# BLACKJACK ATTACK

## Playing the Pros' Way

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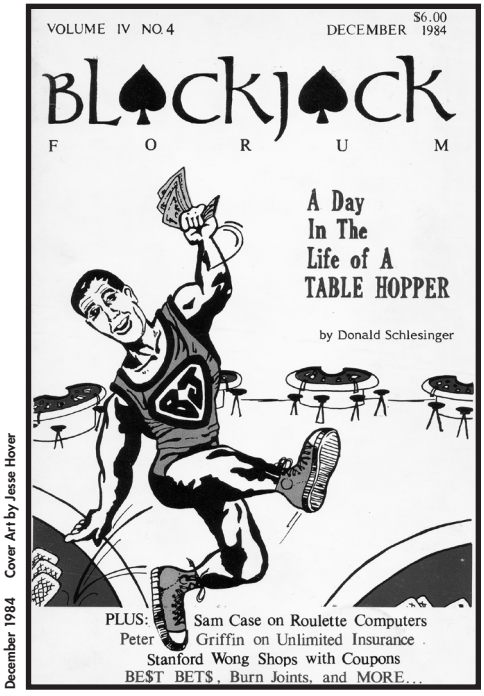
# Table of Contents

# List of Tables




Chapter 1

# Back-Counting the Shoe Game

"Enjoyed Don Schlesinger's fine article."
*— Ken Uston, legendary player, and famed author of many blackjack books, including* ***Million Dollar Blackjack***

"I can provide an assurance that Don Schlesinger really is as good, as successful and as disciplined as he claims."
*— Stanford Wong, noted blackjack author of several landmark works, including* ***Professional Blackjack***

"Schlesinger's article is the best that has ever appeared re: 'Casino Comportment.'"
*— Peter Griffin, author of* ***The Theory of Blackjack***

*As the saying goes, "This is where it all began." I had been, for several years prior, a steady contributor and letter-writer to both Stanford Wong's blackjack newsletters and Arnold Snyder's quarterly magazine,* ***Blackjack Forum.*** *I proposed to Snyder a more formal, feature-length article on back-counting, and it appeared as "A Day in the Life of a Table-Hopper," in the December 1984 issue. The response (see above quotes), from some of the most respected authorities in the field, was quite flattering. And, you might say, my blackjack-writing career was officially "launched."*

*As might be the case with a parent, who always holds a special place in his or her heart for a first-born child, the following article will always be special for me. Many who read it wrote back to say that it was the best depiction of "Wonging," or back-counting, that had ever appeared in print. I'll let you be the judge. Enjoy!*

The adrenaline starts pumping the night before the trip down. The dedicated perfectionist leaves no chance for sloppy or inaccurate play. I can recite 165 index numbers in my sleep and can count down a 52-card deck starting from a face-down position (no scanning several clumps of cards at once) in under 14 seconds. No matter. There is practice to be done. Hands are dealt at lightning speed. Cards are flipped over. Indices are recited. This is a *discipline* thing. You either do it right or you don't do it at all. At least that is my approach to the game. The practice completed, I get a good night's sleep. It's going to be a *very* long day.

I have eschewed the junket approach for my entire nine-year playing career. I am very much a loner by nature and I have an infinite capacity for playing the game. I don't care a lot about the freebies if accepting them cramps my style. I like getting the money *and* doing it on my terms. I have never uttered my real name in a casino. I have never established credit anywhere. Central Credit Agency doesn't know I'm alive. I use different names in A.C. from those in Las Vegas and, for various reasons, have established more than one pseudonym, according to the casino in question. Thus, Caesars Palace can't cross-reference a name with Caesars A.C.; ditto for the two Trops, the two Sandses, etc. It pays to be careful.

I have tried to impart to all of my students that the cardinal rule in this game is not to win as much money as possible. Rather, it is to win as much as you can, consistent with being welcome back in the casino the next time. There is a very big difference. If improper money management is the greatest destroyer of potentially successful card counters, then certainly greed and impatience are close runners-up for that top honor. If you can't learn to win (and *lose,* for that matter) with both style and grace, then a) you probably won't last in this game, and b) you will eat yourself up inside while trying.

And so, I drive down the Garden State Parkway. Two and three-quarter hours later, I'm in my first casino, Caesars Boardwalk Regency. It is 12 noon. The battle begins!

The bus would have been cheaper and much more relaxing. So why drive? Because the bus tells you when you must go home. I like to decide for myself. Not that I'll refuse to quit if I'm losing. You lose too often to refuse to stop playing. It's simply that I like to be in control of as much of my own destiny as possible. Thus, the car.

## The Back-Counting Approach

Readers of *Blackjack Forum* have questioned the practicality and feasibility of the back-counting approach. No one promised you a rose garden! Sure, I'd rather be in Las Vegas playing the Riviera's two-deck surrender game dealt to the 75% level. Or at Caesars Palace or the Trop with its 85% 4-deck game. But I live in New York and a lot of my play is going to be in A.C. whether I like it or not. The game *can* be beaten, but probably *not* the way you are playing it. Read on and follow me from casino to casino. Warning: If you don't have a good pair of thick rubber-soled shoes, forget it. I'm going to leave you in the dust! Second warning: If you've come down to have fun playing lots of blackjack, stay home and play with your family. You've come to the wrong place. I come to win money. I use blackjack as the vehicle to achieve that goal. We might play 15 minutes out of the hour; we might play less. This doesn't appeal to you? Then you're a loser already, and they haven't even dealt the first card.

The better your eyesight, the easier it is to back-count. Of course, we're already assuming you can count seven hands and the dealer's upcard in two or three seconds. If your concept of back-counting is literally standing two inches behind a player's back and riveting your eyes on each card as it falls, then you've got this thing all wrong. Look, there's a dealer shuffling at the corner table, the one across the aisle from the craps table. I position myself in between the two. I'll be looking at the craps action almost as frequently as at the blackjack table. And I'll be no closer to one than to the other. I'm looking for true counts of +1 or higher to enter the game. Zero is still a minimum bet. Why do I want to play when *they* have the edge? And zeros have a way (almost 50% of the time) of turning into negative counts. Is this any way to start a game? Not for *me,* it isn't!

I get the true of +1, but there are five players at the table. I'll be the sixth hand. Would you play? I pass. And here's why. A true count of +1 with one deck dealt out in an 8-deck game (we'll assume Hi-Lo even though I personally play Revere) is a running count of +7. On the next deal, if I play, approximately 19 cards will be used. Can 19 cards produce a running count of –7 or lower? Of course they can. It happens all the time. So where does that leave me now? I've played one hand, the count is negative, and I have a choice: a) leave the table (and look like a horse's ass!), or b) keep playing into the negative shoe. You don't like either choice? Well, neither do I.

I have a motto: "If it's good, it'll keep." I want to enter the game where I'm reasonably assured of a little action before conditions deteriorate. I might miss a few

advantageous hands, but remember, we don't want to win every dollar possible; we want to win what we can while looking *normal* doing it. You *have* to believe this. And what is even harder is that you have to dedicate yourself to playing in a manner that reflects this philosophy.

And so I wait. Two people leave and the count gets better. I'm in! Now, a word about my style of betting. It is Kelly Criterion with several modifications. You won't like most of the constraints, because you want to win *all* of the money. Remember — *I don't.* I want to win and have them as happy with me as I am with them. Are you getting tired of my hammering home this point? Well then, stop being greedy and try the "right" way!

Getting back to the bet scheme: one unit from +1 to +2; two units from +2 to +3; four units from +3 to +4; six units from +4 to +5; and two hands of six units from +5 to anything higher. Why two hands instead of the one-hand, eight-unit bet at +5? Because a) eight units piled up start to look a bit too conspicuous, and b) two hands of six units (thus 12 units) increases my spread and thus my hourly expectation. Yes, it also increases my standard deviation. But it doesn't change the probability of *losing.* It just makes the expected win greater with a commensurate increase in the magnitude of the "swings." Such is life. I'm capitalized properly. And you had better be, too. At the A.C. game, you *work* for your money — they don't give it away!

I lose the first five bets. A lovely greeting! In the process, the true count shoots up to +2. I guess you'd double up, eh? Well, I bet the same one unit. In nine years of play, I can count the number of times I have increased my bet after a loss on the fingers of one hand and still have several fingers left over. I told you there would be constraints you wouldn't like. My rationale: Winners celebrate by parlaying bets. It is the logical and acceptable thing to do. *Card counters* jump bets regardless of the outcome of the previous hand. They make the *mathematically* correct play. If you want to play the single-deck drunken slob routine where the erratic betting scheme bewilders personnel, then go to Reno. That bit doesn't get it in A.C. First of all, the cocktail service is so pathetic, you couldn't get drunk if you wanted to; second, that approach is completely unsuitable for a table-hopping, back-counting style. This is a science, not a freak show.

## Hello, I Must Be Going!

I look at my watch constantly. I want everyone to think I'm on the verge of leaving at any moment. In fact, I am; but if they think it's because I'm late for an appointment or because (later in the day) the bus is leaving, my departure from the table is expected and appears more natural. A little common sense goes a long way. I have no hard-and-fast rule for how long to play in one casino. But I am sure of one thing: Most amateur card counters — win or lose — overstay their welcome. If I win a lot — say 30 units

or so — I'll be out the door. I consider it poor taste to shove it down the casinos' throats. Remember — OK, OK, you *do* remember the "welcome" bit! I won't mention it again.

And so, on the win side, I let amount rather than time dictate my departure. However, I do have an hour or so limit. Even if the win is meager, I don't show my face for too long. And, on the loss side, it is naïve to think that just because you've been losing, you can play forever. I've been formally barred from one casino in my life — Bally's Park Place — back when they had the right to do so. And do you know what? I was losing 25 units at the time. If someone is skillful enough to determine that you are a card counter, do you think it matters to him whether you are winning or losing? If you think it does, you are quite simply wrong.

Round one goes to Caesars. They beat me rather convincingly. No time to feel sorry for myself. Time is money. Get to the next casino. Trump Plaza is enormous. Dealers are inexperienced. Cut card position varies greatly. They don't know where the hell to put it! They'll learn, but while they're learning, I'll exploit the deep cuts. Every little edge helps. I go down the tubes again. They want to offer me the casino — meals, show, everything. "If there's anything we can do for you, Mr. S. (no, not Schlesinger!), just let us know." I thank them graciously, decline, and leave. I don't want to stay another hour, win back all of my loss and ruin their happiness. I'll get the money back, but it will be at another casino. At least, that's my plan.

You're no more than a 55% favorite to beat any one casino during any one playing session. If you make it a crusade to stay until you beat them all (you can't, no matter how much you want to, anyway), you're making a bad mistake. I have won 62% of the total sessions I have ever played in my life. This is an empirical fact. (I guess I've been a little lucky!) So what am I supposed to do, cry when a casino beats me? Technical ability comes through dedication and practice. But most of all, this game takes an incredible amount of *heart.* It takes an iron will and a fierce determination to succeed. It takes physical stamina, nerves of steel, and an inordinate amount of discipline and self-control. Without all of the latter, the former (technical skill) is meaningless.

## Long Memories …

It's 2:30, I'm a 28-unit loser, and a bit hungry. I grab a quick bite on the boardwalk (you have to understand my aversion to lengthy, drawn-out meals) and decide to honor Playboy (now Atlantis) with my presence. I like the third-floor, posh *salon privé.* Players bet fortunes up there. Nothing I put on the table can upset them. The tuxedoed pit bosses are accustomed to huge action. I find a good count and, as I move in, a young man practically knocks me over getting to the table. He hasn't even played a hand yet, but I already *know* he's a counter. Suggestion: As you spot a good situation, *walk* to the table. Don't you think it's a bit gauche to *charge?!*

I shouldn't have played, because two counters at the same table is deadly. You start orchestrating your bets in unison as the count rises and, to a skilled eye, it looks ridiculous. But the running count goes to +20 (Hi-Lo), and I'd like to be a part of it. I play. And win. But the guy next to me makes an ass of himself. He also happens to win a fortune, but as you know, I'm not impressed by that, because he can never play again at the Atlantis … and I can.

What was his crime? The count escalated so fast, he went from two hands of $200 to two hands of $600 with nothing in between. Result: blackjacks on both hands ($1,800) and several more winning plays before this great shoe ends. Also, *three* pit bosses, two calls to the "eye in the sky," several huddles in the pit, and numerous glares. In short, I hope the guy is satisfied with his score, because that's the last money he wins on day shift at Atlantis for a long, long time. Maybe forever. These bosses have *long* memories.

When the MGM Grand in Vegas changed from four to five badly cut decks a couple of years ago, I stopped playing there. Then, I was told (alas, erroneously) that the cut card had gotten better. After a more than two-year hiatus, I ventured back and played a couple of shoes even though the cut was mediocre. Enter a pit boss: "Oh, hi, Mr. S. Good to see you again. It's been quite some time." The problem was, I had no relationship with this guy. I knew him well by sight and am sure that somewhere along the line he had asked for my name, but I was really surprised. Moral: They don't forget for a long time!

And so, you must parlay your bets when you win. You win, the count goes up, you let the winnings (or a portion) ride. Eventually, you win again at a higher count and you get more money on the table. Yes, mathematically, another constraint. But it's a necessary one. People naturally parlay when they win. I simply consider it very risky to raise a bet after a loss or jump a bet (more than a parlay) no matter what the count is. Remember, survival is the name of the game.

The kid leaves the table and cashes out. Of course, I stay. There is no way in the world I'm going to leave a table at the end of the shoe with him. I mean, you didn't need me writing this article to teach you that, did you? I shouldn't have been at the table in the first place, but you just know I have to stay for a while now.

I pray for another high count, but the shoe is uneventful. The French have a proverb: *Les jours se suivent mais ne se ressemblent pas* — "The days follow one another but don't resemble one another." Substitute the word "shoes" for "days" and you've got the picture. If you think there's a pattern or an exploitable rhythm to this game, if you think there are "biases" or "dumping tables" or *predictable* hot and cold dealers, you'd better save your blackjack playing for Disney World, for as sure as a twenty beats a twelve, you're playing in Fantasyland. TARGET players — it's not too late to play this game properly — while you still have a bankroll. But I digress.

## A Narrow Escape

It's 3:45, I'm still losing, but I've narrowed the gap. On to the Tropicana, where I dodge a very big bullet. Come along with me. The Trop is the best technical game in town, but that doesn't make it the best place to win money. After all, if they make it very difficult to play, then what good are the 76 well-cut 6-deck games? For a while I had a hard time playing there. I've never claimed that with a good act it is *impossible* to be detected in a casino. And there isn't a pro in the world who, sometime in his career, hasn't been spotted somewhere by somebody. After all, if I worked for a casino, do you think that there's a counter anywhere whom I couldn't spot in five minutes flat?

Well, then, it's conceivable that if a casino wants to go to the trouble, it can hire the proper personnel to spot me. And that's exactly what the Trop has done. I think they have more counter-catchers than the rest of the city combined. On this day, however, something unexplainable happens. They walk right by me. They let me play. Can it be that I've stayed away long enough (only six months or so) for them to forget? I can't believe that. Does it have anything to do with my being 35 units down? No, as you will learn shortly.

The 35-unit loss exceeds the 30-unit stop loss I use as a guide. In my system, one "session bankroll" equals 30 units and ten such "session bankrolls" (12 to 15 would be even better) constitute the total bankroll. So why have I permitted myself to lose more? Because I reached the limit in the middle of a very high-count shoe, and there were more hands to be dealt. You simply don't walk away from such a situation no matter how badly you're losing.

The "streak" system players will tell you you're throwing good money after bad and that there's no sense being stubborn and getting clobbered even further by finishing an obviously cold, "dealer-biased" shoe. The streak players are full of it!! The count is high and so you keep on playing. Period. If you don't agree with this, then stop reading, close the issue, and write to Arnold for a refund. He can't help you win and neither can I. You don't *want* to win. God bless you and I wish you luck. You'll need plenty of it, for surely that's the *only* way you'll ever win.

And so I play on and finish the shoe. I lose a little more. I did the right thing. In blackjack, you are right when you play correctly and wrong when you don't. Winning and losing have absolutely nothing to do with it. I change tables. After all, if you get your brains beaten in, you have a right to move on, no? Of course, you realize this is what I assume *they'll* be thinking. It's my excuse to leave a table where I no longer have an edge. Losing lets you get away with a few things in a casino. Walking around is one of them. "Let me see if I can find a table where the dealer pays the player once in a while" will do!

I get the dream-come-true situation — the ultimate in a shoe game. We start out as five players. The count skyrockets. And do you know what? Two people get up and

leave! Usually, it's the other way around. What's more, the two other remaining players are bigger bettors than I. No matter what I put out, the pit will be more concerned with their play than with mine. It's helpful not to be the "big shot" at the table. Deal the cards, it's get-even time! I win back the 35 units and 18 more. That's right. I run this one shoe for 53 units. Forgive me, Pit Boss in the sky, for I have sinned. I have already told you that I don't approve of winning 53 units at one time. But a) I made sure the whole world knew that I was "almost even" after the bundle I had dropped at the other table, and b) what's a fella to do, quit in the middle of a shoe? I couldn't help myself.

I play a few camouflage hands off the top of the next shoe and make sure I lose the last one. The throwaway line goes something like this: "I've worked too hard to get even. I don't want to give it all back." I color up and leave. I know I promised, but — it's not the 18-unit win (after coming back from the dead!) that makes me happy. You guessed it: I'm *welcome* at the Trop again! Nothing else matters — certainly not the money.

It's 6:30. My feet hurt, my legs hurt, and worst of all, my eyes burn. I loathe smoke. I don't permit it in my house or where I work. But once inside a casino, I am helpless against it. Call it an occupational hazard. God, I hate it so. Well, I'm winning a little now. No big deal, but it's good to be in the black for the first time all day. Unfortunately, it's not going to last. Next stop, Golden Nugget.

The Nugget has won more money the past two months (May and June) than any other casino in A.C. So what, you say? Things like that can actually have an effect on your play, and I'll explain why. They're in a good mood there these days. They're loose and win-happy. The place is crawling with high rollers, and the casino is winning tons of money. That's a good atmosphere for playing. Also, despite the 8-deck game, the cut is excellent — average about 1 1/2 decks. There's money to be made here — unfortunately, not by me on this night!

I walk for 45 minutes and never play a hand. Are *you* capable of doing that? You have to be. Remember, you're in the casino to win money, not to play for the sake of playing. I don't sit down, because I can't find the right conditions. And believe me, it's not for lack of trying. Put a pedometer on me and I bet I've racked up a mile in the Nugget alone! Here's the frustrating part of the A.C. game. You finally find a good shoe, the count is super, and you lose anyway. I make a little comeback, but the net result is that I'm once again losing for the trip.

It's 8 p.m., I left home at 9 a.m., I've decided to drive back the same night (another three hours on the road), and so far the whole trip is for naught. When this happens, many players have a hard time justifying their actions to their families and to themselves. So maybe they press a little. Maybe they increase their stakes, or play negative shoes, just to have a *chance* at winning. You have to watch out for this. You're in this for the *long run.* Day trips (even weekends) are artificial divisions of time that have no

real meaning in what is just an ongoing and continuous process. If you are destined to win 15 units in ten hours of play (about the average for the A.C. back-counting approach at 6- and 8-deck games combined), what does it matter if, in two five-hour days, you lose 15 then win 30; lose 5, win 20; win 20, lose 5; win 10, win 5; or any other combination? You have to think this way, or the game will drive you crazy. I'll now describe another way that blackjack will test your mettle.

## *The* Hand

I decide to give it one more shot. Night shift begins at 8 p.m. on Fridays and Saturdays, so it's OK to return to Trump Plaza, as the personnel have all changed since the afternoon. Well, the personnel may have changed, but not the outcome. I'm winning just enough to be even when THE HAND arrives.

Now, before I set it up for you, let's review a few mathematical facts. The true count equals or exceeds +5 about 1.64% of the time in the 8-deck game. For the Revere or Halves counts, the frequencies are slightly higher and thus, correspondingly, so are the hourly win rates. You average around 25–27 hands *played* per hour (based on being able to see and count about 100 rounds per hour). If you put in six hours per day (150 hands played), you will be placing a top bet of two hands of six units each an average of only nine to ten times. And since it is at these counts that the largest contribution to your win is accomplished, they become very important. Win your fair share of them and you'll probably be a winner for the day. Lose them, and it's tough. And when the two hands turn into three, or even four, that can be the whole ball of wax for the day. Now, let's get back to the game.

The count is astronomical. I work up to the max bet. Dealer shows a 6. I make 20 on the first hand and the second hand is a pair of 3s. Already, the count has gotten even higher. I split the 3s and get a 6 on the first. Where are the big cards? The double down produces 19. I turn the other 3 into 18. There are 24 units on the table, and I've got 18, 19 (doubled), and 20. I teach all of my students the number one tenet of the game: *Never* celebrate early! You know you've won a hand when the dealer pays you — not a second before. The count is so high I can't believe it. Normally, a dealer's 6 breaks about 43% of the time. With this count, I'm sure it's closer to 50%. She flips a 3 in the hole. Although the entire process happens in a flash, I nonetheless have time to think: "I push the 19, lose the 18, win the 20. No catastrophe." Yet. The next card is a deuce. My heart sinks. *Still* no big cards. The rest is history. You're not really interested in *which* 10 it was, are you? I lose the 24 units I should have won. To me, this is a 48-unit swing. The dealer, a new young girl, actually apologizes to me: "I'm awfully sorry, sir." I try to console her and make a joke at the same time: "It's not your fault. On the other hand, it sure as hell isn't *my* fault, either!"

You have to play this game like a machine. What would a computer do now? It

would play the next hand — after all, the shoe isn't over. If you can't do this, if you're devastated by the sad occurrence, you're not cut out for this yet. If you *do* play on but lose your concentration and keep returning in your mind to the "tragedy," you're not cut out for this. Blackjack will test your soul, your character, and the very fiber of your being. You have to sit there and take it. Otherwise, you're going to be playing this game on the funny farm! There will be better times. I win some back, but the final result of the trip (–32 units) has been sealed by the one hand.

Don't shed any tears for me. I've got a little lead on them! I'm in the car by 10 and home at 1 a.m. It's been a 16-hour day. Some restful way to spend a Saturday! When I write my first book, the title won't be *Blackjack for Fun.* And although it could very well be *Blackjack for Profit,* Arnold has already beaten me to that one!

But it's late now. I've got to get a good night's sleep. I'm going to A.C. tomorrow. There's just no way I'd rather spend a Saturday!

*[Editor's note: As Don said, don't shed any tears for him. We understand he got the 32 units back ... and a few more!]*

## From "The Gospel According to Don," *Blackjack Forum,* June 1990:

**Q.** *After rereading your table-hopping article, it is clear to me that back-counting alone is a tedious process that takes a great deal of patience and discipline. It has also occurred to me that if I were to enlist the aid of one or more confederates who would act as "spotters" (back-counting different areas of the casino, but never playing), I could certainly enhance my hourly win rate. My question involves the calculation of the increase in profits these spotters would produce. I know, for example, that there would be some "overlapping," but I'm not sure how to do the math. Also, can you suggest an equitable manner for compensating the spotters for their time? I would appreciate any help you can offer.*

**A.** Although the concept of using spotters to increase back-counting hourly win rates is not new, I doubt that the kind of analysis I'm about to present, in response to our reader's question, has ever been published. I hope it will be useful to players who are contemplating using this style of play.

First, let's define the nature of the activity. Obviously, a spotter must walk in a separate region of the casino from where the primary player finds himself. What good are two people if they're back-counting the same tables? The problem of "overlapping" occurs when the player is already involved in a good shoe and, simultaneously, the non-playing spotter finds a second opportunity. It is possible that this second positive shoe will still be playable after the first opportunity is exhausted, but until that happens, there is a temporary period of time during which the spotter's efforts cannot be exploited. Simply put, the player can't be at two tables at the same time.

Fortunately, with only one spotter, this overlapping does not occur too frequently, and the math involved in calculating the effect is relatively easy. Let's assume, for the sake of simplicity, that a back-counter sees 100 hands per hour, of which he actually plays 25. In practice, these are, in fact, very realistic numbers. Thus, the player plays 1/4 of the hands seen, and the spotter finds another 1/4. Just adding the two, 1/4 + 1/4 = 1/2, or 50 hands, produces the wrong answer, since it does not account for the "interference" described above. Here's how we alter the incorrect answer. Multiply the probabilities that both will find a table simultaneously and then subtract from the 50 the number of hands this probability implies. We get 1/4 x 1/4 = 1/16. Rounded to the nearest whole number, 1/16 of 100 hands is 6. 50 – 6 = 44. The correct number of hands played per hour is 44.

Adding a second spotter can complicate the math, but I'm going to show you a shortcut that often simplifies probability calculations. Before we consider the two-spotter problem, let's go back to the original example. You'll like this approach. Each participant does *not* play 3/4 of the hands. Since, in these instances, probabilities are multiplicative, together, the two do not play 3/4 x 3/4 = 9/16 of the hands. Therefore, they *do* play 1 – 9/16 = 7/16 of the hands. (In probability theory, the totality of all the outcomes is expressed as 100% or, in fractional form, 1.) Now, 7/16 of 100 is approximately 44, and although you may not think this method is much of a shortcut in calculating the first answer, it becomes a very valuable technique when multiple spotters are involved.

Let's add a second spotter. The three now don't play 3/4 x 3/4 x 3/4 = 27/64 of the time. So they do play 1 – 27/64 = 37/64 of the hands or, roughly, 58 betting opportunities. See how simple that was?! While we're having fun, let's examine one more situation, this time with three spotters. $(3/4)^4 = 81/256$. So, 1 – 81/256 = 175/256, or about 68 hands per hour.

We are now in a position to analyze the percent increase in profits that can accrue to the back-counting player who uses spotters. With one spotter, 44 – 25, or 19 extra hands are played. 19/25 means a 76% increase in revenues. Two spotters yield 58 – 25 = 33 extra hands, thus a 33/25 = 132% increase. Finally, three spotters add 68 – 25 = 43 more hands, and so a 43/25 = 172% increase.

Now let's carry this one step further in an attempt to answer your second question. How should the spotters be compensated? Clearly, in my opinion, the actual results of play should have nothing to do with it. Rather, the theoretical "value" of the spotters should be calculated. How many extra dollars, on average, will their presence produce? Next, how should this surplus be divided? I suggest an equal split. After all, the spotters (who, presumably, don't have the bankroll to play themselves) need the player's money. In return, the player needs the spotters to enhance his revenue. I can foresee an objection. Suppose one player is a low-stakes bettor while another is a

very high roller. A spotter who hooks up with the former will be paid much less for his efforts than if he were to team up with our well-heeled friend. Yet, in each situation, the spotter's efforts are identical.

Permit me to digress. If you ask a waitress to bring you a hamburger and she does, you tip her 15% of the bill. If the burger costs $3, she gets 45 cents. If, instead, you ask her for filet mignon and her trip to the kitchen (same as for the burger) produces a $30 piece of meat on your plate, you tip her $4.50. Now, I've never found this to be a very rational process, but that's the way it goes. So it really isn't unreasonable that the spotter who hooks up with the "filet mignon" will be paid more for his services than the one who works for "hamburgers."

Now, how will the original player make out if he shares equally with his spotter(s) the extra theoretical revenue that is produced? Well, with one spotter, the extra 76% is split 50-50, so 38% goes to the player. The extra 132% from two spotters is divided three ways, so the player gets 44% more. With three spotters, something interesting occurs. There is a 172% increase in profits, but a four-way split yields only an additional 43% for the player. Obviously, "diminishing returns" have set in, and it does not pay to add the third spotter under this arrangement. Now, I'll explain why, for practical reasons, I don't think a second spotter is worth the trouble either.

Casinos are, more often than not, noisy and crowded (particularly, those in which you are most likely to back-count). An attempt, on the part of the spotter, to get the player's attention by any kind of audio signal will undoubtedly fall on deaf ears. So, a visual call-in must be used. Suppose the player is busy looking down at a prospective table? Suppose he does manage to see the spotter immediately, but can't navigate his way through the casino until one or two hands have been dealt? The bottom line is that, in reality, hands will be missed. If the idea for two spotters is to add 33 extra hands, it is not at all unreasonable to estimate that five of these hands will go unplayed. But this reduces the extra edge to 28/25 = 112%. Split three ways, it becomes 37.3%, or less than the two-way 38% split. And even if only four hands are missed (and I'm certain they would be), 29/25 = 116% and, consequently, an extra 38.7% for the player. Surely, compared to the one spotter 38%, it isn't worth the extra effort. Conclusion: If you intend to share additional revenues equally, play with exactly *one* spotter to maximize your back-counting profits.

Of course, my profit-sharing suggestion is not the only conceivable method for compensating spotters. Indeed, I know of a team in operation now that pays spotters a fixed, hourly wage. Let's say, in our above situation, spotters earned $25 per hour, no matter how many were employed. (And let's assume $100 per hour for our player.) Here the theoretical value to the player would be quite different. After all, with one confederate, the player would keep $76 – $25 = $51 of the extra profits. Paying two spotters would still leave $132 – $50 = $82 more for the player. Even three spotters, who

would earn a total of $75, would leave an additional $172 – $75 = $97 for the player. And four (getting a little crowded now!), after their $100 salary, would nonetheless produce an additional $104 for the player. Not until the fifth spotter is hired would his presence be superfluous, as the player, after doling out $125 in salaries, would be left with "only" $103 extra for himself, a decrease of $1 compared to the four-spotter arrangement.

Here again, I believe that missed opportunities would preclude the use of four spotters, but a marginal case could be made for at least three. Obviously, there are several possible "variations on the theme," and this short piece is meant simply as a guideline to those who are contemplating the idea.

I have summarized the above findings in Table 1.1. I hope you have found this information useful, and I wish you success with your back-counting endeavors. Good luck, and … good cards.

***Postscript:*** *It has been 12 years since this article first appeared, yet, little has changed in my approach to the shoe game. I can't think of any advice that I would alter. Obviously, casino conditions are constantly changing, and many of the games described no longer exist in the same form as they were. The computer age has, however, made practicing a lot more fun than it was back then. Today, I believe the practice regimen, briefly described in the article's first paragraph, would be a lot more enjoyable, thanks to the genial software, such as Norm Wattenberger's* ***Casino Vérité,*** *that has been designed for such purposes. I'll be making further remarks on simulators and study aids, throughout the book.*

*Finally, note the casual reference, in the next-to-last paragraph of the "Table-Hopper," to "when I write my first book." It may have taken 13 years, but I'm delighted to say that the time is now!*

## Table 1.1
### Back-Counting with Spotters

| No. of People | Hands Played per Hour[1] | Percent Increase in Profits | Extra Revenue (%) to Player (increase shared with spotters) | Hourly Profit for Player[2] | Extra Revenue ($) to Player (fixed wage, spotters) | Hourly Profit for Player[2] |
|---|---|---|---|---|---|---|
| player alone | 25 | — | — | 100 | — | 100 |
| one spotter | 44 | 76 | 38 | 138 | 51 | 151 |
| two spotters | 58[3] | 132[3] | 44[3] | 144[3] | 82[3] | 182[3] |
| three spotters | 68[3] | 172[3] | 43[4] | 143[4] | 97[3] | 197[3] |
| four spotters | 76[3] | 204[3] | — | — | 104[3] | 204[3] |
| five spotters | 82[3] | 228[3] | — | — | 103[4] | 203[4] |

[1] Rounded to nearest whole number.
[2] Based on $100 per hour playing alone.
[3] Potentially lower because of missed opportunities (see text).
[4] Case of "diminishing returns."