

Memories Are Made of This

**Simon Aronson's Introduction to
Memorized Deck Magic**

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Introduction

“The card conjurer’s repertory is never complete without employing the prearranged deck to some extent.”

—S. W. Erdnase

[Note (May 2002): This pamphlet was originally written approximately three years ago, for use in some private workshops I conducted on memorized deck magic. Since that time much has happened to make the use of a memorized stack even more popular. Last year I published my book, *Try the Impossible*, which contains an in-depth exploration of the Aronson stack, plus two of the tricks that were contained in the original version of these notes. I also now have a website, at www.simonaronson.com, which allows me to share my ideas about magic generally, and about memorized deck magic in particular, on a more current basis over the internet. I’ve revised these notes in just a few minor respects, to update the references, correct any errors that have been brought to my attention, and in only a few places to clarify or expand on the ideas presented.]

An awful lot has changed over the past twenty or so years. When I wrote my first book (*The Card Ideas of Simon Aronson*, 1978), I tipped my mitt on a lot of “underground” stuff that I had developed, using the memorized deck. In my introductory essay



to that chapter, I mentioned that I sometimes felt “guiltily pleased” that so few of our advanced cardicians had (at that time) ever considered using the memorized deck.

Well, I can't feel such guilt any longer because the memorized deck has certainly come of age. Indeed, the past few years have seen a groundswell of interest in this venerable tool among some of the world's most respected magical thinkers and performers. Lecturers at magic clubs around the country have showcased memorized deck miracles. But the enthusiasm is not limited just to the professionals. In magic chat rooms on the Internet, and at magic conventions, I am regularly besieged by eager, inventive amateurs who want to show me their latest twist or accomplishment with a memorized deck – and many are really good! The momentum is growing and contagious, and the sheer number of cardicians now using a memorized stack has produced a synergy that is causing the number of effects, tips, variations, and new principles to multiply exponentially.

I'm happy to have been part of the inspiration for this renaissance, but there's no reason to stop there. I'm constantly working on new memorized deck effects. So, it's about time that *you* joined the ranks also.

About This *Introduction*

As the title implies, the purpose of this booklet is simply to introduce you to some of the basic principles and applications you need to know to get started with a memorized deck. In Section I, I define a few of the basic terms, and answer some of the more frequently asked questions about how to approach the topic. In Section II, I try to give you a sense of the power and scope of the memorized deck by discussing five principles that are commonly used in memorized deck applications. These principles are illustrated with several simple, though quite fooling, location effects. In Section III, I offer some thoughts on how one can best go about learning a memorized stack. At various points I refer to some of my favorite “memorized miracles” and to my books, so for convenience in looking up those references, I've included in Appendix A a current bibliography of all of my published writings on memorized deck magic. Finally, in Appendix B, I've set forth the Aronson stack, in case you want to learn it.

I hope this brief introduction will make you feel more comfortable with, and will whet your appetite for further exploration of, memorized deck magic.

Please understand what this Introduction is *not*. It's not a "summary" of everything there is to know about memorized decks; to the contrary, it barely scratches the surface. It's also not a substitute for reading my books. I've been publishing material on the memorized deck since 1972. If you're familiar with my writings, you know that I'm usually quite detailed (my friends say "exhaustive") in discussing the underlying principles, tradeoffs, lead-ins and clean-ups, variations, credits and other references concerning each effect. This Introduction however, goes in the opposite direction – the discussions are intentionally abbreviated, and are expressly meant to point you toward my books for further exploration and discussion of the material. (If you already have read all my books, you probably *don't* need this Introduction at all).

I. Getting Started

Getting started

So, what is a “memorized deck” (or, sometimes a “memorized stack”)? Quite simply, in current parlance among cardmen who actually perform memorized deck magic, a memorized deck means any specific ordering of the 52 playing cards, in which the position of each of the 52 cards (from 1 to 52) *has been committed to memory*. That’s it.

The key element is the phrase “committed to memory.” If you’ve really memorized the positions of all 52 cards, and if a deck is stacked in that particular *memorized* order, you’ll be able to do two things:

- A. if someone names any number, from 1 to 52, then you will know instantly what card lies at that numbered position, and
- B. if someone names any playing card, then you’ll know instantly at what numbered position that particular card lies in the deck.

That, in a nutshell, is all there is to a memorized deck, but a lot of wondrous possibilities flow from this one simple fact of memorization. And, likewise, the esoteric nature of memorized deck magic also becomes immediately apparent: the average magician who contemplates the supposed difficulty of memorizing 52 abstract numerical relationships, quickly dismisses this tool as being not worth his time or effort. (Many practitioners are secretly happy about that, but hopefully this Introduction will help you overcome any initial hesitancy or inertia).

So let’s examine the foregoing definition a bit more.

“Instantly” means, in this case, without needing any formulas, calculations, or time to get from a position to a card or vice versa. If someone calls out, say #38, you instinctively know it’s the Ten of Hearts (or whatever particular card lies at position #38 in the particular deck order you’ve memorized), or if someone calls out, say, the Ace of Spades, then position #6 (or whatever) will immediately come to your conscious mind. It happens instantly, without mediation, or thought, or rules, or formulas, of any kind, because the 52 correlations of each

specific card and its respective numerical position have previously been established in your memory.

At the outset, this concept of learning the 52 cards “by memory” is what scares most beginners. Let me offer some encouragement that, at this stage, must simply be accepted on faith by any initiate. Believe me, memorizing a stack is far, far easier than you ever would imagine. Indeed not only will learning a stack come much more quickly than you’d ever have thought possible, the learning process can be enjoyable, even fun – because you’ll be learning powerful new tools that will strengthen your mental powers, both in and outside of magic. The *only* people who speak of the difficulties of memorizing a stack, are those who’ve never seriously tried to learn one.

The “stack number” of a card is the numbered position each card occupies in your memorized order. Thus, for example, in my particular memorized deck order, the Jack of Spades has stack number #1 (it’s the top card), and stack number #52 is the Nine of Diamonds (it’s the bottom card of my memorized order). Each card’s stack number is unique to it, and by definition stays with it, no matter what order a particular deck is in. If I shuffled my memorized deck, the Jack of Spades still is the card whose stack number is #1, regardless of what position the Jack happens to fall at in the now shuffled deck.

The stack number, once it has been learned, is as though each card now has a second “name,” a new “secret identity.” The Ten of Clubs (which is stack number #35 in the Aronson stack) can also be thought of or “known” as card #35 – but while everyone knows the card’s ordinary name “Ten of Clubs,” *only you* know its other identity, its stack number #35. A card’s regular name carries with it certain characteristics by which the card can be classified, organized, or arranged; for example, the Ten of Clubs is black, a club, a spot card, an even card, etc. The fact that each card now has a secret identity means that cards can now also be classified or organized with respect to this new identity, and this “secret” principle of classification or organization will be known only by you. No one else will even be aware that any organization or order exists. If this so far sounds a bit conceptual, let me give a concrete example to illustrate.

Divided Deck Location

Everyone is familiar with one of the earliest tools for doing a location effect, namely, secretly dividing the deck into reds and blacks. If a card is withdrawn from one half of the pack and replaced in the other, it can

easily be discovered because it is the only misplaced card among the opposite half. As long as the audience is unaware of the divided nature of the deck, it can be a real fooler, but obviously, one can't spread the cards face up while using the red/black principle. Because the red/black division is so visually apparent, magicians have sought to disguise it somewhat, by dividing the deck not by color, but by other characteristics of the cards, e.g., all the "even" cards in one half and the "odd" cards in the other, or Clubs and Diamonds in one part and Spades and Hearts in the other. Each of these criteria for dividing, or organizing, the deck has one drawback: if a spectator is looking for the organization, he may find it. If, however, the deck were divided into halves by organizing the cards according to some feature or characteristic *of their secret identity*, even an intense or prolonged inspection would fail to reveal anything, since the secret identity, the stack numbers, are known only to you. Thus, in the above location effect, if all the cards with low stack numbers (1-26) were in one half of the deck and the cards with high stack numbers (27-52) were together in the remaining half, you could perform the identical location effect and could spread the deck face up with impunity, for the principle of organization cannot be discerned by anyone who is not familiar with the particular stack you've memorized.

Note that, depending on your needs, you could use any feature you want with regard to stack numbers (high/low, even/odd, every fourth card, just those between 30-40, etc.) as a principle or means of organization. And obviously you aren't limited to dividing a deck into just two halves; the same secret identity principle can be applied to one or several small groups or packets of cards. While the classification will be apparent to you, the cards will be *random* as far as the audience is concerned. One can generalize the above example into a rule or principle: Whenever a division, organization or arrangement of cards has been made, and this arrangement is to be used as a secret tool and not something which is ultimately to be revealed or exposed to the spectators, then an alternative arrangement based on the stack numbers of the cards can usually be substituted.

Ed Marlo employed a memorized deck, and when using "marked cards," Ed found it easier to "mark" the backs of cards to indicate the card's *stack number*, instead of its suit and value. ("Marked Memory," *Pallbearers Review*, Jan. 1968, p. 152). Such markings, of course, give no clue or evidence of the card's identity even if a mark is noticed or studied – because the mark refers to the card's secret identity, known only to the performer. My essay "General Observations on the Memorized Deck" offers a number of other examples, suggestions and ideas for using a card's secret identity, i.e., its stack number, as an "organizing principle."

Finally, I use the term “memorized deck magic” strictly to refer to just that area of card magic whose secret modus operandi makes use, at least in part, of the fact that the performer knows the stack numbers of the cards by memory. This is a subtle, but important, terminological distinction. Often the particular stack order which has been memorized contains one or more special features imbedded within, or “built into,” it that allows you to perform special tricks that couldn’t be performed without that specific order. (For instance, the Aronson stack contains three separate poker deals, a perfect bridge hand, a spelling effect (that is designed to allow you to subtly switch in the memorized deck), any poker hand called for, a blackjack deal, tricks for producing four-of-a-kind, a lie detector effect, and many other goodies). It often is quite possible to use those special features, and perform those specific effects, without even having memorized the stack. Where such memorization *isn’t required* to perform a particular effect, I generally don’t call it “memorized deck magic”, even though one might, in fact, have memorized the order of the deck.

Which Stack, or Deck Order, Should You Memorize?

For the vast majority of memorized deck effects, it makes no difference what particular stack order has been committed to memory. All that matters is that you know the positions of the cards “cold.” The deck order that gets memorized could hypothetically be one that’s completely random, or one that’s ordered in some non-obvious way (e.g., faro stay-stack order) or one that has cyclical or repetitive patterns (e.g. Si Stebbins or Eight Kings), or one that’s been designed for some other particular tricks or purposes. About the only “absolute” requirement is that when the cards are arranged in order, their faces should appear to be random; they should not evidence any planned or pre-arranged feature upon cursory inspection. (The regular alternating red/black color pattern of CHaSeD order has frequently revealed a pre-arrangement when using the traditional Si Stebbins or Eight Kings set-up, but this can easily be rectified by using my disguised suit variant, “Running Without Being CHaSeD,” *The Aronson Approach*, p. 163, comment 9).

That having been said, it’s pretty obvious that if you’re going to invest the time to memorize a particular deck order, and you plan to regularly, or at least often, carry around a deck that’s set up in that memorized order, it might as well be an arrangement that offers you some extra advantages. What sorts of advantages depends on your own unique situation; the particular types of card effects you prefer, or are called on, to perform; your performing circumstances; how many card tricks you usually perform at any one time, etc. For example, I find it very impressive to be able to perform a gambling demonstration apparently on the spur of the moment, so I constructed my stack to include many different poker deals, as well as a perfect bridge hand. I’m thus usually ready to respond to such a request, if asked “out of the blue.” I also wanted a separate trick that would allow me to secretly “ring in” my memorized stack, in the course of performing a prior trick with a duplicate shuffled deck, so I incorporated into my stack a special spelling sequence that allows my memorized deck to be undetectably switched in, while performing a mental miracle. But that’s just me, and my tastes.

Other performers may prefer to devise their own unique set up, that's tailored to their own favorite tricks. For instance, it's been suggested that if you perform a number of different packet tricks, using combinations of different cards, you might be able to set up your own private memorized deck to consist of successive separate packet tricks, or effects that use only a portion of the deck (e.g., the ten card poker deal, oil and water, an ace assembly, etc.). At any time, you could cut a desired packet trick to the top of the deck, perform it, and then replace those cards back on top (or on the bottom), being careful to keep them in their proper memorized order. Your memorized stack could thus also function as a "bank" of your favorite packet tricks.

Some performers begin each performance by opening a brand new pack. For them, there may be a benefit in having a memorized order that can easily and efficiently be generated from new deck order on the spot; however, there may be price to pay, a trade-off, in sacrificing other "built in" features. I don't open a new pack that frequently, and when I do, I like to "wear in" the cards somewhat before using them, but this is clearly a matter of personal preference. The key is to make a realistic assessment of your own performing habits and to incorporate features which will deliver practical benefits, ones that *you* will actually use in your particular real world circumstances.

Finally, if you session with, or perform often in the company of, other magicians, there's a significant benefit in having learned a deck order that some of your compatriots also have memorized. This enables you to perform miraculous "stooge" effects and often presents an opportunity where you can "borrow" someone else's (secretly pre-arranged) deck and still perform your intended memorized miracle. At the time of this writing (2002), the two most popular memorized stacks are Juan Tamariz' stack, which is somewhat more prevalent in Europe, and my own stack, which seems to be more in vogue in the States. (Juan's stack is presented at the end of Volume 2 of his "Lessons" videotape (A-1 Multimedia, 1997), and also in his book *Sinfonia en Mnemonica Mayor* (two vols, 2000), soon to be published in English by Hermetic Press). The Aronson stack was originally published in a separate pamphlet, "A Stack to Remember" (1979), which is reprinted in its entirety in my book *Bound to Please*. Its many built-in features are discussed extensively in the foregoing book, and in *Try the Impossible*. For convenience, the Aronson stack is listed on Appendix B to this *Introduction*).

Regardless of what stack order you decide to memorize, let me offer two personal opinions. First, you'll find that the vast majority of memorized deck effects you actually do perform will in fact, be "stack independent" (which simply means that they can be performed with any memorized stack), so the issue of which underlying

stack has been learned will for the most part, be irrelevant. Second, I've met too many cardicians who are "waiting" for the perfect stack to be devised, promising themselves that they'll memorize it once they know they've found that "ultimate" one. Don't let such an excuse be your procrastination crutch. There's no time like the present to start – and, in the long run, what is important is not whether the Ace of Spades happens to be 6th or 7th in your memorized order, but whether you have some order memorized at all.

What Else Will I Need?

Whenever you're using a stacked deck (and this applies not only to memorized decks but to other full deck stacks as well), it's helpful to know a few false shuffles and one or two good deck switches.

False shuffles, done sparingly, in a casual manner at an offbeat moment, undercut suspicions that any pre-arranged set-up might be in effect. Magic literature is replete with various techniques and descriptions, so I'll just mention that it's practical to know false shuffles suitable for different performing conditions. For table work, I prefer the Zarrow, or my own "The Aronson Stripout," *Simply Simon*, p. 65. For stand-up, it's nice to know an overhand false shuffle (I prefer Erdnase's first method, *Expert at the Card Table*, (1902), p. 159) and one in-the-hands false riffle shuffle; I use my own variation of Lennart Green's shuffle, but there are many excellent published alternatives (for example, "On the Hay False Dovetail Shuffle," *Vernon Chronicles* (1989) Vol. 3, p. 44; "The Cascade Shuffle," Tamariz, *Sonata*, p. 77; "An In-the-hands False Shuffle," Roberto Giobbi, *Card College*, Vol. 3, p. 651; Guy Hollingworth's elegant work in his *Drawing Room Deceptions*, 1999, p. 169; or Karl Hein's Heinstein Shuffle, *Genii*, April 2001). It's also helpful to remember that some memorized deck effects utilize only a partial stack, and in such tricks you can create a convincing illusion by actually shuffling just the non-necessary portions of the deck.

Deck switches allow you to ring in your memorized stack during the course of a longer routine. They're helpful, but not essential – it's perfectly possible to arrange your routines so that the memorized effects come at the beginning. Some performers have a series of effects that maintain the stack in order throughout the entire routine (see Mike Close's chapter "On the Memorized Deck," *Workers #5*, (1996) p. 122). Most of the many effects built into the Aronson stack that are described in *Try the Impossible* maintain the stack in order.

Deck switches do provide greater flexibility, and many are easy to do. I find it convenient to simply switch packs by putting a deck aside behind another prop, or into my pocket, while performing an intervening non-card effect. Mel Brown's "Joker Deck Switch" is a great ruse, which allows you to switch decks between tricks in the guise of inadvertently forgetting to return the jokers to the case (*M-U-M*, August 1958, p. 96, also described in my *Bound to Please*, p. 61). Some card tricks actually involve putting the deck in your pocket, or under a table, and these procedures can often be adapted to include a deck switch; I use my marketed effect "Side-Swiped"

to accomplish such a deck switch. Some tricks are expressly designed to function as transitions from a regular deck to a memorized deck, while being strong effects in their own right (see my “Mental Spell,” *Bound to Please*, p. 128, or my “Bait and Switch”). If you ever “vanish” a deck, and then make it reappear, you might as well have the re-appearing deck constitute a deck switch as a bonus. In summary, I’ve found it’s fairly easy to bring your memorized stack into play. Indeed, there’s a classic effect that actually allows you to subtly generate your memorized stack order, from a borrowed shuffled deck, at any time during your performance, right in front of your audience! (See “A Subtle Game,” in the Nikola Card System (1927), included as Chapter 20 of Jean Hugard’s *Encyclopedia of Card Tricks*).

Is There a Substitute For Memorization?

No.

The reason I've harped on the need for the 52 mental connections (between each numbered position and its respective card) to be "instant," "instinctive" and "by memory," is to dissuade you from considering the tempting but illusory wish that perhaps, somewhere, there's a "crutch" one could lean on forever, that would obviate having to commit a stack to memory. There isn't.

Some people, exercising inventive inertia, have sought to avoid having to memorize a deck's order, by instead devising an order of cards which is susceptible of one or more mathematical formulas. By applying such formulas, one can (hopefully simply) "convert" any given numbered position to its respective playing card, or vice versa. Is such a "formula" a valid substitute for a memorized deck? The short, practical and only realistic answer is: no way!

Consider for example, the very simple Divided Deck Location described above (p. 5), where the deck was secretly separated into "high" and "low" stack numbers, so you could perform locations by finding a "stranger" card in the divided deck, the one card whose stack number was "from the other range." A "formula" approach would be out of the question, because you'd need to calculate your formula on each and every card just to determine whether it was a high or a low one! And this problem will occur whenever you're searching among a "group" of cards to discern some particular characteristic (e.g., say, the "highest" stack number in the group). When the stack numbers jump out at you by memory (just like a color or a suit jumps out at you visually), such a search poses no problem, but for virtually any sophisticated application, you simply don't have the time to start working through separate formula calculations for each card in a group.

Moreover, for most memorized deck magic, you're already pre-occupied doing too much else, at the very time you'd have to apply the necessary "formulas." You'll want to start off by already knowing a card's stack number instantly – because many memorized deck tricks themselves will require you to perform some simple mathematical calculation to that stack number. Formulas would increase the amount of mental gymnastics

required and will slow you down. You'll start hesitating, while your mind goes into overdrive. This isn't entertaining or even fooling. If your thinking shows, it's as bad as if your breaks show.

Formula stacks have their place in magic; some of them are quite inventive. If, hypothetically, a formula stack had other attributes to it which made it worth memorizing in its own right, then I suppose there's nothing wrong with memorizing a formula stack as your chosen memorized order; this might even offer some mental security, in the comfort that if you ever momentarily "forgot" a stack number, you could use the formula to come to your aid. A formula might, in a few very simple tricks, provide a valid alternative to memorization, but in virtually all of the more complex or advanced memorized deck tricks, a formula is of theoretical use only.

II. The Memorized Deck in Action: Basic Principles

Using a memorized deck as a secret “tool” or utility has been around for a long time, so it’s not surprising that many different applications have been developed. I thought it would be helpful, as part of this Introduction, if I briefly summarized five separate principles that I’ve found to be particularly useful in developing powerful, and fooling, memorized deck effects. In each instance, I’ll also refer you to some of my own tricks that I feel make good use of these principles.

1. Secret Groups

We've already touched on this idea in our discussion of how a card's stack number provides a new, secret identity for each playing card. On page 5, I offered an example of how the deck could be secretly divided into high and low stack numbers for a location effect. But this only scratches the surface.

Many excellent card locations depend upon having the deck secretly divided into two or more groups (red/black, odds/evens, four different suits, flats/rounds, spot cards/court cards, etc). By secretly maintaining the deck in such a segregated fashion, the performer is able to perform amazing locations and discoveries, usually by either finding an "out of place" card that doesn't belong in a particular group or by using the "breakpoint" between groups (the bottom card of one group, or the top card of the next group) as a secret key. Such "groups" allow for convincing shuffling, because as long as the shuffling is done only *within* each separate group, the secret modus operandi is maintained.

Consider the advantages that a memorized deck can bring to any such effect, if the secret groups are based on the card's stack numbers. First, the grouping will be, by definition, completely invisible and indiscernible, because the organizing principle is not based on any overt characteristic of the card itself but solely on its (secret) stack number.

Second, you can arbitrarily divide the deck into any number of distinct and separate groups you want, and each group may be of any size you desire. You are not limited to exactly 26 reds or blacks, or exactly 13 of one suit, or any other fixed limitation imposed by the physical characteristics of the card. You can have many or few groups of uneven amounts, using however many (or however few) of the cards in the deck as you want.

Third, the dividing point between the groups can be "floating," and need not be decided upon beforehand. An example will illustrate. If you're using the traditional red/black separation, there must be 26 cards in each group. If however, you're using a low/high division by stack number, the dividing point does not have to be exactly in the middle – it can be anywhere you'd like! This allows much more freedom in handling, because the spectator can be asked to "cut off about half." If you then glimpse or otherwise learn a key card at the point where he cut (either the face card of the upper half, or the top card of the lower half), you can create your divided groups

based on the spectator's cut; for instance, if your key card informs you that he happened to cut off, say, 23 cards, then the "lows" would consist of stack numbers 1-23 and the "highs" from 24-52. This floating dividing point can be extended to any number of groups; just imagine asking Spectator #1 to "cut off about a quarter" and have him shuffle his packet; meanwhile you glimpse the top card of the remainder. Now, ask Spectator #2 to repeat the process, cutting off another quarter, and so on. After the deck has been so divided, you'll know the stack numbers contained in each packet and can then proceed to amazing locations using this knowledge. (See, for example, my "High Class Location," "Four Stop Intersection," "S-D Plus" and "Shuffle-bored"). The floating dividing point can add flexibility to many locations.

Fourth, groups organized by stack numbers can allow recollection and mental manipulation in ways just not available under more traditional groupings. In my "Histed Heisted" the deck is passed out among ten different people, giving each person five "random" cards. What the audience doesn't know is that one spectator actually gets five cards whose stack number ends in 1, and the second spectator gets five cards whose stack number ends in 2 (e.g. #2, 12, 22, 32, and 42) and so on. Not only does this allow you to instantly remember each of the cards distributed to each of the spectators, it allows for a subtle, yet easy, application of the cross-matrix elimination principle, by merely reciting your memorized deck in distinct groups of ten! (I don't expect my beginner readers to follow or fully appreciate all of the nuances I'm pointing to here, but when you read the full trick, you'll be impressed with the amazing mind reading that gets accomplished, all because of subtle secret groupings based on stack numbers).

2. Counting

The relationship between a card and its stack number means, of course, that if a packet of cards is cut off the top of the deck and you know the card that's been cut to, you'll automatically also know the precise number of cards that are contained in the cut off packet. This point was exploited in one of the earliest memorized deck effects, "Weighing the Cards" (from the Nikola Card System mentioned earlier).

I've found that a reverse application of this numbered relationship is even more intriguing; namely, that if you can secretly count the number of cards contained in a cut off packet, you'll automatically know the card that was the original face card of this cut off packet.

Pulse Reading

Here's a simple but quite fooling effect. Have a spectator cut off a packet from the top of the tabled deck, look at the card she's cut to (the one at the face of her packet), and then shuffle her packet. She then ribbon spreads her shuffled packet face up across the table in front of you. You take the spectator's wrist, to feel her pulse, ask her to merely think of her card, as you move her hand back and forth across the tabled spread. Slowly, you lower her hand down until it lands on just one card, say the Seven of Diamonds. And, of course, you're correct. How? Because as you move your hand over the cards, you silently and secretly count the number of cards comprising the entire spread. Suppose you count a total of 15 cards; that means that the spectator originally cut to the 15th card (which in the Aronson stack is the 7D). The rest is just acting, as though you're reading her pulse and being "guided" by it. It can be a quite convincing demonstration.

As an alternative, I've even done the foregoing with the spread of cards *face down*! Proceed as above, but this time have the shuffled packet spread face down across the table; then hold her wrist and act as though you're getting vibrations from the spectator toward a particular card, as you lower her finger onto that face-down card. Act a bit unsure, as you carefully lift up a corner of the card to peek at it, and ask, somewhat hesitatingly, "Is your card the Seven of Diamonds?" Once again, by counting the total number of cards in the face down spread, you'll already know the identity of her card. The rest is a bold bluff: it actually makes

no difference what card you ultimately touch, since *only you* peek at it! You then miscall it as the Seven of Diamonds (or whatever stack number #15 is in your memorized order).

Either way, this simple effect is both fooling and entertaining – and all it takes to accomplish it is a secret counting of the cards that comprise the packet. The total count tells you the original cut-to card.

It's important that you realize that this simple principle, a secret counting, has much broader applications than just to the above trick. There are many subtle, ingenious ways of secretly counting the number of cards in a given packet, and any one of them can be used to generate and develop baffling card locations. While performing a few overhand shuffles, you may be able to secretly count by running cards individually as you shuffle. If you can get a spectator to fan a small packet of cards in front of his eyes, you may be able to secretly count how many cards are contained in the fan. Or, if the spectator is given a task of dealing ("Deal, and stop whenever you like. . ." or "deal the cards into two piles . . ."), the performer can secretly count as the cards are dealt.

I've found that this secret counting principle escapes notice by virtually everyone, including knowledgeable magicians, so long as there's a natural rationale for whatever procedure you adopt. This counting principle is used, and expanded on, in some of my favorite memorized deck effects, including "Two Card No Touch Location," "Past, Present, Future," and "Madness in Our Methods."

3. Endpoints

The above counting idea is extremely helpful, as long as you have a starting point (usually the top of the deck) to count from. But what if you didn't even know such a starting point? What can you do then?

Center Cut Location

Imagine this scenario: the deck is on the table, and the spectator withdraws a block of cards *from the center*, looks at the card he cut to (the one at the face of his withdrawn block), and then shuffles up his packet. How can you find his selected card, under those conditions? Let's make the conditions even more challenging: after the spectator shuffles his packet, he hands you only some (but not all) of his packet, and he alone decides how many, and which cards to give you (so long as his selection is included among them). Believe it or not, because of the special properties of stack numbers, you can quickly run through the cards he hands you and with confidence find his selection, without touching any of the remaining cards, without asking any questions, without any key cards, and without any counting!

How? By using the concept of the "endpoint" of a block. If you visualize the selection procedure (i.e., withdrawing a block from the center of the deck) just a moment's reflection will reveal that, out of all the cards contained in the center block, the card at the face of that block (the selection) will have the *highest stack number* of all the cards in that center block (because it's the furthest down in the deck). All you need to do is mentally recite to yourself the stack numbers of whichever cards he hands you and just pick the one whose stack number is the highest. That must be the selection.

I pioneered this concept of endpoints in my "Center Cut Location," and I want to emphasize that the above simple location procedure is offered solely to illustrate the principle. The principle of endpoints can be expanded on, in many ingenious ways. You can have multiple selections even within the same block – just use the top card of the packet, whose stack number will always be the *lowest* in the group. You can also use successive blocks of cards and use the endpoints in each block! The endpoint principle is of amazing utility, because it can be used in situations where the conditions are so stringent.

Indeed, this endpoint “principle” isn’t even limited to the extreme endpoint in a particular group or block – because it doesn’t require a “consecutive” block at all! It can be used within any group of cards, as long as you know the *relative* position of the selection from the endpoints. Here’s one more, quite different, use of the same underlying idea that illustrates this “relative” concept.

Five Card Location

Ribbon-spread your memorized deck face down across the table and ask a spectator to slide any five single cards only half-way out of the spread, leaving them face down. Explain to a second spectator that his job is to narrow the decision down to one of the five cards, and ask him to point to any one of the five protruding cards. Once he’s done that, turn away and while your back remains turned, have him remove and show everyone the card he’s chosen. Then have him remove the other four protruding cards as well and shuffle his selected card among the other four. He then hands you all five cards.

Notwithstanding those conditions, you can instantly determine which of the five cards is his selection by a subtle use of the endpoint principle. When spectator #2 points to one of the five face down cards protruding from the spread, just mentally note whether that selection is in the first, second, third, fourth or fifth position (judged with respect to the five protruding cards), reading from the *bottom* of the deck. That “relative position” is all you need to remember. You can forget about all the rest of the cards in the deck and you needn’t be concerned that the five potential candidates aren’t “together” in the deck. When the five cards are handed to you, just rearrange them from low to high by their stack numbers (you could even do this “arrangement” mentally, without actually readjusting the physical positions of the five cards). The “relative position” you originally noted will now indicate which of the five was selected. For example, if the spectator had pointed to the “second” of the five cards (reading from the original bottom or face of the pack), then you’ll know that the selection will be the one among the five with the second highest stack number.

If you want to see what can be done with the endpoint principle, especially in conjunction with some of the other ideas we’ve been exploring, then in addition to my “Center Cut Location,” you should check out my “Four Part Harmony” and “Topsy Turvy.”

4. Mathematical Principles

Sometimes beginners get frightened because they imagine that memorized deck magic must require performing a lot of mathematical calculations in your head. As you've seen from the examples so far, this doesn't have to be the case. Using the principles discussed above, we've been able to create some amazing locations that require nothing more than being able to count or spot the highest stack number among several cards.

I fully appreciate that this is only an "introduction" and most of my readers are perusing this out of curiosity about what memorized deck magic is and whether it's "worth the trouble." I don't want to scare you by making memorized deck magic seem complex, because it doesn't have to be. But I would be remiss if I didn't at least point out some of the opportunities a memorized deck provides when it is used in connection with other mathematical principles applicable to card magic (ones you probably already know about). The fact that the memorized deck is in a known, numbered order, and you know the positions of each card by heart, greatly facilitates and can actually simplify using other mathematical principles.

Sometime ago, I wrote an essay "Memorized Math" that goes into these topics in great detail. I won't repeat that information here, but later on, once you feel comfortable using a memorized deck, then it would probably be worth your while to read that essay and start thinking along such mathematical lines. I'm *not* talking about making all your memorized deck magic into complex math problems; far from it. I just want you to know that once you do use a memorized deck, it will make other kinds of card tricks, one that utilize mathematics, more accessible to you – and more fooling, because of the added dimension of your secret memorized stack.

The main mathematical tool that the memorized deck provides is that it furnishes you with the numbered position of every card. Anyone who has ever wanted to have a known key card at a given position (e.g., at position 13 for a clock trick, or at position 26 to divide the deck in half, or indeed at any specified position) will appreciate that the stack number already supplies you with all 52 keys, without having to do any math at all. But from there, it's only a small step – in fact one single cut of the deck – to recognize that you could place *any* specific card at *any* specific position you want. All you need to know is where to cut the deck. One small mathematical calculation will tell you. (As mentioned, I'm *not* going to go into formulas in this Introduction;

that's the last thing you need at this point. But if you can subtract a number from 53, that's about as complicated as it gets for probably 90% of the effects using math.) And you don't need precise estimation skills to cut the deck, nor do you need to secretly perform an "invisible" pass. You can accomplish such mathematical cuts or adjustments while simply spreading through the cards face up, to show they're "well shuffled," or to remove a joker. When you spot your desired target, just casually cut the deck at that point.

Knowing and positioning key cards is rudimentary. Just imagine what can be accomplished if you apply some of the formulas applicable to the faro shuffle to your known stack. You could know the resulting position, after giving the deck one or more faro shuffles, of any card you wanted to track. In "Memorized Math," I even describe how a memorized deck is "automatically" a stay-stack deck, where the top half stays in constant relationship to the bottom half, despite any number of faro shuffles.

Those of you who perform tricks that rely in part on "binary" positions (i.e., 2-4-8-16-32), will find added flexibility when you realize that a memorized deck can furnish you with information of what specific cards occupy those key binary positions. If you like "duck and deal" tricks, you'll be pleased to know that there are formulas that will tell you what the final card will be, in any given size packet you start with. And the list of possible mathematical connections goes on, but that's enough for an "introduction."

Let me make just a few closing remarks about using mathematical principles. Although a trick may depend on math, its "look" or "feel" to the spectator ought not to be a puzzle or an arithmetical exercise. Mathematics is best used as a *secret* component, something of which the spectators should not be aware. This means that presentation, patter and pacing should be planned, to make certain that your mental processes are hidden and not obvious. Part of the solution is to plan your routines to expressly provide for the right moment in which to do the necessary mathematical calculations. For example, if you give the spectator some task to do, then attention will turn to him and you can hopefully do your calculations while the spectator is thus occupied.

My personal opinion is that most of the effects that do utilize some math calculations are, in fact, not hard or intimidating – if you know your stack cold. My all-time favorite memorized deck effect (to date) is my "Everybody's Lazy." All it requires are a few simple additions or subtractions, done at different times. It's not difficult, but it produces an effect that others have kindly labeled a "classic" in card magic. Read it and judge for yourself whether a little math is worth it.

5. The Open Index

The principles discussed so far are useful primarily in location effects, for discovering selected cards under challenge conditions. This final “principle” takes quite a different tack.

The basic idea is that when you have your memorized deck in play, there is a real sense in which you have all 52 cards under your control. If any one of the 52 cards is named, since you know its exact position in the deck, you can with very little effort devise some procedure which will secretly bring that named card to a position from where you can palm it, or force it, or magically produce it, or otherwise deal with it in some magical way. This kind of procedure generally involves no more than an estimated cut of the deck and a glimpse of the bottom card to see how close your estimate was. If it is “off” by a few cards, the glimpsed bottom card will nevertheless tell you the target card’s *exact* position from the top (or bottom), so that one more minor adjustment (e.g., perhaps a double undercut of a card or two) will bring the target card to the top (or wherever you want it). Note that this is pretty powerful stuff: a spectator can just name his favorite card in casual conversation, and you could remove it from your pocket (or otherwise have it in your control) – without having ever spread through the faces of the cards!

It’s almost as though you had a secret pocket index of all 52 cards that easily and efficiently delivers any desired card to your control. Only here, the secret index is out in the open; it’s the very deck you’re openly holding, and the secret memorized order provides the organizing arrangement and mechanism that allows you to quickly get to any desired target card. Because the memorized deck can thus function as an “index” that’s nevertheless out in the “open,” I’ve dubbed this concept the “open index.”

In a detailed essay entitled the “Open Index,” I explore this concept in much greater detail. There I discuss estimation, cutting and glimpse techniques and also some subtle ways of making any needed adjustments, if your estimation is off a bit. The essay also suggests applications and uses for the Open Index – the kinds of plots and tricks that can best make use of this valuable tool. The point to appreciate is that the more you know about other facets of card magic – the more sleights, palms, controls, ways of magically producing a card, methods of forcing and the like, that you have in your arsenal; and the more other card effects and routines you know – the better use you’ll be able to make of the Open Index. The Open Index is not a trick or even a “method” in itself;

rather, it's a chance to get way ahead in other tricks you perform by being able to add an extra dimension of working with any freely named or designated card.

Named Triumph

Here's an example of how the Open Index can enhance a trick most magicians already perform. Triumph is a deserved classic of card magic, but imagine how it plays when the spectator can just "name" any card he likes, instead of having to physically select and replace it. Once the spectator names any card, you use the Open Index procedures to secretly get the named card to the top of the deck. (Indeed, you may be able to efficiently combine getting the target card where you want it with the normal procedures of cutting the deck in half and turning one half face up). You then proceed with your favorite Triumph shuffle, but at the climax, when all the cards are spread and shown to be magically facing the same direction, the spectator's named card is staring him in the face, as the only card face up! (And if you use Vernon's original Triumph shuffle, or two Zarrow shuffles, you can even maintain your stack in order!). This Named Triumph is an excellent example of how the Open Index aspect of the memorized deck can combine with other card effects to produce a synergy and an extra magical touch.

Two masters of the Open Index concept are Juan Tamariz and Mike Close, and their work is worth your close attention. Mike has written a detailed chapter "On the Memorized Deck" in his *Workers, Vol. 5* focusing on the Open Index, that is a must read for anyone who's serious about this concept. In addition to presenting many specific effects that rely on the Open Index, Mike also opens up the topic of "jazzing" with the Open Index, that is, improvising in an open-ended manner, thinking on your feet while you perform. You've got this incredible secret weapon in your hands: any card you want can – in some way – be dealt with, so what's the best way to utilize this potential?

Those of you who are familiar with Vernon's classic, "The Trick That Can't Be Explained," will know how sometimes you can make up a trick as you go along, dealing with ad hoc situations as they arise, taking advantage of fortuitous circumstances when you can, or having to make up an alternative effect, if the breaks are against you. The more you become familiar with your stack, the more potentialities you'll find available and the more comfortable you'll be taking risks to reach for the possibility of getting a miracle. Anyone who has

ever seen Juan Tamariz in action will appreciate the power and flexibility of this tool in the hands of a gifted magician who works with lots of confidence, nerve, multiple outs and creative thinking.

I've published two of my favorite open index effects, "Two Beginnings" and "The Invisible Card," in *Try the Impossible*. I think you'll see how they bring the memorized deck out of the realm of location effects to create visual and entertaining magical plots that go far beyond the "I'll find your card" type effects.

I hope you realize that I've had to be somewhat arbitrary in isolating the above five principles to discuss. I chose them because they're, to some degree, unique to memorized deck magic. Naturally there are many other principles applicable to other kinds of "stacks" and pre-arranged decks that can also be used to advantage with a memorized stack. Please also keep in mind that the above discussion has only scratched the surface of what these principles can accomplish when they're intelligently applied. And, we haven't even begun to examine how these principles can be used in combination with one another. You can create diabolical, multi-phase effects by using one principle in one phase and then switching methods by using another principle in a different phase. The methods can cancel each other out, leaving the helpless spectator with nowhere to turn, other than to marvel at your magical powers. As you continue your study of memorized deck magic, I think you'll be delighted with just how ingenious the memorized deck can be.

III. How Do I Memorize the Stack?

How Do I Memorize the Stack?

The short answer is: by whatever method is comfortable *for you*.

Learning

Over the years I've had many discussions with magicians around the world, who have each given me their personal views, tips, approaches and individualized slants on how they memorized their stacks. Their methods are quite varied, but anyone who has ever studied memory or mnemonics will tell you that there is no one "right" way to memorize something, and what works well for one person may not work as well for someone else.

Some people have chosen to simply memorize their stack by "rote," by just applying "brute" memory and learning a few more cards each day. When you think about it, 52 items isn't really that much; most of us probably know far more than 50 telephone numbers of our friends, relatives and business associates – and phone numbers are far more abstract and complex than playing cards.

Many other people (myself included) prefer to memorize the stack by using a more formal, organized system, that's actually structured to help your memory. I prefer the universally recognized and accepted method for memorizing things, based on the mnemonic/phonetic alphabet and the ability to "link" images by making visual images or associations. If you've never heard of it, Harry Lorayne will be extremely disappointed, but it is a tried and proven system that really works. Descriptions can be found in many general books on memory (Bruno Furst, *The Practical Way to a Better Memory*, Grosset & Dunlop, (1946); Harry Lorayne, *How to Develop a Super Power Memory*, Fell, 1957). I'm *not* going to describe it here (it would take too long, and I've already described the entire system in great detail, *A Stack To Remember*, pp. 16-29, and also *Bound to Please*, pp. 129-139). That general mnemonic system provides an underlying structure that accomplishes several important things. First, it translates uninteresting, undifferentiated, abstract numbers and playing cards into vivid, memorable, unique visual images – all based on a simple list comprising just ten basic "phonetic" units. That basic list of ten components is really the *only* thing that has to be actually memorized; and this can easily be accomplished in less than 15 minutes. Everything else relies on, is connected to, gets built upon, those ten basic phonetic units, so once you get the ten units fixed in your mind, you'll be amazed at how quickly you can combine them to form an entire mental superstructure.

Second, the system paves the way for your mind to quickly and easily create mental pictures which can link together, or associate, two separate visual images. It is this combined mental picture or association that stays memorable in your mind's eye, your imagination, and yes, in your memory.

Sometimes people initially get intimidated when they first hear about such memory systems – but only before they try them. I've never known *anyone* who, after reading the necessary ten pages (that's *all* there is, that's the complete explanation) didn't actually smile, as he found out how simple, how neat, how elegant, and how easy the system was to use. It's almost too easy – like there must be a “trick” – but really, I kid you not: this system, when applied, will connect the cards and positions in your memory.

Third, and this is the most important encouragement I can offer, regardless of how extensively you rely on a mnemonic system to first learn a memorized deck, once you become proficient, the entire mental sub-structure of phonetics, words, images and associations soon entirely drops out of the picture. After a month you'll find that, when you see a playing card, you'll instantly and automatically know its stack number, and vice versa. The system eventually will establish the memorized deck as a direct, conscious and un-assisted memory link. Trust me.

I'm a strong proponent of this mnemonic system, at least as it applies to the specific task of memorizing once and for all, a deck of cards. I immodestly recommend my description (referenced above) as perhaps the best material written on the subject. (Practically everything else was written by professional memory experts trying to train the general public to remember everything from shopping lists to faces to dates, etc., while my single and only limited goal in writing *A Stack to Remember* was to focus on the best way for magicians to memorize 52 playing cards). But you don't need to buy my book to get this mnemonic system; many of you probably already have it in your library – for example, there's a brief description in *Greater Magic*, pp. 902-906, under H. Adrian Smith's “Mnemonics with Cards.” (That's where I first learned it, as a teenager).

Finally, let me emphasize that the entire mnemonic system touted above is not limited to, or designed for, just the Aronson stack (or any other particular stack). That mnemonic system will help you learn *any* stack order you apply it to.

Here's one more tip. Some users have suggested that it helped them *not* to learn the stack in "sequence." Thus, instead of first learning stack number 1, then stack number 2, and proceeding consecutively, one practitioner decided to start by first learning the positions of the four Aces. After he committed the positions of all four Aces to memory (using the mnemonic system, or any other method), he next learned the positions of the four Deuces – and so on. He felt this "freed" him from the potentially dangerous crutch of always thinking of a card as coming immediately after, or immediately proceeding, another card. By remembering each set of values, by themselves, nothing was tied to any order or sequence of numbers. (He learned the deck very quickly and knows it stone cold). You may find such an approach helpful, or you could vary this concept, and for example, learn all thirteen Clubs first, then the thirteen Hearts, etc.

Practicing

A good, organized mental structure can initially teach you the stack and provide you with confidence and security as you take your baby steps into using it. But at the beginning you'll also want to have ways of practicing the stack, drills to run through and ways of jogging your mind with little memory ticklers. There are lots of tips that users have suggested over the years. It's simple to create a set of flash cards – just take an old, used deck and mark the stack numbers on the back of each card with a bold marking pen. Once you have your deck of flash cards, there are all sorts of exercises you can do. Besides the obvious challenge of shuffling the cards and dealing through to see how many you can name (both the cards and the stack numbers), you can try different combinations. For example, from the backs (stack number side), shuffle and then see how quickly you can deal and divide the cards into reds and blacks. Or, from the faces, see how quickly you can separate the high stack numbers from the lows. There's all sorts of sorting combinations (suits, odd stack numbers, court cards, etc.) you can exercise with.

You don't need to have a physical set of flash cards handy to practice because, of course, the entire goal is to exercise your mind. This means that you'll have many opportunities to practice reciting your memorized stack, namely all those "dead" or waiting times, when your mind isn't otherwise engaged (what I refer to as "Moments to Remember"). Whenever you're in the shower, waiting for a train or cab, standing in the checkout line, mowing the lawn, or tuning out the dull conversation of a cocktail party bore or an after-dinner speaker — just inwardly practice your memorized deck. You can recite it backwards, then all the Clubs, Hearts, Spades and Diamonds in order — any combination you'd like.

Many magicians are computer adept, and its quite easy (and fun) to create computer programs that quiz and drill you on the stack. The computer can randomize by cards or by stack numbers, and it will never get bored. Mark Harris has devised a simple, and highly effective “Quizzer” that acts as a computerized set of flash cards. It can help in quizzing you on everything from the cards and their positions, to the various mnemonic key words I discuss in *A Stack to Remember*. Mark has generously allowed his Quizzer to be posted on my website at www.simonaronson.com, so if you choose to memorize the Aronson stack, it’s a convenient way to practice for a few minutes. Try it.

As mentioned above, the hard part is simply to start — soon, now. Once you do, you’ll be amazed at the progress you make.

How Long Will It Take?

Twenty years ago, in *Card Ideas*, I wrote, “It takes about a month, of perhaps 45 minutes practice a day, to feel confident that you really know your stack.” My experience, at that time, was based on my own learning curve, plus that of a few friends who had learned my stack. Now that I’ve spoken with literally hundreds of people who have memorized a deck, I’d say my original estimate is, if anything, somewhat conservative. If you really dedicate 45 minutes a day to learning, practicing and exercising to re-enforce the memory links, you should be operational in a few weeks. The all-time record reported to me to date is just three days, but the fellow spent all his time at it (and I’d hate to have been his roommate during that marathon). The point is simply to use dedication and balance, and you should have no problem. Once you have your stack in mind, you can prevent yourself from getting “rusty,” even if you’re not regularly performing memorized deck effects, by occasionally going through some of the mental recitations noted above, whenever you have some mental “down time.”

I predict that the only people who won’t succeed at memorizing a stack are the ones who don’t try.

Conclusion

Conclusion

In concluding this Introduction, I want to add an important cautionary note. I've tried to explain certain basic concepts, principles and themes that are central to memorized deck magic, to start you on your way, but this theoretical discussion has been largely free of "presentation." Such an omission is permissible in an Introduction whose goal is to give you just the bare bones, but I wouldn't want anyone to come away from this Introduction thinking that good memorized deck magic consists of just "adventures of the props" or merely finding a card under challenge conditions. Memorized deck magic, like any other area of magic, needs interesting plots, entertaining patter, surprise and camouflage, to build upon the bald skeletons we've unearthed so far. I hope the concepts and principles are intriguing and inspiring for you to work on, but please try to give them a presentation they deserve and one that will help your audiences enjoy and remember the miracles you're performing.

Appendix

Appendix A

Bibliography of Simon Aronson's Writings on Memorized Deck Magic

(As of May 2002)

Key to Publications:

KAB = *Kabbala* (the Simon Aronson issue, April 1973)

CI = *The Card Ideas of Simon Aronson* (1978)

STR = *A Stack to Remember* (1979)

SB = *Shuffle-bored* (1980)

AA = *The Aronson Approach* (1990)

BTP = *Bound to Please* (1994) (a compilation of Aronson's early works, including KAB, CI, STR, SB and other items)

SS = *Simply Simon* (1995)

TII = *Try the Impossible* (2001)

Essays

General Observations on the Memorized Deck (CI p. 88, BTP p. 84)

Memorized Math (AA p. 113)

The Open Index (SS p. 222)

Effects

Some People Think (KAB p. 57, BTP p. 3)

Lie Sleuth (KAB p. 58, BTP p. 5)

Group Shuffle (KAB p. 59, BTP p. 8)

Two Card "No Touch" Location (CI p. 95, BTP p. 88)

Four Stop Intersection (CI p. 100, BTP p. 92)

Histed Heisted (CI p. 104, BTP p. 95)

S-D Plus (CI p. 111, BTP p. 100)

Center Cut Location (CI p. 117, BTP p. 105)

Shuffle-bored (memorized deck applications) (SB p. 14ff, BTP p. 160ff)

Bait and Switch (AA p. 85)

Any Card, Then Any Number (AA p. 93)

Four Part Harmony (AA p. 101)

Past-Present-Future (SS p. 153)

Lazy Memory (SS p. 162)
Everybody's Lazy (SS p. 167)
Two Wrongs Make It Right (SS p. 173)
Taking Advantage of One's Position (SS p. 179)
Self-Centered (SS p. 187)
Madness in Our Methods (SS p. 194)
Topsy Turvy (SS p. 203)
High Class Location (SS p. 216)
Twice as Hard (TII p. 46)
Two Beginnings (TII p. 171)
The Invisible Card (TII p. 175)

The Aronson Stack

In *A Stack to Remember* (as reprinted in full in BTP, with new 1994 notes):

The Aronson Stack

Features of the Aronson Stack:

Draw Poker Deal
Stud Poker Deal
Ten Card Poker Deal
Poker Routines
Perfect Bridge Hand
Spelling
Any Poker Hand Called For
Mental Spell Pocket Deck Switch
Small Packet Trick Pocket Deck Switch
Blackjack Demonstration

Memorizing the Aronson Stack

In "Unpacking the Aronson Stack" (a chapter in TII, pp. 193 – 266):

Introduction: Stalking the Stack
Aces Awry (Producing the Aces)

Four on a Match (Producing the Fours)
Jack Coincidence (Producing the Jacks)
The Mind Reading Deck, Part 6 (Producing the Sixes)
The Mind Reading Deck, Part 9 (Producing the Nines)
The Mind Reading Deck, Part 7 (Producing the Sevens)
Two by Four (Producing the Twos)
Fit Four a King (Producing the Kings)
Joshing With The Threes (Producing the Threes)
Routine Maintenance (Poker Deal Restoration)
Truth-Sayer (Four Lie Detector sequences)
Deal and Duck Poker
Reciprocal Spell Pairs
Threespell (using UnDo Influence)
Built for Two (using UnDo Influence)
Triple Trick Tip
Sequence Spells

"The Aronson Stack Makes Good," MAGIC magazine (April 2002), p. 79.

Additional effects specific to the Aronson stack are described on the Aronson Stack Page, at www.simonaronson.com.

Appendix B

The Aronson Stack

TABLE 1

THE ARONSON STACK (Numerically)

| | | | |
|---------------|--------------|---------------|--------------|
| 1-JS | 14-KD | 27-5D | 40-3C |
| 2-KC | 15-7D | 28-7C | 41-2S |
| 3-5C | 16-8C | 29-4H | 42-9H |
| 4-2H | 17-3S | 30-KH | 43-KS |
| 5-9S | 18-AD | 31-4D | 44-6S |
| 6-AS | 19-7S | 32-10D | 45-4C |
| 7-3H | 20-5S | 33-JC | 46-8H |
| 8-6C | 21-QD | 34-JH | 47-9C |
| 9-8D | 22-AH | 35-10C | 48-QS |
| 10-AC | 23-8S | 36-JD | 49-6D |
| 11-10S | 24-3D | 37-4S | 50-QC |
| 12-5H | 25-7H | 38-10H | 51-2C |
| 13-2D | 26-QH | 39-6H | 52-9D |

If you take a deck and arrange it in Aronson stack order and ribbon spread it face up in front of you, you'll see that it looks simply like a well-shuffled, randomized deck; no particular value, suit or color grouping jumps out at you. Table 2 presents the same stack, this time arranged by the suits and values of the cards; you'll see that still no particular numerical arrangement is apparent.

TABLE 2

THE ARONSON STACK (By Cards)

| | | | |
|---------------|---------------|---------------|---------------|
| AC-10 | AH-22 | AS-6 | AD-18 |
| 2C-51 | 2H-4 | 2S-41 | 2D-13 |
| 3C-40 | 3H-7 | 3S-17 | 3D-24 |
| 4C-45 | 4H-29 | 4S-37 | 4D-31 |
| 5C-3 | 5H-12 | 5S-20 | 5D-27 |
| 6C-8 | 6H-39 | 6S-44 | 6D-49 |
| 7C-28 | 7H-25 | 7S-19 | 7D-15 |
| 8C-16 | 8H-46 | 8S-23 | 8D-9 |
| 9C-47 | 9H-42 | 9S-5 | 9D-52 |
| 10C-35 | 10H-38 | 10S-11 | 10D-32 |
| JC-33 | JH-34 | JS-1 | JD-36 |
| QC-50 | QH-26 | QS-48 | QD-21 |
| KC-2 | KH-30 | KS-43 | KD-14 |

Find out more about Simon's books:

Bound to Please

The Aronson Approach

Simply Simon

Try the Impossible

and Simon's marketed effects:

Red See Passover

Ad-jacent

Aronson's Aces

Side-Swiped

At Simon's website, www.simonaronson.com. The site is periodically updated, with the latest effects using the Aronson stack, and Simon's other magical creations.

2009 Bonus

Shuffle Tracking - by Simon Aronson

Deck switches are an important tool for memorized deck work, so it's efficient to have an effect that's both strong and entertaining in its own right, but also secretly rings in a memorized stack for use in further effects. (My "Bait and Switch," from *The Aronson Approach*, has been one of my favorite such effects).

"Shuffle Tracking" fills these requirements admirably. Because you apparently explain secret "gambling skills," it has an intriguing, almost plausible hook, and may earn you credit for being a sophisticated card technician. It also subtly emphasizes that the deck is well shuffled.

Technique Needed

One good glimpse. I think Steve Draun's "Fan Glimpse" (Kaufman, *Secrets Draun from Underground*, (1993), p. 31) is the ideal move for this effect (and, indeed, is one of the most useful and most deceptive moves in card magic). But any glimpse that allows you to secretly learn the identity of a freely chosen card can be adapted to this effect.

Alternatively, if you don't know a good glimpse, there are still other ways of getting into this effect (see comment 3).

Preparation

"Shuffle Tracking" can be performed at any time during any card routine. The only requirement is to have a matching deck in memorized order in one of your pockets, loose (i.e., without the card box) with the bottom card facing your body. I find it helpful to put a pocket divider next to the face card (a piece of cardboard works fine, or in a pinch a comb will do). During the routine you're going to put your regular deck into this pocket, and the divider simply helps keep the two decks separate.

I'll present my patter script along with the procedure.

Working

1) Have your spectator, Ginny, shuffle the deck. *“The main difference between a gambler and a magician is that a gambler takes chances. A magician wants his trick to work every time, but a gambler plays the odds. A gambler’s skills don’t absolutely guarantee a win, but they better the percentage. Let me show you.”*

2) Retrieve the deck. *“Let’s use just one card, as a target. I’m going to show you the cards like this. Can you see them as they go by? ... Good, as I go through them, just call stop. Now remember that card.”* Have a card freely peeked at, and obtain a secret break below the selection. Immediately do a pressure fan, with the faces toward the spectator, actually performing Draun’s “Fan Glimpse” in the process to glimpse the selection. All of the “work” is now behind you; the rest is presentation.

One note. Ordinarily when I have a card “peeked at” I make a point of turning my head aside, so that I “can’t see anything.” Here, however, I don’t turn away. The ensuing patter explains why.

3) *“You might think a gambler wouldn’t know anything about your card, but that’s not quite true. He doesn’t know anything about the identity of your card, but he can estimate, sometimes very closely, its approximate position in the deck. And estimation is enough to give him an edge. I still have a rough idea where it is.”* Table the deck in front of Ginny, so the long edge faces you.

“Let’s take it a step further. A second skill is called shuffle-tracking, trying to follow a card during shuffles. I’m only a beginner, but cut off half the deck, and give those two halves just one riffle shuffle. I need to watch the edge of the deck.” Have Ginny give the deck a riffle shuffle, and as she does, focus your eyes intensely on the edge of the deck. *“And, as long as I’m in the line of sight, give it one cut.”* Again, feign concentrating on the deck. *“So, now I’ve got a narrow range of possibilities. It’s not exact, but it’s not completely random either.”*

4) *“Those first two skills were visual. The third skill is tactile – the sense of touch. You don’t want to constantly stare at the deck, so a gambler develops finger sensitivity, without looking at the cards.”* Place the deck into your pocket below the pocket divider.

Here’s what’s going to happen. Apparently you’re now going to try to find Ginny’s selection by your sense of touch. In essence, you’ll remove cards in bunches from your pocket, as you attempt to narrow in on the

spectator's "target" card. Actually you'll simply remove small groups (about ten cards at a time) starting from the top of your memorized deck. As you remove each group, hold the cards with the faces fanned or spread toward Ginny, so she can see each card (and so you can't see the faces). You're supposedly relying on your shuffle tracking and estimation skills, to determine that these groups don't contain her target. As the spectator confirms that each group does not contain her card, you'll drop that bunch face up, in a casual spread across the table. At one point you'll hesitantly remove a single card from your pocket face down, and place it face down on the tabled spread. You'll then continue with more bunches, tossing them face up onto the tabled spread, until the deck is exhausted. Ginny will not have seen her target card, so the suspense and foreshadowing grows.

Of course, since you already know the spectator's card, you know exactly where it lies in your memorized deck. You will thus know exactly when to remove a single face down card, and can act accordingly.

5) Let's follow a detailed example. Suppose the card you secretly glimpsed was, say, the KH (which happens to be stack number 30 in the Aronson stack). In this example, you can quickly grab a bunch of cards off the top of your memorized deck, and remove them from your pocket with their faces toward the spectator, saying something like, *"A gambler plays the odds. If I'm right about the approximate location of your cards, the first bunch is easy, look. Don't say what your card is, but confirm, your card's not in this group, is it?"* Make sure you fan the cards so Ginny sees them all, and wait for her to take a serious look. I play this up as if my attempts at getting close are "for real." When she confirms that it's not there, only then do you turn these cards face up and drop them, still spread in a fan, onto the table.

6) The face card of the tabled group tells you exactly where you are in your stack, so there's no need to count or calculate (yet). Let's say the face card is, say, stack number 11. That tells you there's still plenty of room to go, before you reach position # 30. Continue to remove another bunch, perhaps a dozen or so cards, from the top of your stack, again with the faces toward your spectator, saying "It shouldn't be here either. Please check, it's not there, right?" Once she confirms it's not, toss this fan of cards face up onto the tabled spread, gradually building a loose pile on the table. Let's say the face card of this group happens to be stack number 23.

7) You now know you're getting close to # 30. Do one simple (the only) calculation (here, 30 minus 23, minus 1, = 6) to determine how many cards should be in the next group. So, reach into your pocket and count off

the next six cards and bring them out, as another bunch. Don't rush the counting, because your patter covers (indeed, suggests) a hesitation. Say something like, *"If I followed your shuffle correctly, I think I'm getting close. But I don't think it's one of these, is it?"* Show the faces of these six cards to Ginny, and when she confirms it's not there, again toss them face up onto the growing tabled spread. You now have a visual check: if you've done things right, stack number 29 (the stack number immediately before the target) is staring you in the face.

8) Remove the next card singly, without showing it, and toss it face down onto the spread, saying, "I'm not sure about this one." (It will, of course, be the selected card.)

9) Continue on through the rest of the deck, removing further bunches, showing them to Ginny, and tossing them face up onto the spread. At the conclusion, you'll have 51 cards face-up in a loose spread, with just one card face down, ready for the revelation.

I like to nudge cards in a few places in the spread, glancing as if I'm just checking something, and then I say something like, *"One final gambler's skill is a good memory. If I'm right, I've seen only three Kings so far, so this last card should be a King."* I then remove the face down card from the spread, so that only I can see it. *"You didn't happen to choose the King of Hearts, did you?"* Turn the card around, for a strong display climax.

Casually replace the selection back into its position in the deck, and the deck is now in memorized order for further miracles.

Comments

1) Credits.

My inspiration for "Shuffle Tracking" is Martin Nash's deck switch, from his Ovation Act (see his videotapes/DVDs, A1 Multimedia). Indeed, my major contribution was simply to adapt his effect to the memorized deck. Martin simply forced the top card of a cold deck; by using a memorized deck, you can actually do the same effect, and accomplish the deck switch, with any freely selected card. The peek allows for a presentation with an apparently unknown card. There are similarities in procedure, but not presentation, with Ramblar's "Cards from Pocket Stop Trick" (Tamariz' *Mnemonica*, p. 147) and to Laurie Ireland's "Producing Selected Card at Any Number At the Same Time Cold Packing" (*Ireland Writes A Book*, p. 19).

2) Alternative Positions

Depending on where the selected card happens to fall in your memorized order, the face down selected card may get removed from your pocket earlier or later. Indeed, if it's quite near the top of your stack, it could hypothetically appear among the first group. Of course, since you know its exact location, you can control for this eventuality, and could start counting from the top immediately.

But for dramatic and aesthetic reasons I think it's best for the face-down selection not to appear too early. You can always achieve this result, by "mentally cutting" the memorized deck to re-position the selection approximately where you want it. You don't need to actually give the deck a physical cut inside your pocket. Here's how I proceed. If the target card is, say, among the top fifteen or so cards of my stack, instead of starting by removing a bunch from the top of my stack, I just begin by removing a dozen or so cards from the bottom of the stack. Then, I go back and remove the top bunch, and proceed forward from there. Nothing needs to be exact, since the stack will always inform you, as you "approach" the selection. Simple experimentation will show you that it's quite easy, for example, to remove the first bunch of cards from the face of the deck, thus moving everything down about a dozen cards or so. At the climax, the deck, of course, will still be in cyclical order.

3) Alternative Methods

Any method by which the magician secretly learns the identity of the spectator's selected card can be adapted to the "Shuffle Tracking" presentation. Thus, you could use Nash's method of forcing a card, but without any restriction of it being the top card of your stack. This allows you to force a card that will arrive at an optimum position in the spread (per comment 2 above).

Theoretically you could perform any simple location or control that secretly tells you the identity of the selected card. Just don't openly reveal that you know it, and instead go into your shuffle tracking patter.

Indeed, here's a radical suggestion: you could theoretically dispense with any "secret" method! Consider this: you patter about shuffle tracking, and have the spectator remove any card at all, and show it around to everyone (including you!). Explain that it will be your target card, and have the spectator replace it anywhere into the tabled deck, under your watchful stare. Then proceed exactly as in the text, as you apparently try to follow the target card through the shuffles and cuts. You still find it, just as written, and accomplish the deck switch. (Of course, you then can't use my final patter line about a gambler having a good memory, since you openly know the card already.)

I feel strongly, however, that whatever you do should be as simple as possible, so as not to clutter the basic plot. That's why a glimpse is my preferred way to go. Marlo's Book break glimpse, or David Williamson's glimpsing the card in the act of springing the cards from hand to hand, or Tamariz' glimpse from the center of the deck, are other instant glimpses that don't involve extraneous procedures.

4) **Alternative Revelations**

You may want to experiment with different revelations. For instance, it can be convincing if, during the pocket removal, you hesitantly remove two or three single face down cards, located at different places in the spread, as if you're not sure which one it is. (*"That cut threw me a bit. It might be this one ... or (after another couple bunches) maybe this one."* You then can build up the revelation at the end, narrowing it down to one card. (Caveat: Don't give into the temptation to, say, take out four cards face down, and then cavalierly reveal, *"Well, I wasn't sure, so I hedged my bet and found all four Kings!"* While such a feat is obviously easy to accomplish (since you know the location of every card), such overkill just gives away the deck switch. Less is more, here.)

I've also experimented with holding back on removing the selection from your pocket, until the very end of the deck. When you get to the selection in your pocket, just turn it perpendicular to the rest of the deck, leave it there in your pocket, and keep on removing further bunches. At the very end, remove the last two cards (the selection and the final X card), backs toward the spectator, and announce, "I never can be sure, but it's probably one of these." Then, tenderly toss the odd card face up on the table, as you narrow your choice to the final one.

