



# Cardigram

A Christmas Eve gift

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# First lesson in mentalism

**Effect** You tell your friends you started taking lessons with an expert in mind reading and want to test your progress. You take a (false) shuffled deck and while you look away, participants cut the deck until satisfied. Three participants take the top cards, hide the remainder of the deck, look at their card and hide them too. You turn back and try to read their minds. You are to some extent successful in a simple reading, but need the help of your adviser to go further. To do so, you take a picture of your three participants thinking about their card, send it to him and in return you get the card identities and a little lesson on mind reading.

Of course there is no real mind-reading going on, but a little fishing on a specially designed stack. The strength of the effect relies on the apparently innocent confirmation and limited information you get during your first guesses<sup>1</sup>, all cards being out of sight. Of course the deck<sup>2</sup> is stacked and cyclic, allowing for any number of simple cuts.

9♠ 8♥ 8♣ 2♣ 10♣ 10♠ 4♥ 2♠ J♥ J♦ A♠ J♠ J♣ Q♦ Q♠ 10♥ 7♥  
 4♦ 4♣ 6♦ 9♦ 5♦ 5♠ K♣ K♥ 3♠ 3♣ K♠ K♦ 6♥ 3♥ 9♥ 9♣ 8♦ 6♣  
 6♠ A♣ 7♣ A♦ A♥ 2♦ 2♥ 7♠ 7♦ 5♣ 5♥ 10♦ 3♦ Q♥ Q♣ 4♠ 8♠

Among a series of different stacks I designed for the effect, I selected the one which has on average the shortest streaks of cards with the same color. If you are not comfortable with spreading the cards because of the pairs appearing, you can of course prepare the deck with an anti-faro (by doing so separating the pairs) and Jokers at the right place. You can then start your presentation showing the deck, take out the Jokers, faro the deck and do some cuts.

<sup>1</sup>An analytical-minded spectator will realize that you do not even know all suits (except in few rare cases). Hence the natural de Bruijn coding idea on suits, should he know the concept, is eliminated for him.  
<sup>2</sup>complete and without duplicates so you can leave it, possibly reshuffled, with the participants once finished.

Once you have finished false-shuffling<sup>3</sup>, turn away and ask someone to make a cut and complete it. If the participants want to, they can cut again. Once satisfied, ask the first participant to take the card from the top of the deck and keep the card safe. Ask the second and third participant to do the same. Each of the participants has now to memorize his card. Depending on your patter, it would be interesting to find a reason that each of the three also memorized the card of a neighbor (for example "*to enhance the signals they send out*"). This will ensure they do not need to speak to each other or look at cards again should you need to go for the claim "*there is a pair*" discussed later. Indeed it is essential that the cards can never be seen by the magician. You make this clear by asking the spectators to hide the cards while you still look away. The deck is also hidden while you still look away<sup>4</sup>. You then turn back and depending on your style try to infer the cards they think of.

You start guessing the color. To do so you ask them to concentrate on their cards. Then after a while ask them to think of the card of their neighbor to better feel changes.

*"I see red cards !"*

In most cases (44 out of 52), you will get a confirmation from some of the participants. If you have two or more participants who have a red card, you continue with your guesses (again also asking them to think of the cards of their neighbor)

*"I see Hearts !"*

otherwise (so if you have two or more participants who have a black card), you continue with

*"I see Spades !"*

For the second claim<sup>5</sup> you have 11 chances out of 13 to get at least one confirmation. Note that the second claim is actually a very natural one if you would use a pure guessing approach. If you have none or only one confirmation on the color, you have a far better chance to guess suits right by guessing the suits of the opposite color. This is exactly what you do, and in fact it does not matter if the participants think you try to simply guess, since the information you apparently get is minor.

At this stage, in roughly one case out of two (actually 28 out of 52), you already have enough information to know the cards identity though you apparently not even know all suits!

The other cases, where the information is not yet complete, are those where you have two cards of the same color but different suits (so if after the first question you have one or two confirmations followed by one confirmation on the next question. This is globally a rather weak success rate and could be considered a normal guessing outcome). In that situation the stack is designed such that among the cards of the three participants you will *always* find a pair (as defined in poker), with the person in the center *always* having one card of the pair. Thus after a maybe unsurprising result of the two first readings, you now have a strong proposition "*There is a pair*". You can justify your previous miss and the last hit by explaining "*when you concentrated on the other cards I did not see any change so I thought you had the same suit, but you actually had the same value*". The information on who has the second card of the pair (you know already one is in the center) is then sufficient to identify the three cards and there is *no* need to fish for the values in

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<sup>3</sup>You should try to convey the randomness because the only attacking point for a deconstruction of the method is the realization that the three selections are taken in a sequential way. Hence the order should appear random.

<sup>4</sup>If you want the deck be available for examination after the effect, you might suggest to shuffle the reminder if they want to; or you do so once you finished.

<sup>5</sup>if you take the correct one as defined by the above rule.

the pair. On the contrary, avoid having the numbers named. Since the pair is always including the center person's card, you can play with a strong claim and an ambiguity on the definition of left and right<sup>6</sup> if you want to. Here I keep the mentor out until after the potential third claim and involve him only after all cards can be known. For the spectators you might have failed to some extent and in any case you seem to have only a quite imprecise information on the cards. So it is natural that you turn to your mentor. You do so by sending him a picture of the group of three participants. In the message you can encode the two or three confirmations you got, so that an automatic answering machine<sup>7</sup> provides you with the cards identities without the need for a cheating or look-up table.

The coding to the answering machine was designed to be rapidly done on the fly. To do so it was kept as closely as possible related to the sequence of feedbacks you get without any mental calculations. A three or four letter code is prepared where you encode the information you learned. You do not try at this stage to deduce the suits of cards based on logic. You only need to deduce colors by logic: If you guess "Red", the participants who do not confirm have black cards. For example if you ask "Red" and you get confirmation that participants 2 and 3 have red cards, you memorize the temporary code BRR. Since there are two or more red cards, you then guess "Hearts". Assuming participant 3 confirms, you think BRH, replacing the color code by the confirmed suit code, without deducing that the other red card is of course a diamond. This situation is an ambiguous case (two cards of the same color but with different suits, i.e. one and only one confirmed the suit in this case) needing the additional claim for a pair<sup>8</sup>. It turns out the pair is held by participant 2 (always) and participant 1, you retain BRH1 which is your code. You send an email to AlxaTSD42+BRH1@gmail.com and get the cards identities in response (in the example  $K\spadesuit K\heartsuit 6\heartsuit$ ).

Another example: after you claim you see red cards, only participant 2 confirms. Think BRB and go for the spades guess. Participants 1 and 3 confirm and no ambiguity is left. You think SRS and send a message to AlxaTSD42+SRS@gmail.com.

The automatic response immediately sends out the prepared text. So if you want to give the impression your advisor needs some time, either send a big image over a slow internet connection, or wait before you push the send button, or pretend to receive the incoming-message signal only later. Also make sure before you try the automated-response idea, that your mailing system does not filter the response into a spam folder. Or alternatively make sure your mail reader allows you to look into the spam folder without difficulties.

Since you only send a single message, there is no danger that participants see you use different email addresses. You just have a complicated one because your "*mentor is a very secret person*". This is of course also the reason why you delete the messages you send to him and receive from him.

The design of the stack was such that either you already sense some rare cases with two claims (you sensed two or more cards of the same suit) or after reasonable guesses you get a stronger third claim (there is a pair). In this way you already showed better than pure-guess performance but no perfection yet. Hence the justification to ask your mentor. Of course there is one case where you probably should not ask help from your mentor and which you should know by *heart*:

<sup>6</sup>The ambiguity which could be exploited easily is one between you and your mentor or between the mentor and your participants should you decide to involve him before the third guess. Indeed an ambiguity between you and your participants could be difficult to sell in a social context where it would be natural to show what you mean by left or right or even more natural to point to the persons you think have a pair.

<sup>7</sup>It would be fun to have some AI beyond, preparing the response depending on the people you have taken in the picture "*the young lady in the white dress is thinking about, the man with the beard, ...*"

<sup>8</sup>You are in an ambiguous case if after the two first claims your code, if you construct it as told, contains exactly one R and one B. The third letter is an S or H. In all these cases, you need to go for the pair claim.

The case where three spectators confirm they have red cards and then hearts. In that case you can of course "sense" (i.e. memorize) that they have the 6♥ 3♥ and 9♥ (memorize "6 plus 3 equals 9") without any help and you got a perfect hit. The other special case where you have two total failures (which arises on average once every 52 tries), you can recover by knowing the cards without help: 8♣ 2♣ 10♣ (memorize "8 plus 2 equals 10", the suit being obvious).

The response of your mentor not only includes the card's identity but also some pseudo-mentalism talk pretending to give you a lesson. For example in the case of code SRB3 you got only one red color right, a spade right and found a pair. So the response naturally complies with it, but also provides the card identities:

*" You should see there is a slight imbalance of the Stones score towards higher values meaning there are more black cards. You might have missed that due to the person on the right not clearly reacting to the Russel stimulus. Anyway, because of the flat equiscore behavior, suits are well balanced, with a little doubt of whether there are two spades or only one. The var measure (look at the eye positions) is very flat so the card values are all very close with probably a pair. The values themselves are around eight if we trust Max's interpretations (I remember you had some difficulties there). I'm quite confident that the first card is the Nine of Spades, the woman in the middle holds the Eight of Hearts and the last person has the Eight of Clubs."*

To personalize, I added in the response text some information such as "the woman in the middle" by relying on you to put a female participant in the center position<sup>9</sup>. Also the phrasing of the final reveal is varied, should you want to redo the effect.

If you have a small routine, you can send a "thank you email" to AlxaTSD42+TY@gmail.com and you will get a response to lead you into the next effect

*"You are welcome, we will discuss it at our next meeting, but in the meanwhile it would also be good to exercise your lie-detection capabilities."*

Once finished, you can restack the deck by recollecting the cards in the right order. Should you want to redo the effect, you might consider changing the first claim into "Now I see black cards" as it does not change the procedure. I would however not repeat it several times as it might lead to the method.

**Notes and alternatives** Of course alternatively, instead of a mentor and answering machine, you could use the cheating table provided at the end of the text and keep all credit for the mind reading to yourself. Instead of a gmail answering machine, one could also try to use Alexa or Google Assistant. Or one could design an app which analyzes the picture in real time, showing some face detection, fake statistics etc. until convergence to the cards identity which you have encoded when entering the app. Or, as suggested by Mark Beecham, you could design an app where you unlock your phone, send a "help" message to your mentor and get back a genuine text message or exploit a mind-scanning software (contact Mark Beecham and try to convince him to share his beta-version for such an app on Android smartphones). Or, also an idea by Mark, you go for a confederate, stooge or even instant stooge (more details from Mark, including an idea where a mentalist student prepares the mind of the participants before leaving the floor for the master mentalist and his strong reading).

**Notes and alternatives** It should be possible to design a stack where you only guess two times in all situations (you could distinguish up to 8x8 cases), but then the two guesses would be somehow orthogonal to each other, or in other words the sequence would not be very natural.

<sup>9</sup>I assume you are not only presenting the effect to your magician friends...

## Setting up the automated response system

Basically one has to setup an answering machine with 52 canned responses and 52 filters based on the email address. This has been done on the `AlxaTSD42@gmail.com` account for you. For the moment you need to encode the exact codes defined by the rules shown above and no others are allowed<sup>10</sup>. You can of course setup yourself an answering machine with tailored responses<sup>11</sup>. In my version, the responses have been particularized for each case to reflect that the students followed the guidelines by his advisor, focusing first on colors, then on suits etc.

## Background information and similar ideas

De Bruijn sequences are sequences in which any subsequence of a specified length is only found once. This means, applied to a card stack, that if we can identify a subsequence (for example a succession of colors or orientations of one-way cards), it defines a unique position in the stack and can be used to "read" the cards. This idea, also sometimes referred to as using Gray codes, is well known but has two major problems assuming that getting a sequence of information is possible (fishing, asking for colors, one-way orientations, ...): one must be able to determine from this code the actual position in the stack either by calculations or look-up tables and one should be able to determine the next card in the sequence (because getting the subsequence generally involves several cards which then naturally should all be revealed). Here this is resolved via the answering machine. For other ideas on the Gray code, we refer to Behr (2007) or Diaconis and Graham (2012) and for general binary encoding approaches to Boudreau (1989). See also <https://www.conjuringarchive.com/list/category/519> for more references. Similar applications (identifying card identities from apparently incomplete information using de Bruijn codes) are for example "Blind Stud" in Minch (1994) or "Gray matters" in Behr (2007).

For "Kingfisher" in Minch (1994), Alex Elmsley designed a similar effect with first sensing colors and then suits. He made sure he could reach the conclusions with only two "guesses" in all situations at the price of needing four cards. As the major weakness of these kind of effects is that cards are taken in a continuous sequence, the longer the sequence is, the more likely it is that someone will be lead to the method. Hence I think having three cards only and sometimes a (natural) third "guess" is preferable and should be seen as the added value compared to "Kingfisher".

Simon Aronson also uses the idea of guessing without misses in "No-No's Fishing" (Aronson (1990)), but the price for no misses and only using two cards is a longer sequence of guesses. The original stimulation for my setup actually came from T. Blomberg (private communication),

<sup>10</sup>To avoid trouble when miscoding, one probably should have a default answer "*What do you want from me*" if the message does *not* involve one of the 52 correct email addresses. So if by mistake you would send a message to `AlxaTSD42+SRS1@gmail.com` or `AlxaTSD42+BDH1@gmail.com` for example, you would know you did something wrong and can send another message by explaining in more details what you expect from your mentor (and incidentally correcting your code). This is currently not yet implemented in the `AlxaTSD42@gmail.com` answering machine. Also a possible extension of the answering machine is to add all cases like SRC which could be deduced by logic from SRB. So the same cards could be revealed, possibly with a different response text so that one could perform twice the effect even if the same cards are taken.

<sup>11</sup>Setting up the gmail canned responses can however be a pain. My current approach summarizes as follows: encode a few canned responses, disconnect. Connect again and now make the filters with those canned responses. Continue with the next set of canned responses. The reason to work with bunches of responses and check-outs is that it seems the list of canned responses accessible for the filter is updated and limited by gmail. Though the canned responses at one point disappear from the proposed list to create filters, once the filter is created, it keeps the message. When your answering machine is operational, it is a good idea is to export your filters and keep them stored somewhere (google creates a `mailFilters.xml` file for you). Make sure you check your answering machine to see how the spam-detection copes with it (both on the answering-machine side and the user side). As a plan B, it is a good idea to keep a picture of the look-up table on your smartphone. Should you need more details on the implementation, just contact me at `JM.Beckers@ulg.ac.be`.

where he had explained a similar idea for using a de Bruijn code with guesses which are always true (e.g. red cards present), yet providing additional information (positions). Finally I accepted misses in the setup as it demands less fishing and errors are coherent with the presentation.

For a discussion on why getting negative answers from the guesses is not a problem in some cases, see <http://www.thejerx.com/blog/2016/10/5/transgressive-anagrams>. Here, misses even perfectly fit the presentational idea of a student getting into learning complicated things.

The general presentational approach using a mentor in the background is based on the "Man behind the curtain" idea of Andy (2017) see <http://www.thejerx.com/blog/2017/5/11/any-man-behind-any-curtain?rq=curtain>.



Basic text to be associated with the corresponding code to help preparing your personal answering machine.

SRB3 : The first card is the Nine of Spades, the woman in the middle holds the Eight of Hearts and the last person has the Eight of Clubs  
RBB : The first card is the Eight of Hearts, the woman in the middle holds the Eight of Clubs and the last person has the Two of Clubs  
BBB : The first card is the Eight of Clubs, the woman in the middle holds the Two of Clubs and the last person has the Ten of Clubs  
BBS : The first card is the Two of Clubs, the woman in the middle holds the Ten of Clubs and the last person has the Ten of Spades  
BSR1 : The first card is the Ten of Clubs, the woman in the middle holds the Ten of Spades and the last person has the Four of Hearts  
SRS : The first card is the Ten of Spades, the woman in the middle holds the Four of Hearts and the last person has the Two of Spades  
HBH : The first card is the Four of Hearts, the woman in the middle holds the Two of Spades and the last person has the Jack of Hearts  
BHR3 : The first card is the Two of Spades, the woman in the middle holds the Jack of Hearts and the last person has the Jack of Diamonds  
HRB1 : The first card is the Jack of Hearts, the woman in the middle holds the Jack of Diamonds and the last person has the Ace of Spades  
RSS : The first card is the Jack of Diamonds, the woman in the middle holds the Ace of Spades and the last person has the Jack of Spades  
SSB : The first card is the Ace of Spades, the woman in the middle holds the Jack of Spades and the last person has the Jack of Clubs  
SBR1 : The first card is the Jack of Spades, the woman in the middle holds the Jack of Clubs and the last person has the Queen of Diamonds  
BRS3 : The first card is the Jack of Clubs, the woman in the middle holds the Queen of Diamonds and the last person has the Queen of Spades  
RBH1 : The first card is the Queen of Diamonds, the woman in the middle holds the Queen of Spades and the last person has the Ten of Hearts  
BHH : The first card is the Queen of Spades, the woman in the middle holds the Ten of Hearts and the last person has the Seven of Hearts  
HHR : The first card is the Ten of Hearts, the woman in the middle holds the Seven of Hearts and the last person has the Four of Diamonds  
HRB3 : The first card is the Seven of Hearts, the woman in the middle holds the Four of Diamonds and the last person has the Four of Clubs  
RBR : The first card is the Four of Diamonds, the woman in the middle holds the Four of Clubs and the last person has the Six of Diamonds  
BRR : The first card is the Four of Clubs, the woman in the middle holds the Six of Diamonds and the last person has the Nine of Diamonds  
RRR : The first card is the Six of Diamonds, the woman in the middle holds the Nine of Diamonds and the last person has the Five of Diamonds  
RRB : The first card is the Nine of Diamonds, the woman in the middle holds the Five of Diamonds and the last person has the Five of Spades  
RSB1 : The first card is the Five of Diamonds, the woman in the middle holds the Five of Spades and the last person has the King of Clubs  
SBR3 : The first card is the Five of Spades, the woman in the middle holds the King of Clubs and the last person has the King of Hearts  
BRS1 : The first card is the King of Clubs, the woman in the middle holds the King of Hearts and the last person has the Three of Spades  
RSB3 : The first card is the King of Hearts, the woman in the middle holds the Three of Spades and the last person has the Three of Clubs  
SBS : The first card is the Three of Spades, the woman in the middle holds the Three of Clubs and the last person has the King of Spades  
BSR3 : The first card is the Three of Clubs, the woman in the middle holds the King of Spades and the last person has the King of Diamonds  
BRH1 : The first card is the King of Spades, the woman in the middle holds the King of Diamonds and the last person has the Six of Hearts  
RHH : The first card is the King of Diamonds, the woman in the middle holds the Six of Hearts and the last person has the Three of Hearts  
HHH : The first card is the Six of Hearts, the woman in the middle holds the Three of Hearts and the last person has the Nine of Hearts  
HHB : The first card is the Three of Hearts, the woman in the middle holds the Nine of Hearts and the last person has the Nine of Clubs  
HBR1 : The first card is the Nine of Hearts, the woman in the middle holds the Nine of Clubs and the last person has the Eight of Diamonds  
BRB : The first card is the Nine of Clubs, the woman in the middle holds the Eight of Diamonds and the last person has the Six of Clubs  
RBS3 : The first card is the Eight of Diamonds, the woman in the middle holds the Six of Clubs and the last person has the Six of Spades  
BSB : The first card is the Six of Clubs, the woman in the middle holds the Six of Spades and the last person has the Ace of Clubs  
SBB : The first card is the Six of Spades, the woman in the middle holds the Ace of Clubs and the last person has the Seven of Clubs  
BBR : The first card is the Ace of Clubs, the woman in the middle holds the Seven of Clubs and the last person has the Ace of Diamonds  
BRH3 : The first card is the Seven of Clubs, the woman in the middle holds the Ace of Diamonds and the last person has the Ace of Hearts  
RHR : The first card is the Ace of Diamonds, the woman in the middle holds the Ace of Hearts and the last person has the Two of Diamonds  
HRH : The first card is the Ace of Hearts, the woman in the middle holds the Two of Diamonds and the last person has the Two of Hearts  
RHB1 : The first card is the Two of Diamonds, the woman in the middle holds the Two of Hearts and the last person has the Seven of Spades  
HBR3 : The first card is the Two of Hearts, the woman in the middle holds the Seven of Spades and the last person has the Seven of Diamonds  
SRB1 : The first card is the Seven of Spades, the woman in the middle holds the Seven of Diamonds and the last person has the Five of Clubs  
RBH3 : The first card is the Seven of Diamonds, the woman in the middle holds the Five of Clubs and the last person has the Five of Hearts  
BHR1 : The first card is the Five of Clubs, the woman in the middle holds the Five of Hearts and the last person has the Ten of Diamonds  
HRR : The first card is the Five of Hearts, the woman in the middle holds the Ten of Diamonds and the last person has the Three of Diamonds  
RRH : The first card is the Ten of Diamonds, the woman in the middle holds the Three of Diamonds and the last person has the Queen of Hearts  
RHB3 : The first card is the Three of Diamonds, the woman in the middle holds the Queen of Hearts and the last person has the Queen of Clubs  
RBS1 : The first card is the Queen of Hearts, the woman in the middle holds the Queen of Clubs and the last person has the Four of Spades  
BSS : The first card is the Queen of Clubs, the woman in the middle holds the Four of Spades and the last person has the Eight of Spades  
SSS : The first card is the Four of Spades, the woman in the middle holds the Eight of Spades and the last person has the Nine of Spades  
SSR : The first card is the Eight of Spades, the woman in the middle holds the Nine of Spades and the last person has the Eight of Hearts

## Expanded text implemented to reflect that the student has followed the guidelines and including typos typical of a quick reply message:

SRB3 : You should see there is a slight imbalance of the Stones score towards higher values meaning there are more black cards. You might have missed that due to the person on the right not clearly reacting to the Russel stimulus. Anyway, because of the flat equiscore behavior, suits are well balanced, with a little doubt of whether there are two spades or only one. The var measure (look at the eye positions) is very flat so the card values are all very close with probably a pair. The values themselves are around eight if we trust Max's interpretations (I remember you had some difficulties there). I'm quite confident that the first card is the Nine of Spades, the woman in the middle holds the Eight of Hearts and the last person has the Eight of Clubs

RBB : Here we have a clear indication of a majority of black cards (remember the Stones score you always mix up with the Lennart level), which is confirmed by the asymmetric features in the eye contacts (supposing you took the picture at the right moment). Here we have definitely clubs though a beginner like you might think the Hex level points to spades and the only departure from it being the person on the left with a smile level coherent with hearts. For the values, I will explain in more details next time how you get the absolute values in case you sensed the equal values from the Clark reading. So in short the first card is the Eight of Hearts, the woman in the middle holds the Eight of Clubs and the last person has the Two of Clubs

BBB : I'm sure you had some problems here as you often mix up the Stone score and Lennart level. But if you have observed the coherent reaction to the Russel stimulus you should have guessed we are in the presence of three clubs. As we also have a fetish count which is closed (look at the final numbers adding up) and the average stress level feels low. I hope the eye-focus signal for the first person is not just an artifact due to the photograph. Assuming the signal is right, I conclude that the first card is the Eight of Clubs, the woman in the middle holds the Two of Clubs and the last person has the Ten of Clubs

BBS : I hope you did not mix up the Stone score and Lennart level again. Here we certainly have black cards with one Spade to the right in view of the helix orientation. Values are low on the left (do you see the faint Blomberg force?) but higher and similar for the two others (I need to explain you this particular case at our next lesson). So I go for the first card being the Two of Clubs, the woman in the middle holding the Ten of Clubs and the last person with the Ten of Spades (if not, then a Nine of Spades)

BSR1 : It is difficult to see but the Brayer score indicates two black cards to the left, in particular the steric level of the lady might lead to misinterpretations and masks the Brior indicator of spades. For the person on the right the situation is clear regarding the level of hidden smiling (hearts). With last week exercise you should have been able to see that the first two persons have similar cards, very likely a ten because of the perfect Tamariz score. The other value is less clear but court cards are excluded (remember the lesson by Max) and the less reliable Marty level points to a value between three and five. So my best estimate for the first card is the Ten of Clubs, the woman in the middle has the Ten of Spades and then we should have the Four of Hearts

SRS : The opposition of colors your friends think of is striking if you look at the Lennart level, the lady in the middle scoring high in the smile analysis (hearts?) whereas the two others score well in the helix analysis. The decreasing levels of Jay's intensity from left to right would indicate decreasing values from left to right, which is confirmed by the direct Phil estimates of the values. The first card should thus be the Ten of Spades, in the middle we should find the Four of Hearts and the last person hides the Two of Spades

HBH : I do not know where you need help here: the two red cards on the left and right (Lennart score) are hearts (smile level), whereas the central card is very likely a spades (you certainly have noticed the helicity). For the values a direct reading Marty levels should suffice. There is little doubt that the first card is the Four of Hearts, the woman in the middle hides the Two of Spades and the last person took the Jack of Hearts

BHR3 : I understand why you had problems here. Neither the Lennart level nor the Stone score provide a clear picture. So the only solution to get the colors I know is the outdated head orientation analysis of Parker which yields two black cards. I suppose you still got the spades for the first person applying the Russel stimulus. For the two others, I need to teach you yet another technique but I need to get authorization first. As for the numbers, this is out of reach for you and even I had to ask Max who happens to sit across the table for a work on telekinesis. We believe the first card is the Two of Spades, the woman in the middle certainly thinks of the Jack of Hearts while the third person has the Jack of Diamonds.

HRB1 : If you applied correctly the Briar analysis you probably realized there are two red cards. Because of the unbalanced Gladwin score, the hearts are on the left. Spades are on the right (remember the lesson on Bair and his revolutionary approach?). The very strong Blomberg force level shows we have to court cards, most probably Jacks and an Ace. In summary, we first have the Jack of Hearts, the lady in the middle holds the Jack of Diamonds and on the right must be the Ace of Spades.

RSS : You might have thought that there is majority of red cards there because of the Lennart score, but the Alxa calculation counterbalances it. This is coherent with the more difficult to see but relatively high helicity indicating spades. The obvious Blomberg force level leads to court cards and associated with the Bair approach Jack's are the most likely. As for the woman in the center, she tries to hide her thoughts but this is itself already an indication (see Corinda's theory), which together with the Marty level provides us with the necessary information. So in short, we have to the left the Jack of Diamonds, in the center the Ace of Spades and to the right the Jack of Spades

SSB : This is an easy case if you do not confuse the Lennart reading and modified Stone score. The consistent level shows we are in the presence of black cards, two of which being spades (do we need to exercise the helicity analysis next time?). For the values the Blomberg force is on the high side and the participant to the left exhibiting reactions to the Jerx stimulus. With an average Jay intensity for the woman in the center you should have been able to know all cards: to the left there is the Ace of Spades, in the middle we should discover the Jack of Spades and finally we would see his mate, the Jack of Clubs

SBR1 : That is a difficult situation for which I have some doubts. If I'm wrong please send me another picture because here I cannot see very well the Merlin glare. There is a majority of black cards if you look at the Geller signature overriding the Lennart score you might have used. A spade is on the left because of the increased helicity. From there you should know the families and have focused on the values. Similar values of the Alexander score indicate a pair to the left, a lower court card according to the Blomberg force level. The last card has an even higher level and my guess is: a first card which is probably the Jack of Spades, the lady in the middle keeps the Jack of Clubs and then there should be the Queen of Diamonds

BRS3 : Quite a confusing case and if you had difficulties there it is normal. While the Brior score indicates red cards, the Marlo glare rather favors the black card interpretation. Only for the lady in the center the situation is rather clear: she has a red card because of her Lennart score. So for the two others if I weight in the Koran transfer function a club to the left and spade to the right seems likely. The Blomberg force level is very high for all of them, so we have court cards. This is confirmed by the Castana value highlighting the queens. Hence I suspect we first have the Jack of Clubs, then the Queen of Diamonds and lastly the Queen of Spades

RBH1 : You certainly have identified the majority of red cards (otherwise we have to rework the Lennart and Anneman reading). Also the heart to the right is quite obvious though the smile level is a little fuzzy (but you have the Alxa information anyway). So the other red cards is a diamond on the left whereas the woman in the center has a Corinda contradiction level typical when holding a black Queen. I would go for a Spades but need to explain you next time how to reach that conclusion. The same holds for the advanced use of the Parker score reading. In any case, the analysis suggests a first card which is the Queen of Diamonds, the central one the Queen of Spades and the remaining one the Ten of Hearts

BHH : This is a case you have learned very easily to start with. Detecting the two hearts to the right using the Lennart scale should have been a piece of cake. I recognize that going further requires much more analysis work but you should have been able to see the Queen of Spades on the left (you know that black Queens often lead to a high Corinda contradiction level). The values of the hearts are among rather neutral values (no signature of a Geller halo) and the Maven weight makes me think about a ten and seven. Let me know if my guess that the first card is the Queen of Spades, the the woman in the middle holds the Ten of Hearts and the last person keeps the Seven of Hearts is right

HHR : If you missed that all cards are red I should get you excluded from our group because at that level you are not allowed to mix up the Cassidy and Canasta score. I however acknowledge that the diamond to the right is difficult to isolate (The Kreskin mark is fuzzy). There are no court cards as all (in particular the woman in the center) have very normal steric levels. A detailed analysis of the Parker norm, which we will discuss next time, leads very easily to the Ten of Hearts on the left, the Seven of Hearts in the center and the Four of Diamonds to the right. If I'm wrong I owe you a drink next time.

HRB3 : Here we have quite a challenge. The distinction between a majority of red cards (rather to the left) or black cards (rather to the right) can only be achieved by using the modified Lennart score. With the Alxa information you should have guessed a heart to the left and another red card for the woman in the center. The Kerskin level is well balanced and rather low, with an additional (hopefully correctly captured by your foto) Pearlman spark. With a little help from my Alexander database, I think we should have the Seven of Hearts, the Four of Diamonds and the Four of Clubs from left to right

RBR : This is a classic situation with a lot of symmetric readings (same Lennart score on the left and right), similar Koran level for the woman in the center and her colleague on the left. With an opposite Kruskal kernel, her card has a different color than the other but a close value. Hearts are obvious via the helix interpretation. With the weak Blomberg force we easily get to the Four of Diamonds, the Four of Clubs and the finally the Six of Diamonds to the right.

BRR : This is an easy exercise for your capacity to detect the red cards (the two cards to the right). You certainly (did you?) saw the higher Lennart level. But the Kruskal indicator is ambiguous in the light conditions you have. Diamonds are more likely than hearts though. The Blomberg force increases from left to right with the woman in the center having the neutral indicator (so a card around six or seven). We will did not work on the Kreskin counting yet but you will see how the focus the reading an get to the Four of Clubs on the left, then the Six of Diamonds and the last person holds the Nine of Diamonds

RRR : Now this is a Corinda's textbook example if the picture you took is accurate. A Lennart level for all participants perfectly consistent with the modified Brior score indicate red cards. You might have hesitated between hearts and diamonds but from the Merlin halo you should tend towards diamonds. Values are variable (inconclusive steric levels), but on the lower side (look carefully at the B-force). In the next chapter we will work on, this will be detailed. In any case, ask any of our masters and they will tell you we have the Six of Diamonds, the woman in the middle with the Nine of Diamonds and then the Five of Diamonds to the right.

RRB : I applaud your confidence in trying to read this situation. But you should be aware that the case is less obvious than it look like. The overall balance to red cards to the left is in principle clear (I hope you saw the biased Norris tendency), but you probably have incorrectly thought they where hearts (you generally overweight the Alxa glare and overlook the Marlo correction). For the black card just look at the Norris tension to qualify it as spades. For values we still have to finetune your learning, but you should have captured the rather low values (remember the B-force). With some experience you will be able to see the Nine of Diamonds to the left, the Five of Diamonds the woman in the middle thinks of and of course the the Five of Spades

RSB1 : Wow, here we are up for a challenge. Even though the picture is perfect, the reading is complicated by the fact that the Kruskal and Lennart level cancel out. There remains only the less reliable Marlo reading to guess that we have two black cards to the right. Don't worry if you got that wrong, most of us do when we start. The lady in the middle thinks of a spades as you can notice from the Ackermann's halo level (not found on the right so normally a club there). To the left we have a diamond because of the Stone's interpretation. Maybe you captured a similar B-force level (on the low side, so maybe two fives to the left). A high Elmsley value suggests a King to the right. My best guess (let me know if I'm right) is the Five of Diamonds on the left followed by the Five of Spades and King of Clubs

SBR3 : Sorry for the slow response but this one needed quite some work. The majority of black cards to the left is really difficult to see (the Lennart score is ambiguous and the Russel stimulus did not trigger a clear response, so I had to resort to the weaker Alxa analysis). Also the Spades to the left canceled the diamond on the right in the Russel score, so again I had to work with the less reliable Alxa analysis. On the other hand the very strong B-force to the right indicates two very high court cards, whereas the left card is a neutral (in the sense of Corinda's second law) value. Hence I settle for the Five of Spades (left), the King of Clubs (lady in the center) and the King of Hearts

BRS1 : I'm not sure why you need help here? The black cards surrounding the diamond card of the lady in the middle should have been obvious: There is a clear imbalance in the Lennart score not compensated by a response to the Kreskin stimulus. With the same and very high B-force level to the left, I hope got at least the two Kings. I acknowledge that getting the low value to the right is more difficult (the Annemann score is very fuzzy). In any case, we have here the King of Clubs, the King of Hearts and the Three of Spades

RSB3 : This is crazy. If my analysis is right, you have the exact same situation I had twenty years ago at my Merlin exam with the founder of the Canasta theory. I remember well I had trouble recognizing the two black cards on the right (at that time we only knew the Lennart score). Normally with the help of nicely place Russel stimulus you should have seen this more easily. The spade is then nicely seen with the woman in the center and her intense Ackerman halo, contrary to the other black card where the halo is not visible. Also the two right cards share the same low B-force indicator. Only the person on the left as a very high value of it. So I stumble across my exam cards, the King of Hearts, the Three of Spades and the Three of Clubs. Do you realize how strange this is? The probability is  $1/(52*52*50)$ , less than one chance over 100000. This is so unlikely I now wonder if Max has been interfering with your experiment.

SBS : I hope you got the three black cards right. A too rapid analysis would suggest all red cards but if you look carefully, the Lennart score is overridden by the modified Brior level. In addition, except for the woman in the center, the others hold spades because of they strong Ackerman halo. The B-force analysis is inconclusive (too much variability and perturbations), so we need to teach you how to read the Alxa level. That would help you identifying the Three of Spades (to the left), the Three of Clubs (in the center) and the King of Spades (to the right).

BSR3 : You are kidding me ! In the mentalist world we have a myth floating around for years. It is a certain combination of three cards which nobody ever observed during this experiment and which we thought would never appear. A lot of theory has been build around it: why it never comes up and more importantly how to recognize it. The latter was therefore easy for me, as we discussed this a lot in the community but I understand you might have trouble with it. There is indeed an apparent contradiction between the Lennart score and Brior level, but on deeper analysis, the two black cards on the left, with a spades for the lady in the center should be clear. The extreme B-force to the right indicates similar value there and because of the special case our community spent a lot of time analyzing I know they are the Kings. The other one is a feeble (low B-force and Anneman score) card. So we get the famous triplet Three of Clubs, King of Spades and King of Diamonds

BRH1 : Obviously we have two red cards to the right with a heart to the right (look at the Lennart score and Ackerman halo). The Russel score analysis should lead you to the spade on the left. As for values, the clear B-force peak for the two left persons indicates Kings, whereas the average Anneman score on the right suggests a value between 5 and 7. Considering the unspecific Alxa glare, I'm confident we have first the King of Spades, the woman in the center holds the King of Diamonds and the last person thinks about the Six of Hearts

RHH : This is a relatively easy case and I think you should at least have gotten the suits right. Indeed the Lennart score is without hesitation

indicating red cards for all participants. (If you did not get this right we have to have a fundamental discussion). With the slightly lower Alxa level to the left the two heart are on the right. The value question is more complicated, in particular because no coherence between the participants is seen. The easiest case is the woman in the center with no Anneman glare and normal response to the Russel stimulus, so a six. To the left much higher scores suggest a King, while the lower intensity on the right makes me think of a two or three. So my guess (with a confidence level of 80 percent) is first the King of Diamonds, followed by the Six of Hearts and the Three of Hearts at the end.

HHH : Boy ! Why you would need some help with this is not clear to me. All signs are so clean (unless you mix up the basic Gardner reading with the Parker score). There is such a strong Ackerman halo for all that there must be three hearts. The B-force is a little bit more difficult to gauge but you should see the Kreskin sequence 639. Hence the first card must be the Six of Hearts, the woman is with the Three of Hearts and at the end we find the Nine of Hearts.

HBB : We analyzed a similar case a few weeks ago. Do you remember why I teach you to include the Carpenter's measure into the Lennart score ? With this the black card to the right stares at you compared the two hearts. For values, the B-force is inconclusive but you can take the Alxa level in the Canaste interpretation (I assume you took the picture at the right moment and the woman in the center followed your instructions). This yield the Three of Hearts to the left. The two others have similar values (confirmed by a technique we will revisit next time): the Nine of Hearts followed by the Nine of Clubs

HBR1 : Don't be disappointed if you had problems here. The lady in the center might not exactly behave as expected and the Lennart score altered. Also the Bair level is of no help in this case. Yet you can identify the black card surrounded by the reds if you keep the Kreskin analysis in mind. Why it is a club needs an interpretation only achievable with a lot of practice. Also except that the cards to the left have similar or identical values (altered B-force signal) you will probably not be able to detect more at the current stage of your learning phase. I showed the image to Lance, your fellow student, who his taking his exam right now. He goes for the Nine of Hearts, the Nine of Clubs and the Eight of Diamonds. I agree with him but let is know should we be wrong.

BRB : This is a case where basic analysis mostly fail. Though there is a red card (the lady in the center), the Carpenter stimulus has overridden the normal Tyler behaviour and the two other cards are actually clubs (take time to sense the Ackerman halo). The B-reading is quite boring and the Kruskal code is 986 or 532. If your Russel preparation was done correctly I think we have the Nine of Clubs, the Eight of Diamonds and hopefully the Six of Clubs

RBS3 : I nice bag of cards here with quite some subtleties. The only red card has an overall impact on the Lennart score which is much too high and might influence your Alxa analysis. The two black cards are of different families because the Brial level is pointing the lady in the middle. That leaves spades to the right. The Anneman score is quite uniform and the Kruskal code favouring median values. I checked in the Alexander data base (which you will not be allowed to do for your exam) and it confirms my guess for the Eight of Diamonds, the Six of Clubs and his mate the Six of Spades

BSB : A full array of black cards should be obvious from the inversed Brior level: Do NOT use the Lennart scale in the present case because the woman in the middle is obviously hiding the response to the Russel stimulus. On the other hand this makes it quite easy the Ackerman halo leading to spades. The Elmsley value is close to zero and no court cards are expected. However a uniform B-level on the left dropping rapidly makes the value analysis coherent with the Six of Clubs, its twin Six of Spades in the center and the last person thinking of the Ace of Clubs

SBB : This is a typical slippery question for an exam. The strong Lennart level is close to the Brior score and the color information hidden in this contradiction. I then use the alternative Alxa analysis to favor black cards, one of which should a spades due to the A-Halo. B-levels are around average but with a strong Kreskin-Kruskal variability. Hence your jury might accept an inaccurate value reading, which for your information should give Six of Spades to the left, the woman in the center thinking of the Ace of Clubs and then one should have the Seven of Clubs

BBR : Do not get distracted by the woman in the center, she is trying to hide her reaction to the Jerx stimulus. If you have enough self-consciousness you can get rid of that and see the low Lennart score below, similar to the one on the left. With the Carpenter measure we should have two clubs to the left. The red card to the right must be a diamond if I can trust your picture and the Maven hint. Values are quite interesting, with a symmetry in the B-score and a neutral central value in the Kruskal code. Hence the first card must be the Ace of Clubs, in the middle there is the Seven of Clubs and the last one is the Ace of Diamonds without any doubt

BRH3 : This is a nice exercise involving quite some techniques since a lot of indicators are pointing in opposing directions. For example the Lennart level and Brior score are contradicting each other so I would use the Alxa level or Kreskin score to infer the two red cards to the right, the lady in the center thinking about diamonds. The clubs to the left should be seen on the Bair level. There is a nice consistency on the B-level to the right but it is not clear if there are rather aces or kings. Anneman's halo would favor the ace interpretation. For the left card, you might read the dissertation of Canasta (chapter 2). So we have the Seven of Clubs, the Ace of Diamonds and the other red ace, the Ace of Hearts

RHR : I'm not sure why you contact me for this obvious case. There are only red cards as you should see from the Canaste interpretation (do not use the Lennart reading here, the person to the left is hesitating on how to react to your Russel stimulus). The woman in the middle is thinking of hearts (Ackerman's vibrations should be visible in reality). The B-level is extremely flat and uniform with a slight Brior score added up to the right. So normally you should have seen the Ace of Diamonds, the other red ace, the Ace of Hearts and to the right the Two of Diamonds (I would accept a three during exam)

HRH : What a nice configuration for a lecture on reading. A very clear Lennart score for the red cards (just discard the Kalman level for black cards since you are not dealing with a public of castana-type spectators). The symmetry but non-uniformity of the Anneman glare must ring a bell, does'nt it ? So there remains to look at the B-force score which is very low and very uniform. Associated with the modified Kruskal reading we have a very nice hand here: the Ace of Hearts followed by women with her Two of Diamonds and then another two, the Two of Hearts

RHB1 : You probably went for the classical analysis (Lennart level higher to the left and with the nice Ackerman halo of the woman in the center, you should have identified the diamond and hearts). A much more elegant ways in this case is to realize there is a perfect hit for the Kruskal color identification 123. There are no outliers in the B-analysis and the Kreskin variability is on the lower range. To the left one has a flat Alxa response typical for similar (low) values. With some more work on your Russel stimulus, you should get that he first card must be the Two of Diamonds, the next one the Two of Hearts and the final one probably the Seven of Spades (maybe the Eight if the person on the right drank too much alcohol)

HBR3 : You didn't get lucky with this one. There are quite some difficulties. While you might have noticed the red cards on the left and right (symmetric Lennart indicator), the heart to the left is not easy to identify (at least on the photo I have). The women in the middle with the reduced Ackerman halo holds a spade card. Values are not court card (there is no sign of any anomalous helicity) but a nice uniformity of the B-level to the right. Anneman once had such a case and refers to it in his memoirs as the 277 catch. So the first person thinks about the Two of Hearts, the second one the Seven of Spades and the third one the Seven of Diamonds

SRB1 : There is no need to be embarrassed you did not succeed on this one. Even Annemann had problems in a similar situation in the famous 89 session. The symmetric position of the back cards (Lennart indicator, also when using the secondary levels indicating spades to the left) is easily overlooked by the strong reaction of the lady in the center to the Russel stimulus. She is thinking of diamonds (look at Gladwin glare). Values are very evenly distributed (flat B-level) and around neutral values (no trace of a Maven reaction). So the first card is the Seven of Spades, then we find another seven, the Seven of Diamonds and at the end the Five of Clubs

RBH3 : This is a rather boring case with the symmetric position of the red cards (mirrored Lennart reading) around the women thinking of clubs (Canasta interpretation of the Alxa score). You probably had difficulties distinguishing the diamonds on the left from the hearts to the right but a careful analysis of the helicity and Alxa level should provide you with the necessary hints. B-levels are flat and boring (did you really apply the Russel stimulus as I taught you?). But the Kruskal code is well defined (I know we have still to work on that). So you should see the Seven of Diamonds, the Five of Clubs and of course the Five of Hearts

BHR1 : Here we have a strangely balanced-unbalanced situation. The Lennart score is biased to the right whereas the Kruskal analysis (normally pointing in the same direction) is contradicting it. A gutfeeling is that the person to the left is not reacting as he should. So I favour the red to the right reading with the lady in the middle thinking of hearts. The contradictions continue on the B-level and Kruskal code analysis. The Ask-Alexander data base is not of help neither and I'm a little hesitating on the whether the two cards to the left are four of fives (I'm confident they have identical values, look at the Tylor score we briefly discussed last time). But my best guess is the Five of Clubs, the Five of Hearts and the last one is certainly the Ten of Diamonds

HRR : Here we have a rather straightforward thing with only red cards (assuming you triggered correctly the Josh response). There is only one hearts (look at the slightly lower Alxa reading). There are no court cards (no significant signal of Kruskal helicity) with a Kreskin pattern consistent with the Five of Hearts, the woman in the middle holding the Ten of Diamonds and the last person with the Three of Diamonds.

RRH : you son of a b....: I almost fall in your trap for the color analysis. You must have triggered the Russel response rather than the Kelvin reaction to mislead me. But I will show you next time how in even such a bas situation I can find the two diamonds to the left and the diamond to the right (this is a personal variation of Kreskin work on the halo analysis). For the remainder we still have to go to the advanced lessons on Kruskal patterns but you should have identified the strong variations with a drop for the lady in the center. So first there is the Ten of Diamonds, the second thought of card is the Three of Diamonds and last but not least the Queen of Hearts

RHB3 : You wanted to challenge me ? If so you might need to find something more complicated. The two reds to the left are obvious with the lady in the center having a heart card in mind (Biased Lennart score and higher Alxa score for her). The clubs to the right are suggested from the Brior score. As for values there is a high steric level to the right and uniform B-level for those. (Did you check the reaction when asking to think of another card?). You still have to learn a lot in particular some details on the Kruskal patterns. Anyway here we go: Three of Diamonds, the woman in the middle with her Queen of Hearts and to the right the Queen of Clubs

RBS1 : The Lennart reading is complicated here because of the unresponsive woman in the center; are you sure your instructions were clear? The halo seems underwhelming. Anyway, with the Alxa score we can recover the situation and realize the two black cards to the right contain only the spade to the right. To the left, with the high B force, I see the Queen of Hearts. In the center, because of the unchanged B-force (did you check the thought-switch behaviour?) there is thus another queen, the Queen of Clubs. Then, the Anneman halo suggests the Four (of Spades).

BSS : I hope you got the all-black colors right, otherwise we have to restart some of our lessons. There is no real excuse of not seeing the below Marty threshold values of all Alxa scores. I grant you that the clubs to the left is more difficult to detect but with an appropriate analysis of the time-evolution of the halo (an information you have when facing people but not on a picture) you should be able to get it (Myself had to exploit an ancient technique of Nepomuk). The B-force analysis we are currently working on should help you with the values. Here it is quite a complicated situation with several solutions possible. From experience I suspect the Queen of Clubs, then the woman holds the Four of Spades and to the right we have the Eight of Spades

SSS : What a strong signal of the Alxa score ! There should be no doubt that all cards are black (unless you inadvertently mixed up your stimuli). Also the absence of clubs is quite obvious (Nepomuk would be happy to see his theory confirmed). There are no court cards (absence of corresponding halo) but the B-force level is quite erratic. Only with the help of the Kreskin pattern (see the next chapters in our Canasta treaty) you can proceed. This should lead you to the Four of Spades to the left, the Eight of Spades the lady is hiding and then the Nine of Spades

SSR : You realize I will not always be able to help you out ? The strong competition between the Lennart score and Alxa level makes it difficult to get the color balance but with exercise you should be able to realize we have two spades to the left and a diamond to the right. B-level is extremely flat as well as the Kruskal pattern. The absolute value is difficult to see on the picture because of the light conditions and the lady in the middle hiding the Anneman halo, but I think we are in the presence of the Eight of Spades, Nine of Spades and Eight of Hearts

6♥3♥9♥ 10♥7♥4♦ A♥2♦2♥ K♦6♥3♥ 10♦3♦Q♥ A♦A♥2♦ 5♥10♦3♦ 6♦9♦5♦	3♥9♥9♣ 9♦5♦5♠ — J♥J♦A♠ 7♥4♦4♣ — 2♦2♥7♠ 3♦Q♥Q♣	4♥2♠J♥ 4♦4♣6♦ — 9♥9♣8♦ 2♥7♠7♦ — Q♦Q♠10♥ 7♦5♣5♥	Q♠10♥7♥ 4♣6♦9♦ — 5♣5♥10♦ 2♠J♥J♦ — K♠K♦6♥ 7♣A♦A♥
4♠8♠9♠ A♠J♠J♣ 3♠3♣K♠ Q♣4♠8♠ 2♣10♣10♠ 6♣6♠A♣ 6♠A♣7♣ 8♣2♣10♣	8♠9♠8♥ A♣7♣A♦ — J♠J♣Q♦ 5♠K♣K♥ — 10♣10♠4♥ 3♣K♠K♦	10♠4♥2♠ 9♣8♦6♣ — 7♠7♦5♣ 9♠8♥8♣ — K♣K♥3♠ J♣Q♦Q♠	J♦A♠J♠ 8♥8♣2♣ — 5♦5♠K♣ K♥3♠3♣ — Q♥Q♣4♠ 8♦6♣6♠

Table 1: Look-up table. After the first guess you immediately know which of the eight columns to look at; concentrate thus on the column which has the red cards at the right position. If you had two or more red cards, go for guessing the Hearts, otherwise the Spades. The cards shown in larger fonts should correspond to a confirmation of this guess. Now you should be able to identify within your column the unique pattern or if you had one suit right from two cards having the same color, which ambiguous cases you look at. The position of the pair tells you in the latter case what you need to know. The ambiguous cases are found below the "—".



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## After Jerx

1. JM suggests having everyone look at each other's cards so they don't have to look at them again if you get to the stage where you divine that there is a pair. I have a feeling this could lead to some confusion and some false positives. Someone might give you a "yes" for hearts because their neighbor's card was a heart and they were asked to also think of that card (for example). Instead, I would have them only look at their own card and then if you get to the point where you're going to suggest there's a pair you could say something like, "Something's not working here. I'm not getting what I would expect to. I'm not sure what...Actually... I think two of you are thinking of the same number and that's throwing me off. I'm going to turn back around and I want you to peek at each other's cards, and let me know if I'm right about there being a pair." This way you don't have to have them try and remember multiple cards, which spectators are horrible at.

2. If you want to be a real bastard about things, you could have them genuinely shuffle a deck and then switch it as you place it under the table to show them how you want them to cut to a random spot under the table so you can't possibly see where the cards were cut to.

3. It's imperative that you don't see the cards or the deck after the selection. If you don't make those conditions clear then it's really not worthwhile to do it this way. You could just use a marked deck or a regular stacked deck or a stacked *and* marked deck.

4. You don't need to invoke your mentor, of course. You could just do the whole trick with your back to them and just look at a crib sheet.

5. If you use the email responder JM has set up, here's how I would do it. I'd write the email and act like I'm pressing send, but I wouldn't press send. "He responds pretty quick, usually," I'd say. After a minute or so I'd check my phone and *then* press send secretly. Set the phone down. Then a few moments later you'll get a notification that you got an email. What you don't want is to get the notification seconds after they *think* you sent the email. Then it will be obvious it's an autoresponder.

6. As mentioned, there are numerous other ways you could get the information from your non-existent "third party." If you're interested in this trick, it's perhaps best to come up with your own response system rather than use the one JM offers here (just so you can maintain it yourself and make sure it's always up-to-date and ready to go). You could do it with a genuine secret assistant and a simple code; a text or email



autoresponder; a Siri, Google-home, or Alexa type thing; you could just fake talk to someone on the other end of a phone; or whatever else you like.

7. I think timing will be important here. Ultimately this is a card revelation and you don't want *too* long between the choice of the card and the revelation. You want to make sure the cards are revealed while the stringent conditions (you never see the deck or the chosen cards) are still in their mind.

Thanks again to JM for sharing this trick.