## September 2016

Predicted Coincidence, Part 1 (Written Off the Top of Ed's Head)

I use a memorized deck. I think it's one of the greatest tools available to a magician. While playing around with some of the useful features of a memorized deck I developed the following trick, and much to my surprise I found it doesn't need a memorized deck at all!

With this in mind, I'll walk you, step-by-step, through the process I used and the tricks I examined before I came up with the following trick. To pique your interest, I'll give you the final effect to entice you to keep on reading.

You begin by writing something down on a business card and placing it face down on the table. You uncase two decks and spread them on the table to show they're shuffled and all different. You ask a spectator (Alice) to name a number. Let's say she says, "Fourteen." You give her one of the decks.

You give the other deck to another spectator, Bob, and they each deal a card face up onto the table. You point out that the two cards are different. You explain further that the odds of having any matching pair when dealing through an entire shuffled deck are approximately $63 \%$. If you have that match at a specific number called out in advance, the percentage goes down to about $1 \%$.

They slowly deal cards face up onto the table until they deal the thirteenth card. The fourteenth pair is dealt face down. You point out that there have been no matching pairs of cards dealt so far. You ask Bob and Alice to deal out a few more cards and there are still no matching pairs.

You now lift up the business card and say, "Earlier, I wrote 'Fourteen and The Queen of Hearts' on this card. If the cards on the table are both the Queen of Hearts, it's more than magic, it's a miracle. Why don't you turn over the cards and see what they are. They each turn over the Queen of Hearts, faint, and hit the floor simultaneously.

When they come to, one of them will be able to take your business card home as a souvenir.

As I said, this trick doesn't need any memory at all, but if you can use a memorized deck, you'll save yourself some preparation time. This is not to say the trick is simple, or even close to impromptu-it just doesn't require a memorized deck.

## Any Card at Any Number

In order to get a card to a specific position in the deck, I had to tackle this classic plot. So the first thing I needed to know is how to figure out how to get a named card whose stack number (SN) I know to a specific position (SP) in a memorized deck. I had to figure out how many cards to cut (CTC) from the top to the bottom to get the desired card to where I wanted it. The calculation is relatively simplesubtract the specific position (SP) from the stack number (SN). If the SP is greater than the SN then you have to add fifty-two to the SN first. (If you don't care to follow the math, just skip ahead to the text after Formula 3.)

In simple algebraic terms:
Formula 1:
$\mathrm{CTC}=\mathrm{SN}-\mathrm{SP}$ or
Formula 2: $\quad C T C=52+S N-S P \quad($ If $\operatorname{SP}>S N)$
(In these formulas, I assume you use a fifty-two card deck. If you use one or two jokers in your memorized stack, you'll have to adjust accordingly.)

Using a little algebra, you can restate the second equation by noting that the term (SN - SP) is the same thing as - (SP - SN), so you can rewrite Formula 2 as:

Formula 3: $\quad$ CTC $=52-(S P-S N) \quad(I f ~ S P ~>~ S N) ~$
For example, if you want to get the Two of Clubs, which is at stack number twenty of your stack, to position eight, use Formula 1 to get: $20-8=12$ and cut twelve cards from the top of the deck to the bottom.

If you want to get the Jack of Diamonds at position nine to position twenty-four, you could use Formula 2 to get: $52+9-24=61-24=$ 37 and cut thirty-seven cards from the top to the bottom.

Similarly, with Formula 3 you get $52-(24-9)=52-15=37$, and you still cut thirty-seven cards from the top to the bottom.

Knowing Formulas 2 and 3 just might make it easier for you to do the calculation when the stack number is lower than the specified position.

## But How Do You Make the Cut?

The standard way for getting a known amount of cards to the bottom in a memorized deck uses a two-part process. The first is to use estimation to cut the cards at, or near, the desired number. If you want to cut thirty-six cards, you try to cut about thirty-two to thirtynine cards. After you make that cut you glimpse the bottom card of the deck (I use an "All around-square-up glimpse") and use the stack number of that card to make a correction. If you see that the stack number of the bottom card is thirty-four, you do a double-cut that moves two more cards to the bottom, if it's thirty-nine, cut three cards from the bottom to the top.

There is a major problem with doing the cut this way in ACAAN. By asking the spectators to name a card and a number, you're foreshadowing the effect to anyone who is paying a little bit of attention. Doing an open cut or two, although not fatal to the puzzle of how you accomplished the effect, is might be fatal to the magic unless you can manage the audience's attention so well that they don't perceive the cuts as important.

I do the cut exactly this way, but in a different effect where I just have a card named. I use the cuts to get the card to the top and continue on from there. Since the spectator doesn't know what's about to happen, an open couple of cuts goes unnoticed.

This might seem daunting, but in practice it works easily and is completely unnoticed as long as you engage the spectators in an interesting story or plot as you "carelessly" toy with the deck. (I once taught this to another magician who insisted the cut would be obvious-even though I had fooled him with it previously!)

I discovered there is an even easier way to make the cut. I'm sure I'm not the first one to have done so, but it's such an obvious idea, I have no qualms about writing it up.

Mark the stack number on the back of the cards. This is very easy to do with Bicycle ${ }^{\mathrm{TM}}$ Rider Back cards.

Look at the "flower" on the upper left. You'll see it has eight petals, with a white dot in the center-the angel is more or less touching it with his left hand.


By using a red or blue fine point Sharpie ${ }^{\mathrm{TM}}$ pen, you can block out some of the petals or the white dot, to indicate the digits 1-9. (Leaving the petal unmarked indicates a zero.)


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This is probably all you need to locate a specific card in the deck, as long as you can estimate to the nearest ten. If you want additional security you can use the design that's dead center at the top of the card. Leaving the petals unmarked would indicate the digits from 1 10 , marking any of the five petals would then indicate the tens place.


With these markings in place, all you'd need to do is spread the deck during a nugatory gesture, find the card with the number you need and get a break under it. If you're performing an effect where a cut would not be out of place, you're ready. Otherwise you should use a pass to get the required number of cards to the bottom.
(I came up with this marking scheme when I realized marking a deck with stack numbers would be a very useful tool for memorized deck workers. I also realized that the idea was so simple, others must have preceded me. Sure enough, I soon found out that Ed Marlo had published this idea in the Pallbearer's Review (page 152) in the 1960s. Since the Rider back and memorized stacks were around well before then, I suspect several others also had the same idea,

There are other, easier, ways you could mark the deck. Pencil dot every tenth card. It you need to cut thirty-two cards, spread rapidly to the third dot, and then count two more cards. Another way is to corner short every tenth card from ten to forty. This way you can easily cut to the appropriate ten's-place value, and count the additional cards you will need. The corner shorts could be noticeable to someone handling the deck, so you might not want a routine that would allow a spectator to handle it.

Next month, I'll discuss the interesting side-effects of adding a second deck into the concept.

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