6/6/04 This is the third draft of the chapter on The Turn in Hold'em Brain by King Yao. Please email feedback, suggestions, comments, opinions, questions to <u>KingYao@HoldemBrain.com</u> or you could use the Feedback Form to email me at the bottom of the page

Hold'em Brian: The Turn Copyright 2004 by King Yao

Thinking on The Turn

The Turn is a crucial time in a Hold'em hand. The bet size has doubled and the pot is bigger too. Possible draws that were present on the Flop may have gotten there on the Turn. New possible draws may have developed. You should think about what you want to do on the Turn, and you should also think about the impact that your decision on the Turn will have on the play of the River. Here are some of the issues to watch out for:

1. Did any draws on the Flop get there on the Turn?

If there were two cards to a flush on the Flop and the Turn is a third card of the same suit, then someone with a flush draw on the Flop would already have a flush. This could mean you are drawing dead already. The same issue can happen to straight draws. But against straight draws, a hand can improve to a flush to beat them, so there may be more chances for other players to win. You should not automatically fold when it looks like a draw may have gotten there on the Turn, but you should still be aware of that possibility.

2. Did the Turn card provide any possible draws?

If the Flop was a rainbow Flop, the Turn card may give someone a flush draw if it is the same suit as one of the cards on the Flop. There will now be two cards of the same suit on the board, and if the River is a third card of the same suit, then anyone holding two cards of that suit would have a flush. A player may have picked up 9 outs in addition to the other outs he had. Similarly, new straight draws can be picked up on the Turn.

3. Did the Turn card pair the board?

If the Turn card pairs the board, it could change a lot of things. A player with a set or two pair on the Flop could now have a full house, which means anyone with a flush draw or straight draw would be drawing dead (unless they have a straight flush draw). It does not necessarily mean someone definitely has a full house, so draws can usually still continue with the hand. If the Turn card pairs the top card on the Flop, then anyone with a split middle or bottom pair would be drawing dead against another player who had trips. Pocket pairs may have two outs if the opponent has trips. However, if a player is concerned about his opponent being on a draw (flush draw, straight draw or overcards to the board), the pairing of the board on the Turn is good news because it means no draws have yet been made. For example:

Your hand: T♦9♦

Flop: 9 **A** 8 **A** 3 **♣**

Turn: 3 V

The only hand that was trailing your hand on the Flop that has improved over your hand is a hand

that contained a 3. If you were up against any other two cards, then the status quo holds. If you were ahead on the Flop, you would still be ahead. If you were behind on the Flop, then you are still behind. Any draws are still drawing to beat your made hand of top pair. Thus you can be comfortable that you are still ahead against draws or lower pairs. The 3 v on the Turn is almost as good as a 2 v.

4. What if you still only have two overcards on the Turn?

If you only have overcards to the board on the Turn, the pot will usually not be big enough to continue with the hand. If someone has a pair, at most, you will have 6 outs. But someone could have two pair or better, which would mean you would be drawing dead with your overcards. If another player has a pair, and his kicker is the same rank as one of your cards, then you would only have 3 outs. In order for a call by a hand with two overcards on the Turn to be correct against a player who has a pair, the expected pot size has to be at least 7 big bets. But that is only if you are sure you really do have 6 outs, sometimes you will have fewer outs, so you need to adjust your expected outs to a lower number (see the Outs and Pot Odds chapters). On the bright side, there are some cases when you are actually ahead even with no pair. You could be up against a player who has no pair but is on a draw. In that case, he could have as many as 15 outs, but that would mean you have more outs than him to win the hand. If you can identify these situations correctly, then you would be able to call a Turn bet with just two overcards. This is where the ability to read hands well is a nice advantage.

5. What if you are still drawing to a straight or a flush on the Turn?

Typically when this happens, you want to see the River as cheaply as possible. On the Flop, you may be willing to fire away if there are two or more opponents. Against two other players, you are getting 2:1 odds while there is a 35% chance you will hit the flush by the River. But on the Turn, if you have not made your flush yet, you would only have a 19.6% (9/46) chance of getting it on the River. Unless there are still a lot of players left, it would be worth it to put in as few chips as possible on the Turn. This applies to straight draws as well. If a player is aggressive on the Flop but slows down on the Turn, it may be a sign that he was and still is on a flush draw.

6. Did an A come on the Turn?

Many players will play any starting hand if it has an A in it, but not necessarily any hand that contains a K or Q. This is why the focus here is on the A coming on the Turn rather than other high cards. Many players will go one step further and call bets on the Flop just to see if they can hit a pair of A's on the Turn whereas they would be less apt to "take a card off" with a K or Q. Normally these players are calling stations. Or it could be a shorthanded game where that strategy would not be as egregiously incorrect. If you are up against a player with this characteristic, you have to be aware when an A comes on the Turn. If an A does come on the Turn while you are in early position, and your opponent is an aggressive player who will play any hand that contains an A, then you may decide to check and let him bet. Aggressive players may be willing to bet whether or not they have an A, because they think it is worth a try to buy the pot, especially given that you have shown weakness with a check. If you are in last position against an aggressive player, and he checks to you when an A comes on the Turn, you may simply check back and try to induce him to bluff on the River. It should be clear to him that you are afraid of the A, and he may think a bluff can actually work. When there are more opponents, it is more likely that one of them now has a pair of A's.

7. Position is key

Players who have raised in late position on the Flop may now check on the Turn if they were raising on a draw. Sometimes the action on the Flop is just posing. Think of it like peacocks flashing their bright and colorful tails. Players are betting and raising, sometimes with very little, as they jostle for an image and positioning on the Turn. When the Turn comes and the bet size has doubled, many players will now play out the hand to its real strength. This means draws and overcards that have not gotten there will slow down and the made hands are the ones doing the betting and raising. Having a good position to watch the action before it gets to you is mighty useful on the Turn

Betting on the Turn Part I

If you have a hand that you believe is the current best hand, you should seriously consider betting on the Turn rather than trying for a check-raise. Going for a check-raise on the Turn is more dangerous because a free card has more value to players who are behind because the bet size on the Turn has doubled. Often players on a draw can call on the Flop with correct pot odds, but when the bet doubles on the Turn, they no longer have correct pot odds to call. If you bet on the Turn and they call when they are drawing without correct odds, then they are making a mistake. If you check and they get a free card to see the River, then you are the one making a mistake.

In late position, if other players have checked, you should bet even with a mediocre hand. Their check has signified they have weaker hands than you (although they could also be springing a trap with a check-raise if they suspect you will bet when checked to). If you get called on the Turn and you are worried you do not have the best hand, you will often be able to check it down on the River and show your hand.

In early position, if you think a late position player is on the draw, and you are likely to have the best hand at the moment, you should bet instead of trying for a check-raise. You can bet out on the Turn even if they had raised on the Flop as they may have been raising to get a free card on the Turn. This may be easier said than done, because in practice, you may not be sure if he has a draw or a made hand. In these spots, knowing your opponents and reading hands well will be a big advantage to you.

Raising on the Turn for a free showdown

This issue was discussed in the Semi-Bluffing chapter. Here is an example of raising on the Turn to get free showdown.

You are in late position with A*9*. You open raise pre-Flop and both blinds call.

Flop: **A ♦ K ♣ 8 ♥**

Both blinds check to you and you bet with your pair of A's and middle kicker. The small blind check-raises and the big blind folds. You call.

Turn: 2♣

You have added a flush draw to your pair of A's (two clubs on the board, two clubs in your hand).

The small blind bets. The small blind is a loose and aggressive player and you think he may have a pair of A's with a weaker kicker than yours. A check-raise on the Flop would be consistent with that. But he could also have a hand that is better than yours, such as AJ, AT, A8, K8, 88. It is important that you get to the showdown in this hand because you may have the best hand. However the 2* on the Turn has given you some extra outs. You now have a flush draw and have an additional 9 outs to your hand if you were behind on the Turn. You may decide to raise on the Turn with the idea of checking on the river if you do not improve. Your opponent will likely just call with an A and a good kicker (AJ, AT) as he would be afraid you held AK, a common holding for tight pre-Flop raises such as yourself. But even if he did re-raise you on the Turn with a better hand, you probably still have at least 9 outs.

Now if all goes as planned, your opponent will call the raise and check on the River. Your plan if you do not hit your flush is to check and show down your hand. If the flush comes on the River, you should bet of course. Typically your opponent will be surprised to see you with the backdoor flush and mumble something about a bad beat, even if they were already beaten by your kicker. If you lose, you would have lost the same amount if you had just called the Turn and then called his bet on the River. If you win without making the flush, you win the same amount as you would have anyway. If you win with the flush or with a 9 on the River (for two pair), then you would win an extra bet that you would not have otherwise.

The deceptive nature of the flush draw that you picked up on the Turn adds to the complexity of this hand. It also shows the extra value that suited starting hands have over non-suited starting hands (but do not go crazy with this concept, it only adds a little bit of value).

Betting on the Turn Part II

Sometimes you will want to bet on the Turn with the intention of checking on the River. This is similar to the strategy of raising for a free showdown, except that instead of raising, you are betting. This strategy requires that you are last to act and you are the aggressor. If you have raised pre-Flop, bet on the Flop and on the Turn as well, you are clearly saying you have a strong hand. If your opponent check-raises on the Turn after all of your aggression, then it is usually clear he has an even stronger hand. But if your opponent has a mediocre hand and/or is passive, then he may simply call your bet on the Turn and check to you on the River. If you had a mediocre hand and he had outs, t would be even better if he folded. This is useful when you are not sure if you have the better hand or not, as you are not giving him any free cards when you are ahead.

If you had decided to check on the Turn, you may still be willing to call a bet on the River since he may be bluffing, and you could win with just high cards. In that case, checking on the Turn with the intention of calling on the River would yield the same result as betting on the Turn with the intention of checking on the River. If you checked on the Turn and called a bet on the River, you would win one bet if you won, and lose one bet if you lost. If you had bet the Turn and checked on the River, then you would win one bet if you won and lost one bet if you lost. However, if you bet on the Turn, and you catch on the River, you now have the option to bet again on the River and win two bets. This can happen too if you checked the Turn and then raised on the River. However, a raise on the River will seem stronger to most opponents, and you may be less likely to get called in that scenario. Also, if you checked the Turn, you would not have received the possible benefit of your opponent folding on the Turn after you bet.

Here is an example. You are in late position and you open raise.

Your hand: AQo

A loose player in the big blind calls. The two of you see the Flop heads-up.

Flop: K-7-6 rainbow

Your loose opponent checks and you bet. He calls.

Turn: 2

Your loose opponent checks. Even though you do not have a pair, you should consider betting again. You know that he will call with any pair, but if he does not, then you are ahead and you would not want him to get a free card on the River.

The key to this hand is that he may fold hands like T9 and T8 when you bet. With these exact hands, it would be a mistake for your opponent to fold. With T9 or T8, he would have 10 outs, 4 for the inside straight and 6 for a pair. The pot is small (only 4.25 big bets), but he would have enough pot odds to call. From his perspective, if he knew he had 10 outs, then this is the analysis he should be making:

DIPO method with 10 outs	Computation	Result
Good Number	10 x 4.25	42.5
Bad Number	46 -10	36

The pot is offering him enough odds to call. But he does not know he has 10 outs. He may think he only has 4 outs or he may estimate he has 7 outs on average (4 outs for the straight and a 50% chance to have an additional 6 outs). With those assumptions, it would look like a call is a poor play.

DIPO method with 4 outs	Computation	Result
Good Number	7 x 4.25	29.75
Bad Number	46 - 7	39

If you bet your AQo, and he folds an inside straight draw, he is making a mistake. That is a great benefit of your bet because it gives him a chance to make an incorrect decision.

If he does call you on the Turn, you can check on the River. If he was on a draw, he will not call now unless he made the draw or a pair. If he had a pair, he is more likely to call again. If you bet, you are likely to be putting yourself in a situation where you will lose one bet if you have the worst

hand and win nothing if you have the best hand.

Betting or Raising on the Turn with A-high if you think your opponent is on a draw

If you think your opponent is on a draw, then you may have the best hand with A-high even though you may not have a pair. You should consider betting or raising (assuming it is heads-up) to make sure your opponent puts in the most number of bets possible on the Turn. If he is on a draw and you wait until the River to bet, it will be too late as he will either fold without putting in any more bets or raise you when he does catch his draw. Given these hands, if you just call his bet, or check after he checks, you are letting him see the River too cheaply. You want to make him pay his River fee on the Turn when he is still willing to pay it. Here is a look at this issue with expected values.

Assumptions:

- 1. Your opponent is on a flush draw with Q♦J♦
- 2. You have A♣K♣ without a pair
- 3. He will call any bets on the Turn
- 4. If you do not show strength on the Turn, then he will bluff 50% of the time with nothing
- 5. He has 15 outs (9 for the flush and 6 for a pair) and there are 44 unknown cards
- 6. You will fold when you see a flush card, but you will call if you see a Q or J
- 7. The pot is 6 big bets
- 8. It is heads-up now, he is first to act and has checked

Action	Computation	Result
EV of checking	(9/44 x 0) + (6/44 x -1) + (39/44 x 50% x 7) + (39/44 x 50% x 6)	+5.63
EV of betting	(9/44 x - 1) + (6/44 x - 1) + (39/44 x - 7)	+5.86

With those assumptions, it is better to bet since the EV of betting (+5.86) is higher than the EV checking (+5.63). As usual, the EVs of the different decisions are dependent on the opponent. If your opponent is guaranteed to bet 100% of the time on the River if you check on the Turn (whether or not he hit his flush, a pair or nothing at all), then the EV for checking looks like this:

Action	Computation	Result
EV of checking when he bets 100% on the River	(9/44 x 0) + (6/44 x -1) + (39/44 x 100% x 7)	+6.07

So against a habitual bluffer, a check is better than a bet (this assumes he will not bluff on the River if you had bet on the Turn since you have shown him you have a made hand).

If the opponent is so passive that he will never bluff on the River even after you check, then the EV of checking goes even lower.

Action	Computation	Result
EV of checking when he bluffs 0% on the River	(9/44 x 0) + (6/44 x -1) + (39/44 x 100% x 6)	+5.18

It turns out that the breakeven point between checking and betting in this scenario is when he bluffs 76.5% of the time. If he bluffs 76.5% of the time after you check, you should be indifferent between checking and betting. If he bluffs greater than 76.5% after you check, then checking is the better play. If he bluffs less than 76.5% after you check, then betting is the better play. There are many players that would bluff higher than 76.5% of the time and many players that would bluff less than 76.5% of the time in a situation like this. If you can identify your opponent's bluffing frequencies, you will have a much better idea of whether to bet or not.

Action	Computation	Result
EV of checking when a player bluffs 76.5% on the River		+5.86 (the same as the EV of betting)

As in many poker situations, this is a situation where just knowing the math and the equations in isolation is not helpful. The variables that the user inputs into the equations will change the answer. If a player is misinformed on his opponent's playing style, the equations will give him a bad answer. There is a nice advantage to combine the understanding of the equations and the understanding of the players. Of course, plugging these numbers into the formula at the poker table is completely unrealistic. The key is to understand this analysis away from the table, and then use it as a guideline while at the table. Here is the guideline in this situation.

If you have a A-high hand, and you think your opponent is on a draw, you should check on the Turn and induce a bluff on the River if you think there is a high chance your opponent will bluff. If you think there is a low to medium chance your opponent will bluff, then you should bet.

Countering a possible Semi-Bluffer on the Turn

Usually when you have a made hand and you think your opponent is on a draw, it is best to bet or raise on the Turn to make him put in his chips on the Turn. This is because most players will not commit any more chips on the River if they do not hit. But as shown in the previous section, if an opponent is a habitual bluffer, it may be best not to bet. Whether to raise or not works in much the same way.

Let's say you are in a heads-up spot against a very aggressive bettor. He is in early position and you are in late position. You have top two pair, and you are confident you have the best hand. However, you suspect your opponent is on a draw so he has outs. Your opponent had limped in middle position before the Flop, and you had raised on the button. The two of you saw the Flop heads-up. On the Flop, he check-raised you and you called. Here is the situation on the Turn.

Your hand: K♠J♦

Board: K♣J♣4♦ [turn] 3♠

You decide that he is definitely on a flush draw. He cannot beat you unless he catches a club on the River. He is an aggressive player, so you think that if you show weakness by just calling his bet on the Turn that he will bet out on the River even if he has nothing. If you just call and you win, you will win two bets (one on Turn, one on River). If he catches, then you will lose two bets as well.

If you raise, you are telling him you have a made hand, at which point he will now back off on the River and check and fold if he does not hit his flush. If he does not catch a flush on the River, then you will win two bets (two bets from him on the Turn, none on the River). But if he does catch his flush on the River, he will bet out and then you will lose three bets (two bets on the Turn since you raised, and one on the River after you call his bet).

This is a situation where you can win or lose two bets if you just call on the Turn. But if you raised on the Turn, you can win two bets if you win, but lose three bets if you lose. Even though you believe you are ahead, calling against this player who will bluff 100% of the time. The EV formulas are as follows:

Action	Computation	Result
EV of calling	(35/44 x 2 bets) + (9/44 x -2 bets)	+1.18
EV of raising	$(35/44 \times 2 \text{ bets}) + (9/44 \times -3 \text{ bets})$	+0.98

This demonstrations shows a situation where you may not want to raise an aggressive player who is on a draw. However, in the real world, it is rarely as simple as this as it will be difficult to know exactly what he has. Possibly he has a set (then you would have few outs) or he has top pair with a lower kicker than yours (then he would have few outs). Here is an example that will more accurately reflect a real situation at the poker table.

Assumptions:

- Your hand: K♠J♠
 Board: K♣J♣4♠3♠
- 3. Your opponent has a set of 4's or 3's 10% of the time. If he does, you have 4 outs.
- 4. Your opponent has KT 20% of the time. If he does, he is drawing dead
- 5. Your opponent has a flush draw 70% of the time. If he does, he has 9 outs.
- 6. There are 44 unknown cards. Normally the assumption is 46, but we are assuming we have an idea of the two cards he has.
- 7. There were 4 big bets in the pot before the Turn. Your opponent is first to act and he has bet, making it 5 big bets in the pot.
- 8. If you call, your opponent will bet on the River regardless of the card that comes. You will raise if you make a full house, but just call if you do not improve.
- 9. If you raise, you will be convincing your opponent that you have a made hand and he will just call on the Turn no matter what. If he has a set on the River, he will bet and you will call, unless

you pick up a full house in which case you will raise and he will call. If he has KT, he will bet on the River and you will call, if you raise with a full house, he will fold. If he has a busted draw, he will check and fold on the River. If he makes his draw, he will bet and you will call.

Expected Value of Calling

Your opponent's hand and the probability he has that hand	Computation	Result
Set, 10%	$(4/44 \times 7) + (40/44 \times -2)$	-1.18
KT, 20%	(44/44 x 6)	+6.00
Flush draw, 70%	$(35/44 \times 6) + (9/44 \times -2)$	+4.36
Total, 100%	(10% x -1.18) + (20% x 6.00) + (70% x 4.36)	+4.13

Expected Value of Raising

Your opponent's hand and the probability he has that hand	Computation	Result
Set, 10%	$(4/44 \times 8) + (40/44 \times -3)$	-2.00
KT, 20%	(44/44 x 7)	+7.00
Flush draw, 70%	$(35/44 \times 6) + (9/44 \times -3)$	+4.16
Total, 100%	(10% x -2.00) + (20% x 7.00) + (70% x 4.16)	+4.11

The EV of calling is almost identical to the EV of raising. It turns out in this more realistic example, there is virtually no difference between calling or raising. This is because you cannot assume there is a 100% chance he is on a draw, you should assume the opponent has a wider spectrum of possible hands.

Betting when everyone else is weak

If there are no raises pre-Flop and every player shows weakness on the Flop, then you should consider betting on the Turn, even with absolutely nothing. For example, you are in small blind, a weak player limps in, you call and the big blind checks.

Your hand: JT

Flop: K-8-6 rainbow

Everyone checks.

Turn: K

The K on the Turn pairs the board and you should consider betting. Any player that had a pair on the Flop would have probably bet. But since no one bet on the Flop, then when the Turn pairs the board, it probably means no one has anything. Since you were in the small blind and first to act on the Flop, it may look like you were trying for a check-raise. Now that no one has bet the Flop, a bet from you would be consistent with the strategy of trying for a check-raise on the Flop.

When you are Raised on the Turn

Getting raised on the Turn is not fun when you do not have a quality hand. It means someone either has a better hand already or is trying to make a move on you.

If you are raised by a late position player on the Turn, it could mean several things, amongst them are:

- 1. He has the better hand
- 2. He has a hand that may or not be better than yours, he is raising for a "free showdown"
- 3. He is semi-bluffing with a worse hand, but he has outs
- 4. He is bluffing or he has the worst hand without realizing it

These are difficult situations to analyze. The analysis will depend on the characteristics of your opponent. If he is a passive player, then a raise will almost always mean he has the better hand, and you should probably fold. If he is an aggressive, tricky player, then he could have any of the four possible hands listed. Against the passive, predictable player, the decision is easy, against the unpredictable player it is not. This is one of the reasons why it is better to have the unpredictable players to your right, where they will usually have to act before you act.

If an early position player has check-raised, it is more likely that he has the better hand. He is committing himself not only to a raise, but also to a bet on the River. An early position player does not have the advantages of being able to get a free showdown with a raise on the Turn.

Bad Turn/River Cards when you have middle Pair and your Opponent has a possible straight draw

When you think there is a chance your opponent is on a straight draw, there are some cards that are disastrous to your hand. If you have middle pair, a player that has a straight draw could have as many as 14 outs to win.

Example

A loose player limps in and you raise on the Button with $A \triangleq 9 \triangleq$. Everyone else folds except the looser player who calls.

Your hand: A \$ 9 \$

Flop: **Q**♠**9**♣**3**♦

The loose player checks, you bet and he calls. Even a loose player is likely calling with something as opposed to absolutely nothing. Perhaps he has a straight draw with KJ, KT, JT, J8, T8. Of

course he could have top pair or middle pair, but let's concentrate on the straight draw possibility in this example.

Turn: J or T

With a Turn like that, you have to be very careful. If he was on a straight draw, even an inside straight draw, such as KJ, J8, T8, a J or T will either make the straight for him and give him a higher pair than you. If he checks, it is probably worthwhile to bet again on the Turn if he is a passive type of player. This way you know that if he raises you can fold with confidence that you are beaten. But if he calls, you can check behind him on the River, assuming he does check the River. The Turn is a better time to make a bet (rather than waiting to bet on the River) because he may call to see the River with hands such as A3 or K9, whereas on the River, he may not call if he has not improved.

The same type of situation can come up when the cards are lower, such as when the Flop is $T \triangleq 7 \triangleq 3 \clubsuit$. In that case a 8 or 9 would be dangerous. Since all players, including the loose ones, are more likely to play higher cards, an 8 or 9 is less dangerous than in the first example because there is a smaller chance he played a hand like 98 or 96 than JT or J8.

Large Pots on the Turn

When you are ahead in a large pot on the Turn, you should be betting and raising if you think you have the best hand. This is the time to charge the draws as much as possible to see the River. If they do not hit their draw on the River, they will not pay you off on the River. If they do hit, then you will be the one donating to them. So you have to figure out the best way to extract bets out of them. If no one is betting, then you won't have any other option except to bet yourself. If a player to your right bets, then you can raise and make it two bets to the players behind you. When the pot is large, do not play in a tricky way with check-raises or slowplays. If you checked with the intention to check-raise, but no one bets, then you would have given a free card to the other players.