have experience? Mr. Fukuchi Makoto once said, If you don't play mahjong frequently in real life, you won't become a Tianfeng Rank. Mahjong is not just about cutting tiles; it's about choosing what kind of mahjong life you want. I think there might be some tips here that can make people stronger, so I invited the Tianfeng Ranks here to discuss the similarities and differences in this aspect of mahjong life. First, please talk about what fields you fought in before encountering Tianfeng and what your feelings about mahjong were.

Stand Alone: I got into mahjong in the third year of junior high school. At that time, I had no idea about the rules of mahjong and was invited by someone with the words, Hey, want to play mahjong today? Without having played mahjong in games or in real life, I started playing at the mahjong parlor like that. That's how I got into mahjong.

Hirasawa: That's impressive. You went to the mahjong parlor in the third year of junior high school.

Stand Alone: That's right (laughs). I still remember, at that time, we only had one coin-operated locker open, and there were five of us at a table, with the loser rotating out. We bundled up everyone's jackets together and put them in the locker, then closed the locker door, and initially hid the key.

Hirasawa: Haha, I see.

Stand Alone: I played mahjong in real life until I graduated from college at the age of 22 or 23. I played about three to four thousand games a year.

Hirasawa: Three to four thousand games is quite a lot, even on Tianfeng.

Stand Alone: Yes, indeed. I've played that many games. However, I've played even more since then.

Hirasawa: So, in your mahjong career, how many hanchan games have you played?

Stand Alone: I've played about forty thousand hanchan games in total, including Tianfeng and real-life mahjong.

Hirasawa: That's impressive. The number of matches is indeed important.

Stand Alone: Not really, but... I was also asked by the Nico Live comments earlier, Is it true that you've never abandoned a hand? Looking back now, I probably didn't improve much in mahjong from around the age of 15 to my mid-twenties. To be honest, a lot of my mahjong playing was based on intuition, and it wasn't until I started playing Tianfeng that I began to think before making moves. So, in that sense, starting to play Tianfeng was really great.

Hirasawa: I see.

Stand Alone: I realized that mahjong requires using your brain only when I started playing Tianfeng (laughs).

Hirasawa: So, you grew from playing Tianfeng to eventually becoming a Tianfeng Rank.

Stand Alone: That's right.

Hirasawa: Before you started playing Tianfeng, what was Mr. Kani Majin like?

Kani Majin: I initially played mahjong at home, starting from around the fifth or sixth grade of elementary school. I started playing seriously in real life after I started working, about 15 years ago, when my younger brother persuaded me. I won quite a bit, and it seemed like I could participate in tournaments. So, I joined the strongest battle, made it to the semifinals, but faced defeat there. That's when I started learning to play mahjong and started playing online mahjong.

Hirasawa: That wasn't Tianfeng, then.

Kani Majin: No, it wasn't. I reached the fourth dan on Tianfeng and gradually shifted to playing Tianfeng.

Hirasawa: Now, Suzume Crazy, could you tell us about it?

Suzume Crazy: I got into mahjong in the first year of junior high school when my brother started playing Ultimate Mahjong on Super Famicom Nintendo Switch Online. At that time, I didn't know the rules at all and couldn't win even

Stand Alone: Well, I don't know if the reason I advanced from sixth dan to seventh dan is due to a real change in my strength. It's just that, at that time, everyone was only playing Phoenix East. It was a domain only for highly skilled players like Mr. ASAPIN and Mr. Kukyoku. So, I gave it a try, but of course, I couldn't win against them. I thought, Who are these people, really? That's when I started to realize, maybe I'm actually weak in mahjong? Also, that's when I found out, Ah, you can actually study this game.

Hirasawa: Looks like you can review now.

Stand Alone: In my life, when it comes to reviewing, I haven't studied since I got into mahjong in junior high school, but I've reviewed since the third year of junior high (laughs). Well, there were indeed mistakes in my play style. I thought about where I was going wrong, and it seems I wasn't considering the risks.

Hirasawa: I see.

Stand Alone: So mahjong can be played like this, I looked at the game records and had that feeling for the first time. From then on, I opened the door to a new world.

Hirasawa: Indeed, most people generally think they play well, right? However, you'll definitely hit a wall somewhere and then face the dilemma of whether to honestly confront yourself.

Stand Alone: At that time, it was great to think, Ah, maybe I'm quite weak.

Hirasawa: Indeed, being able to confront oneself honestly at that time is indeed a major divergence point.

Stand Alone: At that time, if you made the wrong choice, you might have been wrong forever.

Hirasawa: But isn't mahjong a game where even if you realize you're wrong, you just continue to be wrong (laughs)? Mr. Kani Majin and Mr. Suzume, how did you adjust your play styles when you hit a wall for the first time at the first dan level on Tianfeng?

Kani Majin: For me, when I started playing online mahjong, it was originally for the purpose of improving my real-life mahjong skills. Rather than saying my play style changed...

Hirasawa: It was for the purpose of learning from the beginning.

Kani Majin: To learn real-life mahjong, I started playing online mahjong. I tried to change my play style in online mahjong, well, with the idea of trying to learn a little bit. I started playing Tianfeng to practice real-life mahjong. However, well, I hit walls at many levels. From Tokujou to Phoenix tables, then to eighth and ninth dan, then dropping ranks, experiencing the dropping of ranks at various levels. Every time I dropped a rank, I learned strategies for playing Tianfeng with regret, and then I was able to advance a bit again, and then I climbed to tenth dan in one go.

Hirasawa: Mr. Kani Majin, you have a reputation for playing a lot of matches on Tianfeng.

Kani Majin: Ah, I've been playing since Tianfeng started, it's been about ten years now. I've been playing since before I reached Phoenix tables.

Hirasawa: So, compared to when you first started playing, your play style has probably changed a lot.

Kani Majin: It's completely changed. When I was still at Tokujou, I probably only had Tokujou-level skills, and my play style was completely incompatible with Tianfeng.

Hirasawa: Long-term performance is indeed important, but in this long-term process, play styles will also change.

Kani Majin: Indeed, I feel like I've learned a lot at each level.

Hirasawa: And what about you, Mr. Suzume?

Suzume Crazy: I advanced to ninth dan smoothly, it was the fastest to reach ninth dan at that time, it took about 660 matches.

Hirasawa: 660 matches (laughs).

Suzume Crazy: I just played with the same feeling as usual. Normally, I don't make late discards or very small melds, but after I started watching Tianfeng, I thought, Oh, there's this kind of play style too, and then I started to use this play style a little bit. My meld rate was 25% when I reached seventh dan, but now it's about 30%, which I think has changed a lot. My riichi rate has also decreased a lot, I think it's the result of adapting my play style to Tianfeng.

Stand Alone: Speaking of which, after trying to change my play style, I got some interesting data.

Kani Majin: Indeed, there are such things. Comparing meld rates, riichi rates, and mahjong memory, it's really confusing, isn't it?

Hirasawa: So far, the play styles have been described as relatively flexible, but comparisons between individuals can also be made through numbers.

Suzume Crazy: After reaching ninth dan, it felt like I entered hell mode. There were times when I only played one or two matches a month, but eventually, I steadily climbed to the Tianfeng Rank.

Stand Alone: Suzume Crazy, you don't play on your days off.

Hirasawa: Ah, it's a well-known topic.

Suzume Crazy: When I don't have the emotional capacity, wouldn't I not want to play mahjong?

Hirasawa: It's not enduring not playing for the sake of performance, it's just simply, Well, I won't play today.

Suzume Crazy: Both... it's about half and half.

Stand Alone: Were there no days when you really wanted to play after coming home?

Suzume Crazy: None. I only look forward to the weekend.

Kani Majin: As for me, whenever I have free time, I want to play when I get home.

Suzume Crazy: I've only watched matches on Tianfeng.

Stand Alone: You're not Crazy at all (laughs). That's really Crazy. (Note: Crazy in Japanese, (kureijii), is used humorously here.)

Hirasawa: Does Suzume have any other interests? That's what some comments are asking.

Suzume Crazy: I played Dragon Quest X for about three years.

Stand Alone: I completed all the Dragon Quest games.

Hirasawa: That's really dedicated.

Kani Majin: You went that far indeed.

Hirasawa: (Comment) What do you think are the differences between those who can reach the Tianfeng rank and those who cannot?

Stand Alone: It might be a bit direct to put it this way, but I believe whether or not you can reach the Tianfeng rank from tenth dan is determined by short-term fluctuations.

Hirasawa: Well, indeed.

Stand Alone: I think this has a significant impact. When I first reached tenth dan, I played for a while and then returned to the starting point. Then, I reached the Tianfeng rank from the starting point in only about 55 matches.

Hirasawa: I see. Although as your rank increases, the points lost for dealing into a hand will increase, the strategy of avoiding dealing into a hand will always remain the same, whether you're seventh dan or tenth dan. But the impact of this strategy is minimal in short-term fluctuations.

Stand Alone: For example, in the short term, being able to maintain a stable rank may depend on whether you can deal into only two hands out of 40 matches.

Hirasawa: In the long run, many people have reached ranks above tenth dan, and many have come close to the Tianfeng rank. Next is a comment saying, I've been playing mahjong for several years, but I can't seem to progress past fifth dan, indeed, I think there are many people who hit a wall around fifth or sixth dan. For such situations, do you have any common advice?

Kani Majin: Indeed, in Tianfeng, you can't afford to lack awareness of dealing into hands. Even if you only achieve this, I think there will be significant changes.

Hirasawa: Even if you're strong in real-life mahjong to a certain extent, I often hear that to reach around sixth dan, you need corresponding strategies for Tianfeng.

Kani Majin: After reaching fifth or sixth dan, the points lost for dealing into a hand gradually increase. I used to play very casually offline, so my dealing into a hand rate should be quite high, but indeed, because I'm playing on Tianfeng, I've always thought, It would be better if my dealing into a hand rate could be lower.

Hirasawa: Let's change the topic. Recently, Mr. Fukuchi and Mr. Kani Majin participated in a program where it was mentioned that only those who play mahjong in real life can reach the Tianfeng rank. Indeed, that seems to be the case superficially. In the Tianfeng rank, the only person who only plays offline mahjong is Mr. Mark2 (note: second-generation Tianfeng rank, smiley face). On the other hand, it may also be because there are simply too many people who play mahjong in real life. So, is experience with real-life mahjong necessary to reach the Tianfeng rank? How important is it? Let's discuss this next.

Kani Majin: Although the rules of real-life mahjong and online mahjong are different, I think there are many common points, such as tile efficiency and discarding. And if you want to improve your skills through these common points, you can also practice a lot of matches online, so I don't think experience with real-life mahjong is necessary.

Hirasawa: What about you, Stand Alone?

Stand Alone: I don't think it's necessary either. However, considering whether you can advance your hand through tile efficiency and perform better in simple profit and loss situations, you'll find that mahjong is not a game of managing off-the-board information. Although this off-the-board information exists in online mahjong as well, it's not as obvious as it is in real-life mahjong.

Hirasawa: Although this is important in real-life mahjong, it's just a hot topic in online mahjong, and some people don't pay much attention to it.

Stand Alone: So, rather than how to play because it's online mahjong or how to play because it's real-life mahjong...

Hirasawa: Ah, well, that's right, it's like that if you're only in one community.

Stand Alone: That's right.

Hirasawa: People in various communities have broader perspectives. That is to say, if players who play both online and real-life mahjong can form a community, their perspectives will also be broader.

Stand Alone: Especially when I see discussions online or on Twitter that are beyond my understanding, I tend to resist strongly.

Kani Majin: Ah, that's true.

Stand Alone: But, for example, I don't really understand how Mr. Suzuki Taro (affiliated with the Japan Pro Mahjong Association) plays, but I think his discards contain a lot of meaning. For example, regarding this tile river, how opponents would view it if you discard a certain set. I think it's important to understand how to comprehend things that are beyond your current level or perspective.

Hirasawa: Becoming stronger ultimately means gaining new knowledge or techniques, and of course, it means things that you currently don't understand. If you don't consider this and reject it just because a technique is different from what you currently have, is that good? I've been thinking about this a bit. - So, the next comment is about how to view tactical rank drops (in the Tianfeng ranking system, in some cases, dropping ranks can actually be advantageous for gaining points), what are your thoughts on this behavior?

Stand Alone: I would never do that, and if people around me did, I would find it very unpleasant.

Kani Majin: I can understand the reasons why someone might do it, but I would never do it myself. As for why, it's because I believe it's more important to steadily play each match, accumulate experience, and learn

from it. Tactical rank drops like this are a waste of learning opportunities.

Suzume Crazy: I've never done it, and I would never do it. If someone I support did it, I would be very sad, but people who want to do it will still do it...

Hirasawa: It's a very difficult question. If we only consider it from the player's perspective, tactical rank drops might be the better choice, right?

Kani Majin: Well, it's not necessarily bad or evil to do so. It's just that we wouldn't do it.

Stand Alone: Basically, mahjong is built on the consensus of playing with the same philosophy. Therefore, I hope to maintain my consistent philosophy of playing mahjong.

Kani Majin: Mahjong is also a game that tests your mentality. So, if you simply give up because you're about to drop ranks, I think it will affect your future games. To cultivate an unyielding mentality, you shouldn't give up easily at times like this.

Hirasawa: Some people think that we should establish a table higher than the Phoenix table, what do you all think?

Kani Majin: Hmm... I think we should wait until there are more people.

Stand Alone: I think it depends on what the goal is.

Hirasawa: It's a very difficult question indeed. However, if we further select players, the overall range of variation in performance will actually narrow down. From the perspective of comparing strengths, what would be the effect?

Kani Majin: I think the Phoenix table is already sufficient. However, I believe that participating in matches at the Tianfeng rank is also meaningful.

Stand Alone: It's a matter of what motivates you to play. My motivation for playing is to become the player with the best long-term performance.

Hirasawa: So, establishing a table above the Phoenix table where points won't change? There are also opinions like that.

Stand Alone: The significance of this...

Kani Majin: Indeed, compared to dropping ranks in Tianfeng, the possibility of point evaporation is more interesting.

Stand Alone: When you're about to lose 180 points for dealing into a hand, the excitement of barely avoiding it makes everyday life seem dull.

Kani Majin: Ah, that tension is quite significant.

Stand Alone: It's even worth 180 points of the 1300 points.

Kani Majin: If I could draw that tile, I would immediately strike a victory pose.

Stand Alone: It's even more exciting than drawing into a baiman.

Kani Majin: Exactly, exactly, it's like that (laughs).

Hirasawa: Oh, here's an interesting comment: My son said he really wants to play Tianfeng, should I stop him? Well, imagine if you had a child.

Kani Majin: Ah... please don't...

Suzume Crazy: ...

Hirasawa: Ah, in that case, let's play mahjong.

Kani Majin: If it's mahjong, I wouldn't stop him. Instead, I would say go ahead and play.

Stand Alone: If it's mahjong, I wouldn't stop him either, but, I might be very strict with him.

Hirasawa: Would you say things like, Is this how you should play this hand?

Stand Alone: That's right. But before that, there's the posture when playing. For example, aligning the center of the table with the center of your body before sitting down, and so on.

Kani Majin: Hahaha (laughs).

Hirasawa: What about you, Suzume-san?

Suzume Crazy: If I had a child, I would probably teach him how to play mahjong.

Hirasawa: That's right. Maybe I would also play mahjong with my child.

Kani Majin: But I was originally taught to play by my father, so I would really want to play family mahjong.

Hirasawa: What about Tianfeng?

Kani Majin: If it's Tianfeng, then it's different.

Stand Alone: As for Tianfeng... Well... I would feel a bit reluctant (laughs).

Kani Majin: If it's a high school student, if they only play Tianfeng, it's game over, so it should be in moderation (laughs).

Stand Alone: And then notice that the father only plays Tianfeng.

Kani Majin: That would be contradictory (laughs).

Hirasawa: By the way, in the future, have you all thought about using your position in the Tianfeng rank to do something in the field of mahjong?

Kani Majin: I recently participated as a guest in some programs, but I think it would also be great to publish books or something like that.

Stand Alone: I mainly want to be active in areas where others can see me play, such as celebrity matches (Tianfeng Celebrity Matches) or some exhibitions, and make people enjoy watching me play in such occasions.

Suzume Crazy: I don't really want to change my current position. However, I have played against Stand Alone in offline matches at Slialo (niconico live broadcast · Slialo channel). This match made me very happy, and I hope to have another match like that.

Hirasawa: In Tianfeng, the majority are working adults. And although there are quite a few students at the Phoenix table, there are still more working adults.

Stand Alone: Probably because of the number of matches played.

Hirasawa: From my experience up to now, it seems to be the case. If Tianfeng continues to operate like this for another ten years, what will it be like then?

Stand Alone: In the game of mahjong, the impact of mentality is greater than refined technique. Thinking about it this way, perhaps those older gentlemen delve deeper into how difficult mahjong truly is.

Hirasawa: That's right. When I first started playing, after eating three consecutive hands, I thought I wasn't

the luckiest person in the world anymore.

Kani Majin: Yeah, yeah.

Stand Alone: Well, well, that's how it is.

Kani Majin: So, in Tianfeng, mentality is very important, that's the importance of patience or endurance. Compared to the methods used by young people, the life experiences of older gentlemen may be more enriching.

Hirasawa: After starting to play Tianfeng, the mental burden seems to be even greater. For example, I shouldn't be concerned about consecutive losses of three or four, but now if I lose three in a row, I sigh and close Tianfeng. I should have maintained the mindset of not caring even if I lose three in a row.

Stand Alone: Losing 300 or 400 points still hurts.

Hirasawa: Yeah, it can turn out like that. Um, there's a comment here about whether to continue playing according to tile efficiency after losing three in a row.

Kani Majin: After losing three in a row, it's better to take a break and not play, because it affects your mentality. If I lose three in a row, I take a break for the day.

Hirasawa: Although it's not clear how big the impact will be, basically it won't have a good effect.

Kani Majin: I won't play anymore after losing four. After losing four, there absolutely should not be a mindset of I must regain everything I lost.

Stand Alone: Recently, I've been confined by the idea of continuously playing after losing four. I thought, if I can overcome this, maybe I can rank up.

Hirasawa: I see (laughs).

Kani Majin: This method can't be recommended to ordinary people (laughs).

Hirasawa: By the way, how many consecutive fours have you eaten at the tenth dan?

Suzume Crazy: Five.

Hirasawa: Five? That's 900 points.

Kani Majin: 900 points... I think I had two or three consecutively.

Stand Alone: I also had five. I once reached 2900 points and then returned to square one within a day.

Kani Majin: That's quite obvious (laughs).

Hirasawa: It's really painful (laughs). Well then, let's change the subject, like for those around seventh dan, are there any effective learning methods to get stronger? In mahjong, the ability to judge various situations is very important. This is something that should be mastered.

Kani Majin: In the end, from a technical perspective, mahjong is about understanding how to use tile efficiency, discarding and defense, and corresponding offensive and defensive judgments. If you want to advance to the Tianfeng seventh dan or eighth dan, I think it's better to focus on learning centered around discarding.

Hirasawa: The precision of discarding?

Kani Majin: Precision, and also the timing of discarding. In Tianfeng, there are many situations where it's too late to realize after others have declared a win or after being in a ready hand. Therefore, if you think you don't have much hope of winning, it's better to discard early. Learning about discarding from various aspects in matches and through interactions with others during matches, isn't it a good thing?

Hirasawa: What do you think, Stand Alone?

Stand Alone: My suggestion is, this is also the method I use myself, which is to imagine oneself as the main viewpoint and synchronize with the main viewpoint while looking at the replays. Don't immediately move on to the next turn, but think about what you would discard if it were you, and if you and the main viewpoint discard differently, then what's different, why make different choices, follow this trajectory.

Hirasawa: I also look at replays and think, but whose replays are better to look at? Although you are all at the Tianfeng rank, your ways of playing are not the same. In that case, should I watch the replays of those whose ideal play is closest to mine?

Stand Alone: No, I would look at the replays of people who are good at what I'm not good at.

Hirasawa: Ah, for example, if I've been playing aggressive tactics with face tiles all along, then I should look at the replays of people who are very good at defense.

Stand Alone: I've seen replays of over 1000 other players.

Hirasawa: That's truly valuable learning experience. What about you, Suzume-san?

Suzume Crazy: I don't really look at other people's replays. If there are points that resonate with me during matches, I'll watch the replays afterwards to see how many of my choices coincide with those in actual matches, gradually accumulating experience like that.

Hirasawa: As a result, you'll end up with many theories based on experience or intuition, how to refine them into something you can absorb is very important.

Stand Alone: From this perspective, trying to turn your thoughts into words and write them down, I think is a valuable learning experience. I've also tried writing articles.

Hirasawa: You can write them on Twitter or a blog, there are many options. By the way, do you all think you can improve your mahjong skills by watching matches? I've also thought about this question, I think when watching matches, you don't know why the main viewpoint plays a certain way, so watching matches cannot be used as a reference. Recently, I've watched many matches too, do you have anyone to recommend for watching matches? Do you need to watch matches to improve your strength?

Kani Majin: I often watch matches, for example, how to play in the final hand, how to play when leading by a lot, and how to play when the decision between defense and offense has a significant impact. I mainly focus on how high-ranking players handle these situations.

Hirasawa: This requires a certain level of insight.

Kani Majin: If you just watch casually, you won't improve.

Hirasawa: At this point, you need to try to synchronize with the main viewpoint, track the main viewpoint's play, and carefully consider during the match.

Stand Alone: If you don't understand the reason for a play, such as the reason for choosing offense or the reason for choosing defense, or tile efficiency, how to respond to others' moves, etc. These can be imitated, so even if you're not playing, you can approach it differently depending on the situation.

Hirasawa: Choosing A is because of tile efficiency, choosing B is to respond to others' moves, and this person would pay more attention to responding to others' moves in this situation.

Stand Alone: If responding to others' moves, which player's moves would you respond to, and so on.

Hirasawa: I see, that's also very worth learning. There are a few comments asking: Do you look at the tiles before discarding?

Kani Majin: Yes, I do. It's very basic. I do it subconsciously.

Stand Alone: I look at all of them... well, at least they're all in my field of vision. I pay attention to discarding middle tiles (in terms of the situation), which strongly suggest a potential win, as well as behaviors like breaking up sequences or pairs.

Suzume Crazy: My feeling is similar to Stand Alone's.

Hirasawa: If someone makes a high-scoring discard, I also pay attention to them.

Kani Majin: If you don't pay attention to them at that point, you'll suffer later.

Hirasawa: Here's another comment: When learning mahjong, should you learn from one person or from multiple people? In other words, should you choose one master or seek knowledge from many?

Kani Majin: I think it's good to learn from many people if you can, but I still believe that it's better to learn from one person until you've absorbed everything from them, and then move on to another person to enhance your skills. If you learn from many people, the perspectives of different masters may vary, so I think it's better to narrow it down to one person.

Stand Alone: I think having many different options is also good.

Suzume Crazy: Although it's good for the learner to narrow it down to one person, wouldn't it burden the teacher too much? That's what I think.

Kani Majin: Well, we're gradually transitioning from being the ones taught to being the ones teaching.

Hirasawa: There's also a comment saying, Teaching should be done according to the stage. That's indeed true. The content to be taught to a first dan player is completely different from what should be taught to a seventh dan player. If you can choose and select useful content from different people's perspectives, then seeking advice from different people is also good.

Stand Alone: For regular learning, it's easy to understand because of the school year factor, and you can easily tailor your teaching to suit the individual. However, for mahjong, the question of what level is this person at now, and what are their shortcomings cannot be compared to how old they are now, so they probably don't know this knowledge point.

Kani Majin: Yes, teaching that matches the level is important.

Hirasawa: (Reading the comments) Have you ever thought about giving up mahjong because you're busy with work or something similar?

Suzume Crazy: No, I haven't.

Stand Alone: There was probably a period of about three years when I didn't play mahjong, but if I have the time, I still want to play mahjong.

Hirasawa: Sometimes, haven't you ever thought about not playing mahjong anymore or giving up? Although there have been times when I thought about giving up mahjong after a big defeat, I can't possibly give it up now (laughs).

Kani Majin: That's right (laughs). I want to spend my whole life with mahjong, I've thought that too.

Hirasawa: It's impossible to give up mahjong anymore (laughs). Thank you all for watching today.

## 5.1 Afterword

This is a very readable book by Hirasawa Genki Pro. He has read over 50 books on tactics, extracting everything he could from them, taking the essence and discarding the rest, turning it into his own knowledge.

Not only is the content rich, but the reason why it leaves such an impression on me is also because I can feel the energy overflowing between the lines. Hirasawa Pro spares no effort in studying mahjong, exploring its essence (even if hypothetical), and extracting the crystallization of theory from it. The feeling of wanting to become stronger in mahjong naturally radiates from the words.

The most impressive part of this book for me is Choices with Huge Differences in Existence. It's a difficult task to find these choices, and these choices are where the overwhelming difference between the strong and the weak lies. We are all putting in all our efforts to study these subtle choices, which of course is not wrong, and we will continue to do so in the future. However, on the other hand, let's embark on a new journey by pursuing and discovering Choices with Huge Differences in Existence.

Well, after reading this book, you'll want to play Tenhou, won't you? No, you won't be able to resist not playing Tenhou. There's no need to say more, you'll see yourself evolved at least two stages.

Representative of All Japan Mahjong Association, Taihei Doi