6/10/04 This is the fourth draft of the Introduction chapter in Hold'em Brain by King Yao. Please email feedback, suggestions, comments, opinions, questions to KingYao@HoldemBrain.com or you could use the Feedback Form to email me at the bottom of the page.

Hold'em Brain: Introduction
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The Evolution of the Hold'em Brain
The steps that a Hold'em player takes to learn the game resembles the process of human evolution. Players must master the previous steps in order to develop to the next step. Most players get stuck along the evolutionary path and fail to adapt. Others learn the use of necessary tools, adapt to their environment and move onto the next stage.

Here are the basic steps taken during the evolution of the Hold'em Brain.

Step 1: Hold'em Habilis. The player has just learned the mechanics of the game and the rules. He plays many hands because he thinks the winning hand can be any two cards. Although most players will think they know more than just the rules and the basics of the game, a large majority of the players never move past this step. These players are fed to the more developed players.

Step 2: Hold'em Erectus. To develop to this step, the player has to realize that although any two cards can win any given hand, certain starting hands are more profitable. He learns through experience after constantly getting his K8 beaten by AK. Although many players will develop to this step, most do not develop further. They may know that AQ is a better starting hand than QT, but their understanding is lacking as they play both hands indiscriminately. In order to develop further, the player must learn how to be more selective. He must learn how to play tight.

Step 3: Hold'em Sapien. The player has learned the advantages and disadvantages of different positions. When he has the best of it, the player plays aggressively. The player understands how to treat each opponent differently and adjusts according to their differences. He avoids confronting the better players, and takes advantage of the weaker players. Many players never get to this point. They develop into Hold'em Neanderthals instead, a species that cannot adapt to different surroundings, a species prime for extinction. The Hold'em Sapien is constantly thinking of ways to get better, learning more about the game and developing toward the Hold'em Brain.

Step 4: Hold'em Brain. The player understands how others think of him, how they may adjust to him and he adjusts to them accordingly. He understands Hold'em is dynamic. The player uses his knowledge of the differences in situations, the odds, the relative positions, and how others play to his advantage. The player understands that winning pots is not as important as winning money. The player is sharp.

Developing your Hold'em Brain through this evolutionary process would take a long time in a vacuum. Fortunately there are many ways to speed up this process. Reading this book is one of those ways. Instead of inventing the wheel yourself, you can see how the wheel is constructed and learn from that, maybe even use that knowledge to make a better wheel. As important as reading this book is developing your own thought process. Think through the hands you have played and

what would happen if you had played them differently. Analyze the hands you were involved in to see if you could have saved or gained an extra bet. Talk to some friends that you trust in poker and share thoughts. Get involved reading and posting on internet poker forums to get ideas and thoughts from other players. Keep reading and rereading the good books and continue to think. Following these steps is not easy, it is a difficult process. Most players veer off the path and head toward extinction as lifelong poker losers. Working hard and thinking about the game is the path toward success. In Hold'em, there are no easy steps to become a winner.

The Purpose of this book
This book is for anybody who is willing to think about the game of Limit Hold'em. Players with some experience and who are willing to think will be able to follow the book. If they have to think about the mechanics of the game, like most beginners do, then they will have a more difficult time understanding. If a reader has to think about whether the small blind acts before or after the big blind, then it will be tough to follow along.

The gist of the book is to give the reader the tools to succeed at Hold'em. The idea is to show the reader how to fish, not to give the reader a fish by simply telling them exactly how to act in each individual situation. Why would you want to buy a fish from a bookstore anyway?

This book will introduce the concept of expected value and how it pertains to Hold'em. Strategies will be shown to be correct or incorrect in different situations. Numerous examples are used to illustrate these concepts. Many questions in poker are answered with the phrase "It depends." This book will show how the best strategy in any particular situation will depend on how other players play, the size of the pot, the relative position of each player and other issues. A strategy may be correct against one type of player, but incorrect against another. A strategy may be correct in a certain position, but not in another. A strategy may be correct with a certain pot size, but incorrect when the pot size is different. This book will discuss the many moving parts and different aspects of Hold'em.

Mathematical concepts are discussed in this book, but everyone should be able to understand the concepts without completely understanding the mathematics behind them. These concepts are displayed in such a way that the reader who wants to examine the mathematics closely can do so. While the reader who would rather not muddle through it can still understand. This book shows how the understanding of the mathematical aspects of Hold'em by itself is not enough to make a player a winner. A player needs to understand how his opponents' play and how they will respond to his actions in order to use the concepts correctly. This skill is less of a science and more of an art. Any formula is only as good as its plugged-in variables. As the old phrase says, "garbage in, garbage out."

Who this book is written for
This book is written for the player that thinks analytically about the game of Limit Hold'em. This could mean a player who is fairly new to the game but understands the rules and the mechanics of the game. This could mean an experienced player who wants to add to his game. This could also mean a sharp player who already employs many of the concepts in this book but wants to examine them more closely. A relative beginner who can think critically will get more out of this book than an experienced player who cannot. An experienced player who can think critically will benefit

most.

How to use this book
Make sure you read the chapters in the Foundation (Players, Expected Value, Outs, Pot Odds and Position) before moving onto the rest of the book. The concepts presented in those chapters are crucial for the understanding of the other chapters. After that, the chapters in the Strategies, Hand Development and Extra Topics can be read in any order.

When reading a topic that may be confusing or involved, take some time to think about the issues. When there are mathematical results presented, I would suggest accepting the results at face value first, in order to understand the concept. Afterwards, you can examine the mathematics more closely (the results and the computation are usually listed separately so you can see the results without having to follow the calculations). Think critically about whether you agree or disagree. If you disagree, think about the reasons why (and feel free to send me an email at KingYao@HoldemBrain.com.) Read and think, think and read.

Terminology, Acronyms and Conventions used in this book
Here are some of the terminology, acronyms and conventions used in this book. A glossary is provided in the appendices.

A, K, Q, J, T - Aces, Kings, Queens, Jacks and Tens are denoted with just their first letter. Cards 2 thru 9 are denoted with their number.
A's, K's, 5's - the plural of any card is shown with a 's. For example, a pair of 6's.
Overcards - when your two hole cards are both higher than any card on the board
Overpair - when you have a pocket pair whose rank is higher than any card on the board
Split Pair - when you have a pair using one of your hole cards and one on the board
Top Pair - a split pair with the highest card on the board
Outs - describes the number of cards that improves your hand to the best hand. An open-ended straight draw would have eight outs
Open-raise - the act of raising in the pre-Flop round when all other players before have already folded
AKo - the "o" after the two cards denotes that the two cards are of different suits
AKs - the "s" after the two cards denotes that the two cards are of the same suit.
A♣K♠ - when there is a suit after both cards, it denotes the actual suit of the card. A♣K♠ would denote the Ace of Clubs and the King of Spades
J♣T♦9♣ - this would show a board of Jack of Clubs, Ten of Diamonds, Nine of Clubs
J-T-9 rainbow - the cards have different suits and the suits are not relevant to the hand.
K-J-x - when this notation is used to describe the board, it means that the third card, the "x" is a smaller card and is not important to the discussion. In this case, it means the "x" card is not a A, K, Q, J, T or 9 because any of those cards would be relevant.