

## Chapter 3. Hand building strategy

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## Lesson 7. General considerations

### Two ways

During the gameplay each player must find the answer to the main question "What to do?" with the hand, choose one of two ways. Either build the fastest, most likely low-point hand and exit the deal, having gained or lost the minimum number of points. Or, on the contrary, continuing the game, try to build the high-scoring hand and get points for it from the players remaining in the game.

The choice of a player is influenced by many factors

- the player's position in the tournament
- the minimum value of the hand or points needed to gain for the better position
- defining "target" opponents at the table
- starting distribution of the hand
- selection of forbidden suits by other players
- whether the player has experience in building specific hand concepts
- other situational factors

## Choice as the main decision

The main type decision of the mahjong player is the **choice**

- to build a fast small-point hand or a more expensive but slow one
- which tile to choose for discard
- to declare a set or not, and if yes, which one
- to open a hand at all or not
- which hand-building concept to use
- to declare "Hu" from a specific opponent or not
- other situational options

To improve the choice, it is necessary for the player to reconsider the previously accepted ideas about a particular decision whenever significant changes occur at the table.

In general, the player's depends on

- own actions
- actions of other players
- random factor (wall tiles)

## Typical gameplay chain

A typical hand gameplay chain can be represented by the following scheme

- getting a starting hand
- determining for the starting hand the provisional hand building concept and forbidden suit
- "clearing" the starting hand from tiles of a forbidden suit
- selection from an updated list of hand building concepts
- getting waiting hand
- declaring of "Hu"

It is important to understand that the presented scheme is just a plan. In reality, every time when the assessed result does not meet the expectations, the player has to correct the original plan. In this case, the amendments can be in any direction, both with the building of a more expensive hand, and vice versa.

## Tactics and strategy

First, let's outline the difference in tactics and strategy. Tactics are decisions made in an individual deal, and strategy are decisions made in a series of deals (for example, a session in a tournament). We will assume that the strategy of complete victory has been chosen, that is, the intention to take first place at the current table. All tactical decisions will be dictated by this strategy. In the most general case, these solutions are extremely simple: gain more points, lose less points. And here the first question arises: how to implement this in the game?

The first part of the general tactic, "gain more points," involves targeting the most expensive hands possible. To do this, you should be able to assess the hand and the prospects for its

development. The second part of the general tactics, "lose less points", involves protection from discards into the expensive hands, which means the ability to assess the situation at the table and make assumptions about other people's hands.

Let's make a reservation right away: seemingly, single winning tactic **does not exist**. Why? Mahjong is a game that is very difficult to formalize completely, to indicate the only correct way to play. There are a lot of factors to take into account, and this is still beyond the power of even supercomputers that have learned to win in chess and in Go. As many players note, the ability to play mahjong is more of an art. Everything is very individual, and even two players trained by the same teacher will play in different ways. Another proof of this is the fact that hundreds of thousands of Chinese players have not developed a universal method of playing in hundreds of thousands of games that would allow them to win confidently. Here we will try to provide some guidelines for improving the skill level. Some of them will be obvious, others will not, but all together they are designed to provide a base on which to build your game.

### A bit of math

Let's start with the simplest calculations. As we already know, after distributing tiles from the wall, players have altogether 53 tiles in their hands, and 55 tiles in the wall. How many turns can players make before taking all the tiles from the wall? Consider several options.

#### Option 1

No declarations, simply "take a tile, discard a tile" moves. Divide the wall by 4 and we get 14 moves per player. Important point: approximately every third move (as the theory of probability says), a forbidden suit will come to hand, hence, 4 or 5 moves are useless for the development of the hand. This left us with only 9 or 10 theoretically useful moves, half of them, on a rough count, will be really useful. 4 or 5 useful "takes" leads us to the conclusion of having initially 9 or 10 tiles of the future completed hand.

#### Option 2

The first player was lucky and declared "Hu" from the start. 55 tiles in the wall go to the other three players, this is 18 moves for each player before taking all the tiles from the wall without declarations. Two-thirds of the theoretically useful moves (with the exception of the entry of the forbidden suit) makes 12, or only 6 really useful ones, not much more than in the previous version. Thus, the starting hand should have 8 tiles of the future completed hand.

#### Option 3

The first and the second players were lucky, they declared "Hu" right away: the dealer from the start, and South from the first take. Doing all the calculations in similar fashion we have: 54 tiles in the wall go to two players, 27 moves without declarations, of which 18 are theoretically useful, but in fact 9 are useful. Thus, the starting hand should have 5 tiles of the future completed hand.

#### Option 4

The average option: one player declares "Hu" on the 7th move, when there are 28 tiles in the wall, then another player declares "Hu" on the 12th move, when there are 13 tiles in the wall, the other two players have 6 turns without declarations. Similarly to option 2, the last two players will have: about 18 moves each, only 12 will be theoretically useful, and 6 are actually useful. We come to the same conclusion "the starting hand should have 8 tiles of the future completed hand".

These are just theoretical considerations, despite very rare situations, the calculations are quite indicative. What conclusions can we draw from them?

#### Conclusions

Firstly, the player has a few useful "takes" from the wall, this is important to remember if the player is building a concealed hand, for instance, "Seven Pairs". Hence, it is advisable to use discards by pung declaration to develop your own hand. Kong can bring points, but it does not develop a hand: after the kong declaration one needs to take the replacement tile from the wall (with a chance of  $\frac{1}{3}$  of taking a forbidden suit). Hence the conclusion: try to save pairs of tiles, discard them only as a last resort.

Secondly, a prohibited suit should be chosen according to two criteria: a) it is in the minority and b) it has fewer promising sets (pairs, two tiles per chow). There are difficult cases of choice, read about them below. It makes no sense to choose as prohibited the suit that is best represented in the hand. Obviously, when one suit is missing in the starting hand, assign it as forbidden.

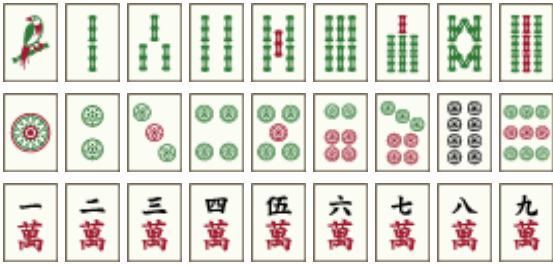



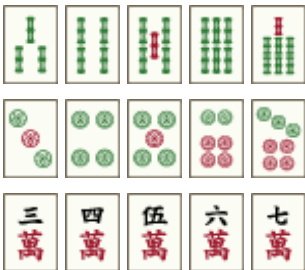
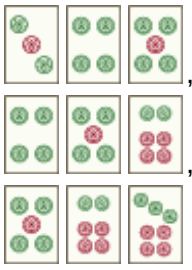




Thirdly, decide on the valuable combinations you want to target, alternatively, just build a quick hand. For a "long" hand consider combinations: "All Pungs", "Full Flush" and "Seven Pairs". The rest of the combinations are situational, even "Kong" or "Root", they should rather be regarded as pleasant bonuses.

### Lesson 8. Hand building

#### Values of tiles patterns

Hands in Sichuan mahjong can be composed of pairs, chows, pungs, and kongs. As it turns out, not all twenty-seven tile patterns are equal when building a hand, the table below shows these differences.

Table 10. Relative values of tiles patterns

Patterns	Tiles	Element	Examples
27		Pair	
		Pung	
		Kong	
15		3 Chows are possible (using a specific tile)	
6		2 Chows are possible	
6		1 Chow is possible	

It can be seen from the table that all twenty-seven tile patterns can be used to build a pair, pung and kong, that is, all types of tiles are equivalent in this respect. This statement is not true for chows. Each of the fifteen "medium" types of tiles, from "3" to "7" in each suit, are strictly included in **three** chow variants. For the tiles "2" and "8" there are only **two** chows, and for the tiles "1" and "9" there is only **one**. As a consequence, other conditions being equal, the tiles "3" through "7" are more "effective" when building a hand.

#### Assessment of the hand and its prospects

How to you assess how strong or weak a starting hand is?

Table 11. Evaluation of starting hands

Hand	Fans	Features	Recommendations
Strong	2+	A hand with the potential to win 2 or more fans <ul style="list-style-type: none"> <li>• 8-9 connected tiles in one suit with pairs</li> <li>• 1-2 concealed pungs in opponents' forbidden suits</li> <li>• 5 pairs in two suits</li> </ul>	Stay in the game
Average	0-1	2-3 pairs in two suits, connected hand	Depends on the situation
Weak	0	3-4 tiles in a forbidden suit, 0-1 pairs	Exit the game

In the table "Evaluation of starting hands", based on expert opinion, recommendations are given on the line of the player's behavior in a particular deal. The limit of the starting hand potential, with which you can confidently try to collect the maximum hand, is 2 fans. It can be either a long suited hand with the ability to pung the discards of opponents in this suit. Or one or two concealed pungs with the option to declare kongs. In this case, it is highly desirable that the player's long suit ***coincides*** with the forbidden suit of one or two opponents. Five pairs in the starting hand can turn into "Seven Pairs".

As the other extreme is the starting hand in suit tiles distribution 5-4-4. With an unsuccessful choice of a forbidden suit, even to get a "ready" hand in "wall ends" final can be considered as a good result.

Between the two extreme options there are starting hands that have no problems with choosing a forbidden suit and which can declare one or two pungs in the first "strip" of discards, that is, the first six discards of the player. The development of these hands and the possibility of switching to build more expensive hands depends on additional factors.

Now, let's talk about proper assessment of the hand. Two types of assessments should be distinguished: preliminary and final. The preliminary one is done at the start, at the same time when the forbidden suit is selected. The final one is done at the moment when the forbidden suit is completely discarded from the hand.

First, you should estimate the number of pairs on the hand:

- Six pairs in the hand in the absence of a forbidden suit means already a waiting hand! If there are five pairs (including four identical tiles counted as two pairs), there is a good chance of building "Seven Pairs". There is no need to declare either pungs or kongs, the technique of building the combination "Seven Pairs" should be used.
- If there are three or four pairs in the hand, one can target at "All Pungs", and kongs come as bonuses. Claim every discard for pungs or kongs, use the technique of building the combination "All Pungs".
- If there are a few (no more than two) pairs in the hand, discard first the forbidden suit. After that one needs to estimate how realistic it is to build "Full Flush". If the hand has

nine or more tiles of the same suit, and the second suit does not contain combinations, or contains, but unpromising ones, use the technique of building the combination "Full Flush".

- Finally, if there are no combinations planned in the hand, simply build a quick hand, opening some pungs, keeping the last pair, use the technique of building a quick hand.

This was a preliminary assessment. The final assessment can confirm the preliminary one, but sometimes it is advisable to change the concept, and the sooner the better. For instance, the initial plan is "Seven Pairs", after many turns tiles of the forbidden suit are still in the hand, the first "Hu" has already been declared, while the hand stays undeveloped. The best choice is to consider "All Pungs".

So far, we've talked about assessing your own hand. As the game progresses, the plans of the opponents become clear, and defensive techniques can be used so as not to discard into someone's mahjong. There are few exceptions to that:

- Other player's self-drawn "Hu", it cannot be prevented in any way.
- Discarding into someone's quick hand, when there is little information about the other hand.
- Discarding into someone's "Hu" from your forbidden suit.





In Sichuan mahjong, attack, that is building a quick hand is often the best defense. If you want to build a certain valuable combination, the defense during its collection is described in the corresponding paragraph below.







### Choosing a forbidden suit

Poor choice of a forbidden suit in borderline situations can lead to the player being "turned off" from the game for the first few turns, as long as there are tiles of forbidden suit, the player's choice in building his hand is limited. Choose a suit according to the criteria: the smallest number of tiles, the worst connectivity, no pairs.


A difficult case is the distribution according to suits "5-4-4", that is, "weak" suits equally. You should pay attention to promising sets: pungs, chows, pairs, incomplete chows, useful chow tiles (tiles from "3" to "7" are more "effective", see the paragraph above about the value of tiles). If two suits have enough pungs and pairs for the combinations "All Pungs" or "Seven Pairs", feel free to choose the third suit as forbidden. If there are few pairs, evaluate each weak suit for the prospect of a fast hand, discard the scattered and extreme tiles (that is, those closer to "1" and "9").


Illustrative examples ("choose" means choosing a forbidden suit):


- Choose  , not  (number of tiles).
- Choose  , not  (worst connectivity).

- Choose , not  (concealed pung).
- Player's choice  or  (number of tiles versus connectivity).
- Choose  from  (distribution "5-4-4" and pairs in two suits against one "unconnected" suit).

Is there any difference in the order of discarding the tiles of the forbidden suit? The main danger is losing points when discarding into other players' kongs or "Hu". Chances can be

slightly improved if you discard single tiles first, for instance, having  it is

desirable to first discard a single tile  as a defense against a kong. However, for the

most novice players, it is still recommended to first discard from the pair  as a protection against the involuntary desire to declare a pung from a pair in a prohibited suit, receiving a gigantic penalty of 48 points.

### The technique of building a valuable combination "Seven Pairs"

"Seven Pairs" is, on the one hand, a difficult and slow hand, but on the other hand, it is quite safe in terms of throwing into someone else's "Hu". You can think about this combination having four pairs in a preliminary hand assessment, and five pairs in the final assessment. Remember that you have few useful moves with no possibility of making declarations. Keep pairs and discard the same tiles as your opponents. Otherwise, discard the outermost tiles (closer to "1" and "9").

### The technique of building a valuable combination "All Pungs"





































Building "All Pungs" is faster than building "Seven Pairs", since you can claim someone else's discard. In the preliminary assessment, you can go for "All Pungs" with three pairs or with a pung and two pairs on your hand, and in the final assessment, with four pairs or pung and three pairs. Try to discard the same tiles as your opponents (that is similar to "Seven Pairs" approach), but remember that if one of the opponents goes for a quick hand, he / she will need tiles closer to the center (to "5"), while for building pungs all tiles are the same in priority. Don't miss the opportunity to declare a kong. Don't forget about the "Golden Wait" too. "All Pungs" is a kind of defensive combination, just follow the opponents' discards.

### The technique of building a valuable combination "Full Flush"

"Full Flush" is an expensive but slow hand. The key to success in building it is the high connectivity of tiles of one suit, the ability to "reshape" undeclared sets according to the

situation. When building a hand, priority should be given to preserving the connectivity of tiles and going into multiple waits. Avoid declaring pungs and kongs that "break" the sets in hand. If you are unable to build "Full Flush" quickly, consider changing your plan to the point of not building it in favor of a two-suited hand. The decision can be influenced by both the presence of opponents whose forbidden suit matches your main suit, and the connectivity of tiles in the second suit. It is difficult to give recommendations on defense when building "Full Flush", it is in a sense a "vulnerable" hand, that is, a player can throw any tile out of two discarded suits into someone's "Hu". Try not to declare extra pungs, so as not to reveal your plans to opponents ahead of time. The main defense here is the speed.

Examples:

- It is not good at a late stage to declare a pung with  having in hand   (two ready chows), since after the declaration we will get only    (two ready chows), since after the declaration we will get only   ,  or a pung and "wreckage".
-      : concealed kong on  can only be announced at an early stage.
-    ,              when taking  from the wall it is preferable to discard , giving up a one-suited hand in favor of a two-suited hand with excellent three-sided wait.

### Quick hand building technique











When your starting hand has a maximum of two pairs, the best strategy is to make a quick hand. In the phase of clearing the hand of the forbidden suit, declare pungs and kongs that do not break the structure of other sets. After discarding all tiles of a forbidden suit, the first candidates for a discard are terminal and isolated tiles. Try to keep the last pair in hand by making a pung announcement on it only if you enter the multi-sided wait. If you fail to get a "ready" hand, pay attention to the discard of safe tiles first, for example, tiles of the forbidden suit of the remaining opponents in the game. As in case of "Full Flush," the best defense here is the speed.

### Kong declarations

There are two things to keep in mind when declaring kong. Firstly, if it is impossible to build a completed hand or get "ready" in the "wall ends" final, the points per kong **must be returned**, in addition, the player may lose points on payments for "ready" hands. Therefore, it is not worth declaring kong with the risk of being left without a win or waiting. Secondly, both a declared kong in hand and an undeclared one (with a valuable combination "Root")






brings 1 fan. Therefore, aside from losing points namely per kong, "Root" in hand has the same effect on hand scoring.

Examples:

- The hand  with "Root" in  is waiting for  and , when declaring kong on  there is a risk of getting a "non-ready" hand (if there are few tiles in the wall).
- After discarded , having in hand , it is better to declare not kong, but pung , then discard  and get "ready" hand with "Root" in .

It is especially worth noting the possibility of declaring kong when building a hand in a one suit. The fact is that the valuable combination "Full Flush" costs 2 fans, the presence of Kong or "Root" gives 1 more fan, in total 3 fans, or 8 points. Recommendation: never declare a kong that can stop such a high-scoring hand from being collected. When possible, declare pung instead of kong and use the 4th tile to a link-tile for a chow. The ability to build an expensive hand easily compensates possible loss of points for a kong.

Examples:














- With the hand  declare a kong on .
- With the hand , when opponents discards , declare pung on  instead of kong.

## Two identical pairs

As stated above, four identical tiles can be considered as two identical pairs to build a valuable combination "Seven Pairs". There is one important feature that distinguishes the "Seven Pairs" combination in Sichuan Mahjong from other varieties of Mahjong. The distribution 3-2-2-2-2-2 is less efficient compared to 2-2-2-2-2-1, however, when waiting for two identical pairs, the hand will cost 3 fans (8 points) due to the combination "Root". And even if there is no discard in mahjong with such a hand, there is always the possibility that the hand will win points for being "ready" versus "non-ready" hands in "wall ends" final.

But what if two identical pairs are already in hand? Actions depend on the game situation. If there are many other pairs in the hand, it is best to try to build a "Seven Pairs" hand. But if there is a concealed pung or one or two chows, then declaring a concealed kong will bring 2 points from each player without "Hu", not counting 1 double.

Examples:

-  + , if it is desirable to declare "Hu" on a quick 4-point hand, then discard , if an 8-point hand is needed, and the fourth copy of  is not visible on the table, then discard .
-  + , build pairs.
-  + , one can declare a concealed kong on .
-  + , one can declare a concealed kong on .

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### Key skill training

To make game decisions directly in the game, one needs to know the exact number of played tiles of a certain pattern, for which there is no other way but to be able to count all the required tiles on the table. To improve that skill, the player must develop the ability to make such calculations in seconds, the faster the better. The main difficulty lies in the fact that the searched tiles can be on the table in **eight** places and be rotated in **four** different ways. Eight places are four discard zones and four zones of melded sets. Four rotations of tiles follow from the way the game is played. After all, the players sit at different sides of the table discarding tiles "straight" (that is, perpendicular to their edge of the table), and rotating one of the tiles by 90 degrees when melding sets.

Exercise: Place the playing set on the table with tiles turned face up (if the set is not available, you can take a screenshot from the game server). Try to find a specific tile amongst all the tiles on the table. Repeat the exercise for the other tile.

### Waits

⇒ **Outs** is the total number of winning tiles left in the game for a particular waiting hand.

#### Simple waits

As mentioned in Lesson 8, when collecting "Full Flush" or a quick hand, it is important to be able to choose a good wait. Simple waits are listed in the table.

Table 12. Simple waits


Description	Hand	Wait	Outs	Note
Single wait (for a pair)	1	1	3	not always the best option, but sometimes the only possible one (in "Seven Pairs", for instance)
Edge wait	12	3	4	slightly better than single wait for a pair
Closed wait	57	6	4	


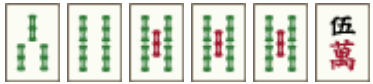



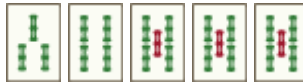

3-sided "combo" wait: closed and for a pair	3335777	4, 5, 6	11
3-sided "combo" wait: closed and for a pair	2224567	3, 4, 7	10
3-sided "combo" wait: for a pung and for a pair	4455566	4, 5, 6	5
4-sided "combo" wait: for a chow and for a pair, var. 1	4455556	3, 4, 6, 7	13
4-sided "combo" wait: for a chow and for a pair, var. 2	4445567	3, 5, 6, 8	13
4-sided 2-suited "chameleon" wait: for a pung and for a chow	B22234 C55567	B2, B5, C5, C8	10
4-sided "combo" wait, var. 1	2223344	2, 3, 4, 5	9
4-sided "combo" wait, var. 2	2223334	2, 3, 4, 5	9
5-sided "combo" wait: for a chow and for a pair	3334567	2, 4, 5, 7, 8	17
5-sided "combo" wait	3334555	2, 3, 4, 5, 6	13
8-sided "combo" wait	2223456777	1, 2, 3, 4, 5, 6, 7, 8	22
"Nine Gates", 9-sided "combo" wait	1112345678999	1, 2, 3, 4, 5, 6, 7, 8, 9	23


We also note that in a number of cases compound waits contain three or even four identical tiles, kong declaration in most cases will destroy multiple waits.

Note that both specified and "mirrored" (that is when all tile numbers are changed in the opposite order of ascension) options work in asymmetric expectations. For example, for a

four-sided "chameleon" (what is a "chameleon", see below) wait 

 the following variations are possible: 

,  and 





.
















In addition to the above-listed waits, one can meet with a lot of others, which are combinations of those already described.

## Chameleons

The term "chameleon" was introduced by Vitaly Novikov in 2005 to describe two-suited multiple waits. The simplest "chameleon" is just two pairs with a wait for two different tile patterns. The main caveat is that each of the two components can be split into sets either **without** a tile or **with** a tile. It looks like two chameleons **together**, a chameleon on its own and a chameleon that got a fly (tile), see picture.

More complex "chameleons" can be obtained by adding a chow to the suit pair, where the

edge tile pattern of a chow coincides with the tile pattern of a pair, for instance, hand  has 3-sided wait: ,  and . By adding a chow to different places of the initial hand we get an increase in a number of waits:

-  is waiting for , , , .
-  is waiting for , , , .
-  is waiting for , , , .

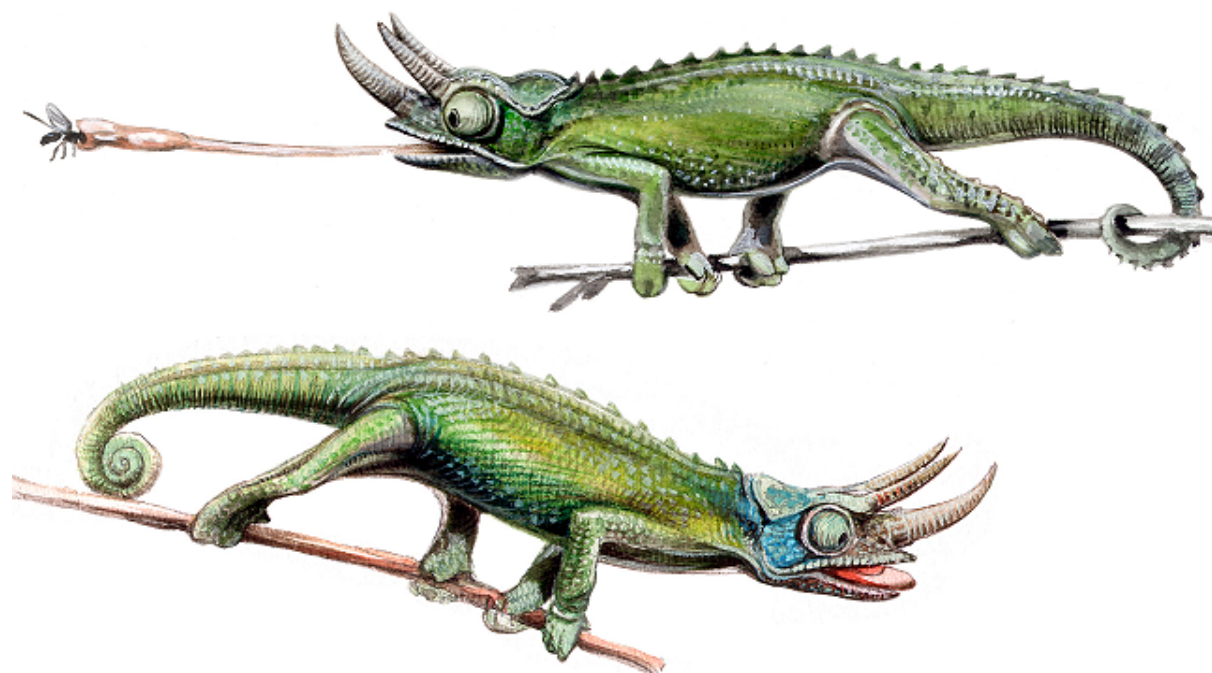








Figure 5. Chameleons

Skipping the “Hu” declaration is a deliberate step, using this technique, the player must weigh all the risks. On one side of the scale is the loss of points from undeclared “Hu”, as well as from declared “Hu” and kongs of opponents when the game continues. On the other side, there is a **possible** benefit in the form of getting points from declaring your own kongs and “Hu”. The key word is "possible" as there are no guarantees. In general, all cases can be divided into two options: "forcing" and "speculative".



In the "speculative" option, the player simply decides that skipping the "Hu" declaration is expedient from the point of view of the chances of gaining and losing points.


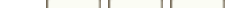
● The hand , and . “Hu” declaration from discard will bring only 1 point, while self-drawn “Hu” declaration with such a good wait will bring 6 points, and the opponents will lose 2 points each.

- With the hand  and two opponents having chosen forbidden suit "Characters", provided 4th copies of tiles ,  and  are still in game, skipping the "Hu" declaration on  or  discard will be an absolutely sensible idea, since not only one can declare kong(s), but also there is a chance to win on the replacement tile.

- In a situation where it is necessary to increase the hand value, the declaring of the fourth set instead of "Hu" doubles the value of the hand due to the "Golden Wait"

combination, for instance, a hand

 when pung is declared on , will cost 8 points instead of 4.

- In an obvious situation when the building of the “Full Flush” hand is almost complete, for instance, to declare “Hu” from discard on  with the hand 



when there are more tiles in the wall, is an absolute “crime”.

## Her Majesty Statistics

Any statistics can be compared to a double-edged blade. On the one hand, the interpretation of figures requires an impeccable understanding of what figures are presented, what they reflect, how to use the data, etc. On the other hand, conclusions drawn from statistical data can significantly enhance the player's ability at the table.

When tiles are handed out, East gets fourteen tiles, while other players get thirteen. Let us ask ourselves a question: what is the player's probability of getting this or that suits distribution? It is also interesting to understand if there can be problems with the choice of a forbidden suit? Since the data for fourteen and thirteen tiles differ significantly, the answers are presented in two different tables.

Table 14. Fourteen tiles starting suits distributions

Tiles distribution	% of cases, theory	% of cases, test*
6-5-3	22,5	22,5
5-5-4	18,0	18,0
7-4-3	15,1	15,1
6-4-4	14,5	14,5
7-5-2	8,5	8,5
6-6-2	5,1	5,1
8-4-2	4,8	4,8
8-3-3	3,3	3,3
7-6-1	2,5	2,5
9-3-2	1,8	1,8
8-5-1	1,8	1,8
<i>others</i>	2,1	2,1
<b>TOTAL</b>	<b>100</b>	<b>100</b>

\* Calculated based on simulated 10,000,000 tiles distribution.

The table in the column “% of cases, theory” the theoretical data of distributions based on combinatorics are presented. It follows from the table that in 60,1 % of cases East will

receive from the distribution no more than six tiles in its long suit, and no more than seven tiles in 76.2% of cases. The only problematic distribution from the point of view of choosing a forbidden suit is "6-4-4", which occurs in 14.5% of cases or every 7th deal. The last column presents data based on a simulation of 10,000,000 deals. Surprisingly, the numbers of theory and modeling coincide (with an accuracy of three decimal places).

A similar table can be built for players with thirteen tiles.

**Table 15.** Thirteen tiles starting suits distributions

<b>Tiles distribution</b>	<b>% of cases, theory</b>	<b>% of cases, test*</b>
6-4-3	23,9	23,9
5-4-4	19,1	19,1
5-5-3	14,8	14,8
6-5-2	13,5	13,5
7-4-2	9,0	9,0
7-3-3	6,2	6,2
8-3-2	4,0	4,0
7-5-1	3,3	3,3
6-6-1	2,0	2,0
8-4-1	1,9	1,9
<i>others</i>	2,3	2,3
<b>TOTAL</b>	<b>100</b>	<b>100</b>

\* Calculated based on simulated 10,000,000 tiles distribution.

In the table with the starting distributions of thirteen tiles, we see that in 73,3 % of cases South, West or North will receive from the distribution no more than six tiles in its long suit, and no more than seven tiles in 91.8% of cases. The only problematic distribution from the point of view of choosing a forbidden suit is "5-4-4", which will occur in 19.1% or every 5th deal.

Thus, the statistical data show some tiny advantage of being East which is represented in lower share of "problematic" distribution from the point of view of choosing a forbidden suit.

## What do you need to know about the tournament?

In a mahjong tournament, participants play hands over a given number of game sessions. The result of the player in the game session is the sum of the game points and the "bonus",

which is the additional points for the place taken in the game session at his table: 40 points for the 1st place, 30 points for the 2nd, 20 points for 3rd place and 10 points for 4th place, respectively. In the event of a tie, adjacent bonus points are averaged.

So far, the official Sichuan mahjong tournaments took place in China, Russia and Canada. In 2020 MahjongSoft site (<https://mahjongsoft.com>) made it possible to run online SBR tournaments.

## Game workshop

Due to the non-prevalence of Sichuan mahjong at present, there is a risk that some of the rules or approaches to the game will remain misunderstood by novice players, while there is no one to get an explanation from anyone. This gap can be filled by looking at the records of the games played by high-level players in a real tournament. Below are the links to the recorded games played at the “Europe & Asia Mahjong Elite Exchange in China” tournament in 2017:

- <https://www.youtube.com/watch?v=B34pcw3fuy0>
- <https://www.youtube.com/watch?v=5vyGtHdlnDY>
- <https://www.youtube.com/watch?v=JnFJ6hBklwA>
- <https://www.youtube.com/watch?v=hdSuL6sDQLk>
- <https://www.youtube.com/watch?v=SQFUIGpDTCY>
- <https://www.youtube.com/watch?v=ftnGR-BGmJ0>
- <https://www.youtube.com/watch?v=U4GzmVBvlx4>
- <https://www.youtube.com/watch?v=ur2XqAR1sTU>
- [https://www.youtube.com/watch?v=aO\\_0sGfmlIw](https://www.youtube.com/watch?v=aO_0sGfmlIw)
- <https://www.youtube.com/watch?v=cGileE1UYKM>.

Each video is a recording of one game session of the tournament. The move of each player is recorded by two cameras, in which the player and his hand are displayed. It is important to note that in the video, the players are shown according to their **original** seating, while after each deal there is a dealership transfer.

## List of tables, figures, photos of Chapter 4

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[Figure 5. Chameleons](#)

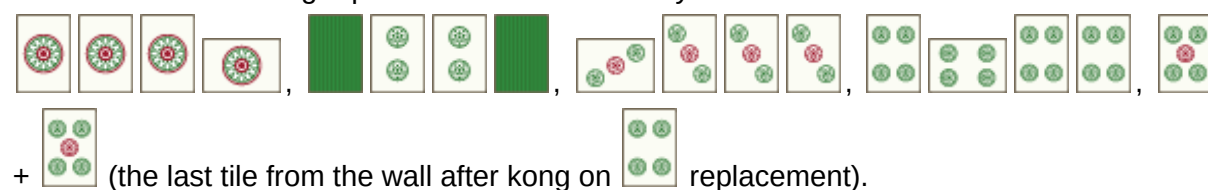
## Answers to problems and tests

The answers to the test from Chapter 1: 1d, 2c, 3c, 4d, 5a, 6c, 7d, 8b, 9c, 10d, 11a.

The answers to the test from Chapter 2: 1b, 2d, 3c, 4b, 5c, 6c.

Answer to the problem from Chapter 1. The maximum is 55 tiles, that is, the **entire** wall! East makes the first discard by flipping the tile of his forbidden suit and all remaining players declare mahjong on this discard. Note that for that, South, West and North must have no suit that does not coincide with the forbidden East suit, so, instead of tiles indicating forbidden suits, they will have cards-indicators.

Answer to the problem from Chapter 2. The maximum possible number of fans can be obtained on a one-suited hand with four declared kongs with declaring "Hu" on the last tile from the wall after kong replacement. The hand may look like:



Fans

- Kong (4 times) — 4 fans
- All Pungs — 1 fan
- Golden wait — 1 fan
- Full Flush — 2 fans
- Win after Kong — 1 fan
- Under the Sea — 1 fan

**TOTAL 10 fans.** The value of the hand (without imposing limits) is  $2*2*2*2*2*2*2*2*2 = 1024$  points, or  $1024+1=1025$  points from each player who remained in the game, since the win on the kong replacement is counted as self-drawn.

Note: There is also a second solution which results in the same 10 fans. Let's replace taking the last tile of the wall after the declaring of the kong with the "last discard" when using the valuable combination "Shoot after Kong". The hand value will be 1024 points, taken only from the discarder after the kong was declared.

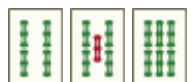
# Appendix

## Definitions of terms



This section lists, in alphabetical order, all definitions of terms that appear in this book.

⇒ **Chow** is a set consisting of tiles of the same suit with three consecutive numbers, for instance,



⇒ **Concealed set** is a set, all tiles of which were taken from the wall.

⇒ **Deal** (hand) is everything that occurs between an initial distributing of tiles and either declaring "Hu" (winning) by three players or taking all the tiles from the wall.

⇒ **Declaration** is a player's word with the intention to declare mahjong or set.

⇒ **Fan** is doubling the hand points.

⇒ **Forbidden suit** is the suit that must be absent in the player's hand when declaring mahjong.

⇒ **Hand** is tiles belonging to one of the players.


Note: "Hand" (in the narrow sense) are sometimes called "standing" tiles.

⇒ **"Hu"** (Chin. 和 or 胡) is a word for declaring mahjong (winning).

⇒ **Indent** is the number of stacks of tiles of the player's wall before the break.

⇒ **Kong** is a special set consisting of **four** identical tiles, for instance,



or . "Kong" is also the word for declaring Kong.

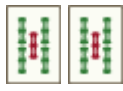




⇒ **Mahjong** is an intellectual board game of Asian origin for four players. The goal of the game is to build a complete hand ("mahjong") having valuable combination(s).

⇒ **Melded set** is a set which contains tile claimed from a discard.



⇒ **Move** is a set of actions of the player's turn.

⇒ **Outs** is the total number of winning tiles left in the game for a particular waiting hand.

⇒ **Pair** are two identical tiles, for instance, .

⇒ **Pattern** is decorated in a unified manner tile, for instance,  or .

Note: Tile "pattern" can alternatively be defined as "unique tile face".

⇒ **Pung** is a set consisting of three identical tiles, for instance,  or . "Pung" is also the word for declaring Pung.

⇒ **Robbing the Kong** is declaring "Hu" on a tile, which the other player adds to the melded pung when declaring the kong.

⇒ **Self-Drawn** is to win by taking a fresh tile from the wall.

⇒ **Set** is the structural element of the hand. See also "Kong", "Pung", "Chow", "Pair".

⇒ **Shoot after Kong** is declaring "Hu" on a tile discarded by another player *right after* making a kong.

⇒ **"Standing" tiles** are player's tiles outside of melded sets.

⇒ **Value combination** is what gives fans (doubles) on the hand.

⇒ **Wait** is the state of the player's hand when one tile is missing before the completed hand. The term "wait" is also used to refer to all tiles that complete the hand.

⇒ **Wall** is mahjong tiles, built in the form of a square. Also, that part of the wall that is directly in front of the player in his play area is called the "wall" of the corresponding player.

⇒ **Wall break** is an imaginary plane between adjacent stacks (of two tiles high) of the wall. All the tiles in the deal are taken from wall break in a clockwise direction.

⇒ **Win after Kong** is declaring "Hu" on a replacement tile *after* making a kong.

⇒ **Win by discard** is to win on a tile discarded by another player.

## Selected information resources

### About mahjong in general

1. "Sloperama", The MAH-JONGG FAQs - a universal repository of various information on the game of mahjong, <http://www.sloperama.com/mjfaq.html>.
2. Article about mahjong in Wikipedia, <https://en.wikipedia.org/wiki/Mahjong>.
3. "Mahjong / Ancient Chinese Games" movie, CCTV, 2011, <https://www.youtube.com/watch?v=dKGhYRv9mY>.

### Organizations

4. Mahjong International League (MIL), <http://mahjong-mil.org/>.
5. Russian Mahjong Federation, <http://mahjong.ru/>.
6. Canada Mahjong Federation, <https://www.cmf-mahjong.org/>.

### Where to play mahjong

7. Playing Sichuan Mahjong on iOS devices, AppleStore + "Chengdu Mahjong", <https://itunes.apple.com/ru/app/chengdu-mahjong-free/id504275523?l=en&mt=8>.
8. Play Sichuan Mahjong on Android devices, Google play + "血战到底", [https://play.google.com/store/apps/details?id=net.joygames.scmj&hl=en\\_US](https://play.google.com/store/apps/details?id=net.joygames.scmj&hl=en_US).
9. "MahjongSoft", a game server that supports Sichuan mahjong and has a menu in multiple languages, <https://mahjongsoft.com>.

### Sichuan Mahjong Books in Chinese

10. 伍泽荣 (Wu Zezhong), 黄培惠 (Huang Peihui), 编著 (Bian Zhu). "血战到底 — 成都麻将实战妙诀" ("Xuezhān daodi — chengdu majiang shizhān miaojue"). 成都时代出版社 (publishing house "Chengdu Shidai Chubanshe"). 2011. ISBN 978-7-5464-0329-8. 140 p., Sichuan mahjong.
11. 朱扬著 (Zhu Yangzhu). "成都麻将高级打法" ("Chengdu majiang gaoji da fa"). 成都时代出版社 (publishing house "Chengdu Shidai Chubanshe"). 2013. ISBN 978-7-5464-0770-8. 152 p., Sichuan mahjong.
12. 伍泽荣 (Wu Zezhong), 编著 (Bian Zhu). "成都麻将经典实战牌局详解" ("Majiang jingyan shizhān pai jiu xiangjie"). 成都时代出版社 (publishing house "Chengdu Shidai Chubanshe"). 2014. ISBN 978-7-5464-1153-8. 105 pages of chapter 2 are devoted to Sichuan mahjong.

## Geography of Sichuan Mahjong

So far, the official Sichuan mahjong (SBR) championships took place in China, Russia and Canada.

### China

In 2016, an unprecedented mahjong competition started in China: the 1st World Grand Prix of Bloody Mahjong (首届 世界 四川 麻将 大奖赛). In the first stage, 21 qualifying sessions were held in several cities in China from August to October 2016, the winners of which were invited to the main event in November 2016 in Chengdu. Out of about two hundred participants, after 10 sessions, 16 finalists were selected, who played in a duplicate format, in which each hand with ***the same starting hands*** was played by all participants in the final. The winner of the Grand Prix and the owner of an impressive prize was Wen Yao from Beijing.



Photo 1. At the 1st World Grand Prix of Sichuan Bloody Mahjong, Chengdu (China), 2016

Sichuan Mahjong as a mahjong style was chosen for the Grand Prix for some reason. In 2016, the Mahjong International League conducted a survey in 35 cities of China regarding the popularity of certain local varieties of mahjong. Among the seven styles, the Sichuan variation was in the big lead. And, the statistics of online games on two large servers only confirmed this leadership.

Articles about the Grand Prix:

- <http://poker.sports.163.com/16/1107/13/C599JGS900050FOP.html>.



Photo 2. Qualifying session #1 of the 1st World Grand Prix of Sichuan Bloody Mahjong, Chengdu (China), 2016



Photo 3. Group photo at the SBR Moscow Open, Moscow, 2017

## Russia



The tournament mahjong in Russia started in 2007. Since then more than a hundred tournaments in three mahjong styles have taken place.

The first Sichuan mahjong tournament in Europe “SBR Moscow Open” took place in June 2017, in which 20 players took part. The main prize of this championship was a paid trip to China for the “Europe & Asia Mahjong Elite Exchange” tournament. In November 2017, the WMSG SBR Selection Tournament was held in Moscow, 28 participants representing two major styles (MCR and riichi) competed for the main prize, the latest model smartphone from Meizu.

Russia develops Sichuan mahjong, since SBR mahjong is viewed as the ideal “first-rules” mahjong style for newcomers. For the recent years several official SBR tournaments took place in Moscow. The first-ever outside China SBR textbook has been published in Russia in 2019. SBR mahjong has been coded at MahjongSoft, both in games and tournament play.



Photo 4. Group photo at the WMSG SBR Selection Tournament, Moscow, 2017

## Canada



Photo 5. Group photo at the SBR Canada Open, Toronto (Canada), 2018

Note: Standing third from left is Gracie Wang, the head of Canada Mahjong Federation.

One can safely add Canada to the countries developing Sichuan Mahjong. Since the beginning of 2018, three official SBR tournaments have already been held in Canada:

- 2018 Maple Cup SBR Tournament, 24 players, February 2018.
- 2018 Canadian Mahjong Championship — SBR, 24 players, May 2018.
- 2019 Maple Quest SBR Mahjong Tournament, 16 players, January 2019.

## Sichuan Mahjong in the Guinness Book of Records

The world record for the simultaneous game of mahjong was achieved on September 19, 2013. Thus, in the city of Dujiangyan, Sichuan province, at the same time ... **2,380 players** played Sichuan mahjong! The Dujiangyan Sports Bureau took the process seriously, with participants selected from nearly 70,000 applicants who applied for the pre-qualification round. Here is the link to the record:

<https://www.guinnessworldrecords.com/world-records/most-people-playing-mahjong-simultaneously>

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[Photo 6. World record of playing mahjong simultaneously, Dujiangyan \(China\), 2013](#)

## Author (cover)



Vitaly Novikov is a mahjong researcher and enthusiast, a champion of Moscow in MCR and SBR mahjong, multiple prize winner of MCR Russian Open, the leader of mahjong clubs in Moscow, a consultant of MahjongSoft site.

In 2017, the first mahjong book "MCR Beginner's Guide" was published in Russia. The second book "Sherlock Holmes and Mahjong" was published in 2018. The third book "Sichuan Mahjong? It's that simple!" was published in 2019.

## Sichuan Mahjong

Sichuan Bloody Mahjong (血战到底, 四川麻将, 四麻) is the only style of mahjong in which the deal is played until mahjong is declared by three players or taking all the tiles from the wall.



## Book



This book is recommended by the Mahjong International League and the Russian Mahjong Federation as a tutorial for studying Sichuan mahjong.



Федерация  
маджонга  
[www.mahjong.ru](http://www.mahjong.ru)