

Prestidigitation!

Introduce the topic and access prior knowledge with a short video about magicians and magic such as Bye, Bye, Bunny <http://vimeo.com/69228454>, also at <https://www.youtube.com/watch?v=UY6edSH6Lpg>. **As always, it is highly recommended that all instructors view any and all video clips prior to showing them to your students to make sure they are appropriate for your class members.**



The Birth of Vaudeville

Towards the middle of the 19th century (1850s) in England, Charles Morton opened the first Music Hall where patrons paid specifically in order to see a show. Until then Music Halls had been simple cafes where people would pay for a drink and perhaps see a performance. Morton changed everything by building the paid-admission Canterbury Music Hall. His immediate success gave rise to what would later become known as Vaudeville, or the variety show circuit. Before long, there were countless variety theatres throughout England and the US and all over the world for that matter. Vaudeville offered many opportunities to magicians with simple acts (without large illusions) for the next 100 years, until television came along, threatening the extinction of live entertainment altogether.

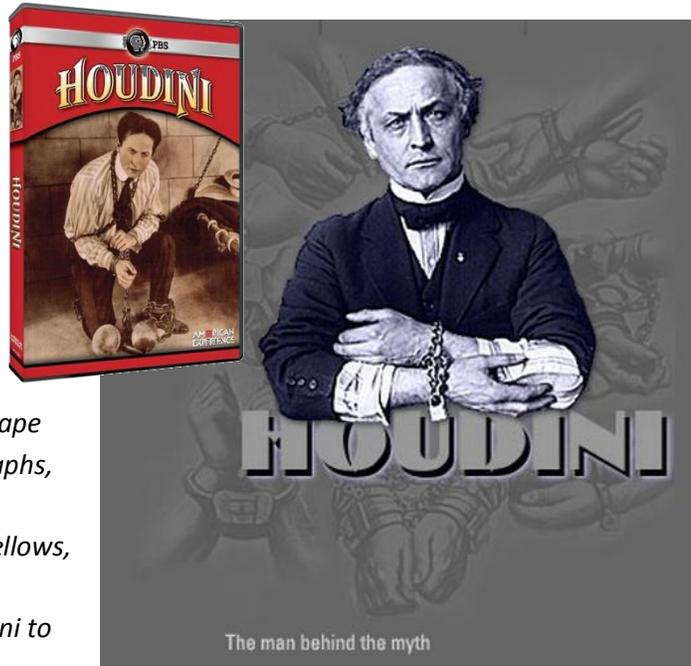
From 1756 to 1781, Jacob Philadelphia performed feats of magic, sometimes under the guise of scientific exhibitions, throughout Europe and in Russia. Modern entertainment magic owes much to Jean Eugène Robert-Houdin (1805–1871), originally a clockmaker, who opened a magic theatre in Paris in the 1840s. His speciality was the construction of mechanical automata which appeared to move and act as if they were alive. The British performer J N Maskelyne and his partner Cooke established their own theatre, the Egyptian Hall in London's Piccadilly, in 1873. They presented stage magic, exploiting the potential of the stage for hidden mechanisms and assistants, and the control it offers over the audience's point of view.

The model for the look of a 'typical' magician—a man with wavy hair, a top hat, a goatee, and a tailcoat—was Alexander Herrmann (February 10, 1844 – December 17, 1896), also known as Herrmann the Great. Herrmann was a French magician and was part of the Herrmann family name that is the "first-family of magic". Those who witnessed Herrmann the Great perform considered him the greatest magician they ever saw.

Harry Houdini

An excellent introduction or supplement to this section is the book *The Houdini Box* by Brian Selznick (the creator of the bestselling book *The Invention of Hugo Cabret*). It has an interesting not about the history of the box and Houdini himself following the story.

Option: Watch clips of *American Experience: Houdini* a 54 minute biography of the legendary magician, illusionist, and escape artist. Through archival footage and photographs, as well as on-screen interviews and dramatic recreations performed by escape artist Bob Fellows, *American Experience: Houdini* brings the remarkable history and legacy of Harry Houdini to life.



Houdini... Except for the legendary Merlin of King Arthur's Court, no name so conjures up the realm of magic. Few performers have ever captured the public imagination like Harry Houdini. From his breakthrough in 1899 to his death in 1926, Houdini was one of the world's most popular entertainers, a true star of stage and screen. Time and again, his escapes from seemingly impossible predicaments thrilled audiences, who found in him a metaphor for their own lives, an affirmation of the human capacity to overcome adversity. Escapism in both senses of the word. But while nearly everyone is familiar with Houdini's stage persona, his little-known personal life is equally revealing. In 1912 Harry Houdini was lowered into New York's East River in a crate wrapped in chains. The crowd of spectators gasped; reporters pulled out their stop watches. Houdini was out in less than a minute. The resulting media blitz established him forever as the world's greatest escape artist. On stage, Houdini subjected himself to the Water Torture Cell, being buried alive, and other perils of his own design. Throughout his rise from Hungarian immigrant to international star, Houdini confronted humanity's greatest fears entrapment, pain, death -- and emerged victorious.

The Highest Form of Flattery

Jim Steinmeyer said in his book, *Hiding the Elephant*, that every magician of the 20th century was *haunted* by Robert-Houdin, "...who cast an enormous shadow over their generation." American magician and escape artist Harry Houdini (born Ehrich Weiss) was so impressed by Robert-Houdin that, after reading his autobiography in 1890, Ehrich adopted the stage name of "Houdini" in honour of Robert-Houdin. He incorrectly believed that an i on the end of a name meant

Often considered one of the greatest escape artists and magicians of all time Houdini was born on March 24, 1874 in Budapest, Hungary as Ehrich Weiss. He was the fifth son of a very poor rabbi. The family came to the United States soon after Ehrich's birth, eventually settling in New York City. In New York, Harry Houdini worked as a messenger and as a cutter in a garment center sweat shop, Richter & Sons, a tie factory to help support his family. He was introduced to magic by a friend (they saw the Chinese rings performed) and they practiced small tricks with cards and coins, and cups and balls (his first trick) but the secrets of rope escapes fascinated Ehrich the most. He made his public debut as a 9-year-old trapeze artist, calling himself "Ehrich, the prince of the air".

Weiss became a professional magician and began calling himself "Harry Houdini" because he was heavily influenced by the French magician Jean Eugène Robert-Houdin, and his friend Jack Hayman told him, erroneously, that in French, adding an "i" to Houdin would mean "like Houdin" the great magician. In later life, Houdini would claim that the first part of his new name, Harry, was a homage to Harry Kellar, whom Houdini admired.

With his new name, Houdini joined his brother in a small magic act. At the outset, Houdini's magic career resulted in little success. He performed in dime museums and sideshows, and even doubled as "the Wild Man" at a circus. Houdini focused initially on traditional card tricks. At one point, he billed himself as the "King of Cards". But he soon began experimenting with escape acts.

Famous Card Tricks: The Invisible Deck

Long considered the world's greatest and most elegant card trick. Just some basic math and a decent memory is all you need to pull this simple but spectacular effect off!

The spectator's freely chosen, THOUGHT of card is shown to be the ONLY card reversed - face down - in the deck.

The trick's title stems from the classic presentation of this effect, in which the magician hands the spectator an imaginary, or "invisible" deck. On being handed the deck, the spectator is asked to mime the acts of removing the cards from their case, shuffling them, spreading them face-up on the table, freely selecting a card, replacing it face-down among the other face-up cards, and returning the deck to its box. (Sample performances of this type can be seen online, ex.

<http://store.theory11.com/products/invisible-deck>)

At this point, either the spectator keeps the imaginary deck while the magician removes the real deck from his pocket, or the spectator hands the imaginary deck to the magician, which suddenly becomes real in the magician's hands. The magician then asks the spectator to name the card he/she selected, removes the deck, face-up, from its box and spreads the cards to show one face-down card. The spectator removes the card to find it is the one he/she named moments earlier.

In the more comedic version of the routine, more focus will be drawn to the part of the effect where the spectator is handling the cards. Often, the magician might criticize the spectator's card-handling abilities, or remind them to take the cards out of the case before trying to shuffle them.

A more serious routine can be performed, which focuses more on the magician's mindreading abilities and the fact that the spectator had a completely free choice of card. The magician could hand the spectator a box of cards to hold, ask them to think of, and concentrate on, any card in the deck, and then to name it. The spectator then hands the box back to the magician and the trick completed as before.

Joe Berg created the Invisible Deck in the 1930s, originally calling it the Ultra Mental Deck. It was Eddie Fields who came up with the invisible presentation after watching a patient in a psychiatric unit of a hospital shuffling an imaginary deck of cards.

The deck can be bought from magic dealers, and it requires some memorization work on the part of the performer. It is also possible to construct the deck using a regular deck and adding additional material.

This trick can be performed quickly, or drawn out as a mind reading or comedy routine. The magician should be able to do simple subtraction in their head with ease.

Things You'll Need

- Imaginary invisible deck of cards
- Real invisible deck of cards
- Lots of practice

Instructions: Use an Invisible Deck

Tips and Tricks Tutorial: <https://www.youtube.com/watch?v=7aYFmYaBixg> (Note: there are some pop-up ads)

First, we need to learn how these decks work. The cards are paired in specific manners. Every pairing equals thirteen. (The Jack gets number 11, the Queen gets number 12. The **red Kings** are **odd** and the **black Kings** are **even**.) The odd numbers are all on one side and the evens on the other.

Spades are back to back with Hearts and Clubs are back to back with Diamonds. Aces are paired with Queens, Jacks are paired with Two's, and Kings are paired with other Kings

Examples of pairings would be the Seven of Spades and Six of Hearts. Spades are paired with Hearts and the pairings have to equal thirteen.

When they're working with the "invisible deck" ask your spectator to name any card that he/she can possibly think of and tell him/her that his card will be placed upside down in the deck.

If the spectator has thought of the 10 of hearts, then you mentally figure out that it takes 3 to add into 10 for making 13. Since 10 is an even number (and you want it face down), you pull out the deck from the odd side.

Counting from the odd side, when you see the 3 of spades ease up on the pressure to let the upside-down card slide out from underneath. It will appear as though 10 of hearts is the only upside-down card in the deck.

Making a Bess of Things

In 1893, while performing with his brother "Dash" at Coney Island as "The Houdini Brothers", Harry met fellow performer eighteen year old Wilhelmina Beatrice (Bess) Rahner,

whom he married. Bess replaced Dash in the act, which became known as "The Houdinis." and for the rest of Houdini's performing career, Bess would work as his stage assistant.

While they gained some notice with a trunk escape they called "The Metamorphosis," life on the dime museum circuit was grueling for the young couple. Though barely twenty-five, in 1898 Houdini was so tired of it he thought seriously about quitting. Houdini's "big break" came in 1899 when he met manager Martin Beck in rural Woodstock, Illinois. Impressed by Houdini's handcuffs act, Beck advised him to concentrate on escape acts and booked him on the Orpheum vaudeville circuit. Harry Houdini developed a range of stage magic tricks, many of them based on what became known after his death as escapology. Houdini was genuinely skilled in techniques such as lock-picking and escaping straitjackets, but also made full use of the range of conjuring techniques, including fake equipment and collusion with individuals in the audience. Houdini's show business savvy was great as well as his performance skill.



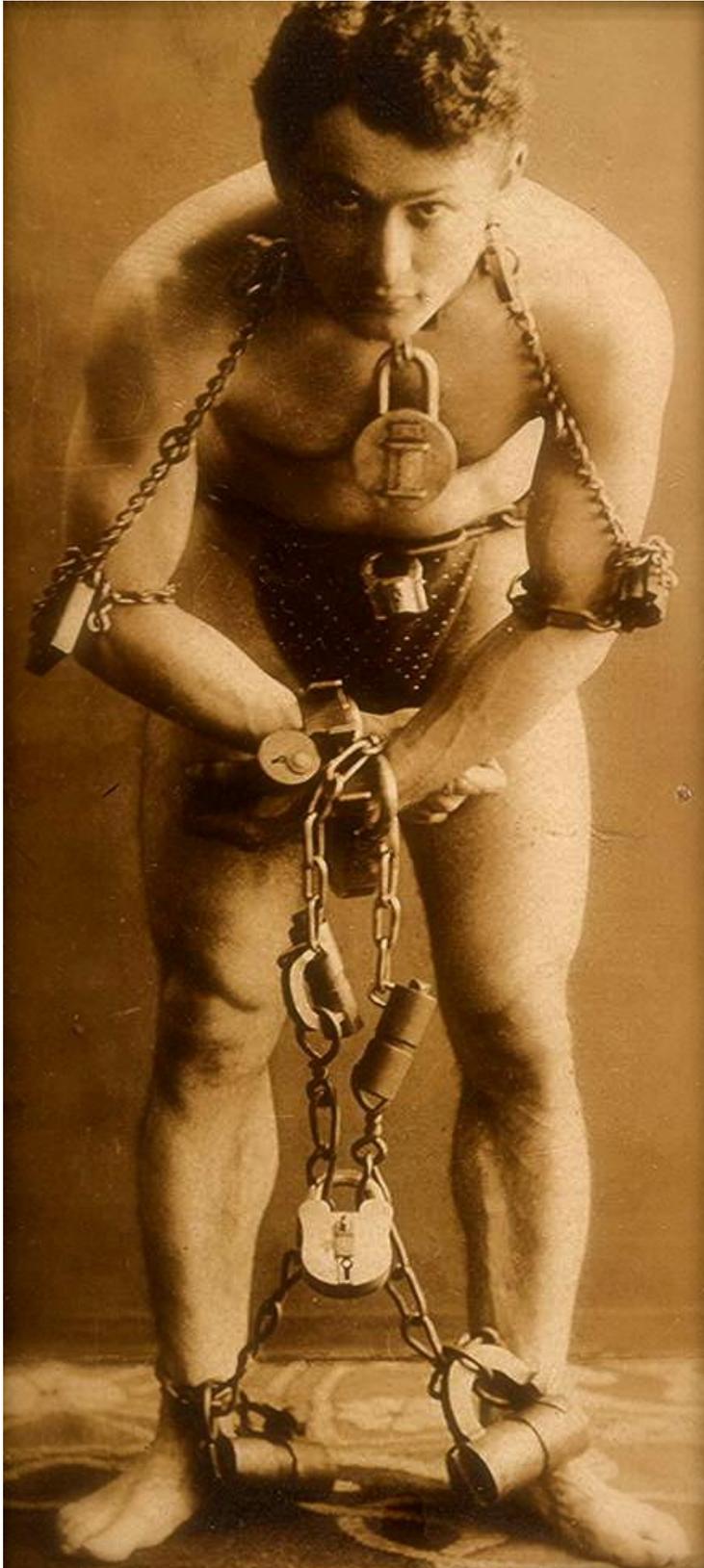
Within months, he was performing at the top vaudeville houses in the country. But as wonderful as this was, no amount of success in America, which had barely begun to emerge from Europe's cultural shadow, could compare with acceptance across the Atlantic. In 1900, already bickering with Beck, he arranged his own tour of Europe, where he would spend the bulk of the next five years. After some days of unsuccessful interviews in London, Houdini managed to interest Dundas Slater, then manager of the Alhambra Theatre, he gave a demonstration of escape from handcuffs at Scotland Yard, and succeeded in baffling the police so effectively that he was booked at the Alhambra for six months.



Houdini became widely known as “The Handcuff King.” He toured England, Scotland, the Netherlands, Germany, France, and Russia. In each city, Houdini would challenge local police to restrain him with shackles and lock him in their jails. In many of these challenge escapes, Houdini would first be stripped nude and searched. At his performances, hundreds were turned away; on stage, the short, muscular star created a frenzy with his daring stunts.

In Moscow, Houdini escaped from a Siberian prison transport van. Houdini publicly stated that, had he been unable to free himself, he would have had to travel to Siberia, where the only key was kept. In Cologne, he sued a police officer, Werner Graff, who claimed he made his escapes via bribery.

Houdini won the case when he opened the judge's safe (he would later say the judge had forgotten to



lock it). With his new-found wealth and success, Houdini purchased a dress said to have been made for Queen Victoria. He then arranged a grand reception where he presented his mother in the dress to all their relatives. Houdini said it was the happiest day of his life.

After five years on the road, Houdini, now an international celebrity, was worn down. He bought an elegant brownstone (for \$25,000, a brownstone at 278 W. 113th Street in Harlem, New York City) in a fashionable part of Harlem and moved in with Bess—and his widowed mother. "Houdini was really twice married," notes biographer Ken Silverman. "He was married to Bess, and then in a way also married to his mother. He always called them 'my two girls.'" Although being an entertainer meant constant travel, the brownstone became home base for his family, particularly Cecelia Weiss. Houdini had always been close to his mother, but since his father's death had demonstrated a fierce devotion rivaled only by his love for Bess. When word of her death reached him in Sweden in 1913, he reportedly fainted, then we pt uncontrollably when he came to. "I am what would be called a Mothers-boy," admitted the man hailed around the world as a real-life superman. He would grieve for her the rest of his life. This devotion, along with a fierce desire to succeed as his father never had, led Houdini to drive himself relentlessly, and helps account for his incredible career.

Harry promised his wife Bess he would slow down, but he couldn't. When others would have retired to enjoy their success, Houdini reinvented himself time and again, finding new ways to maintain his public appeal. In 1908 he offered \$1,000 to anyone with a device that could hold him. His open challenge attracted the makers of packing cases, pianos, roll-top desks -- even a huge envelope. He also introduced the famous milk can escape, reminding audiences that "Failure Means a Drowning Death."

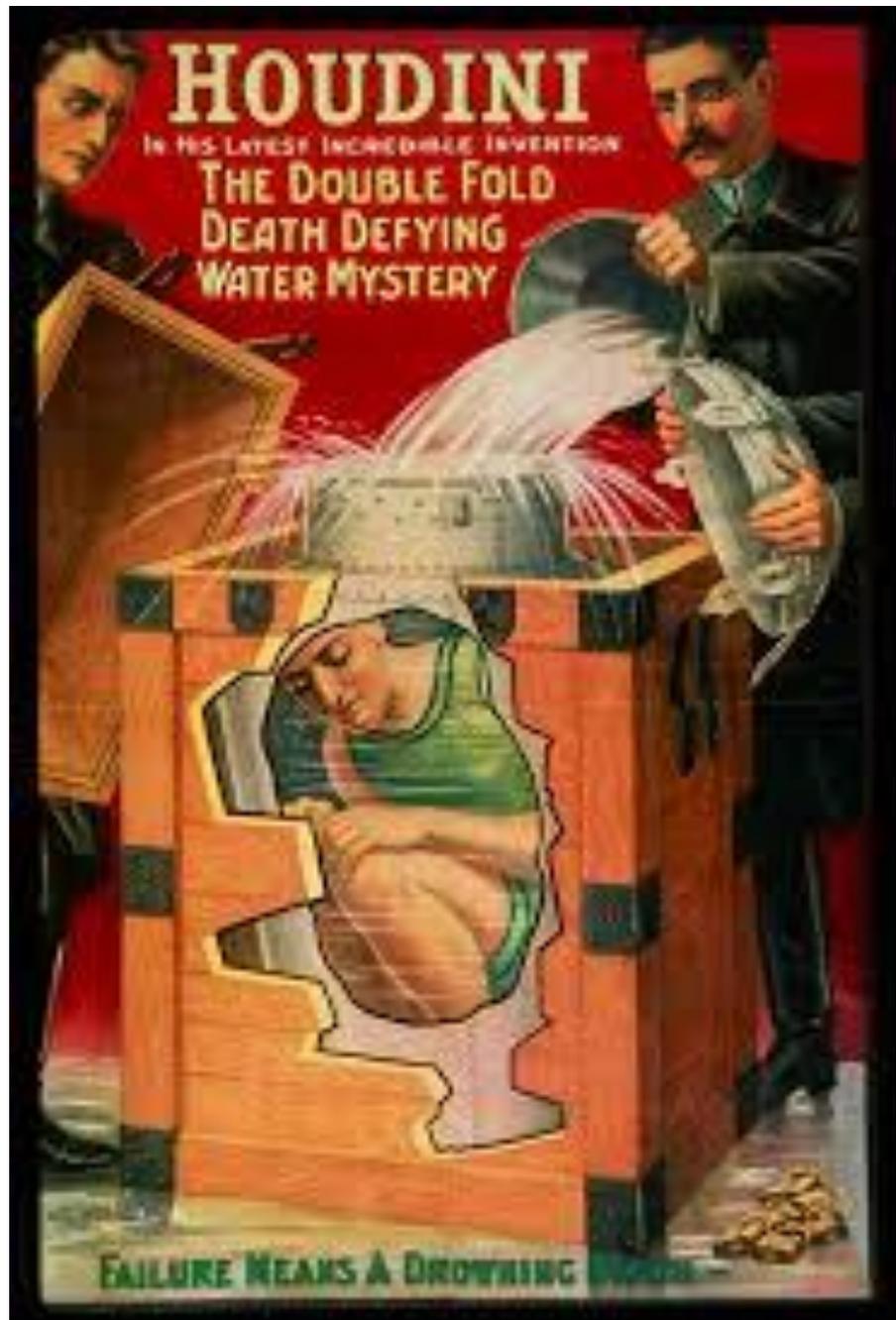
Every escape carried some risk, and each performance took a physical toll.

"Houdini broke, injured, sprained almost everything," says Silverman. "One of the worst times was in Pittsburgh. He had some longshoremen come up on stage and tie him tightly. They pulled so hard that they ruptured his kidney."

Houdini took his act outdoors, performing ever more dangerous water escapes. He trained by submerging himself in an icy bathtub, holding his breath while Bess timed him -- up to three minutes. Then he learned that his famous Milk Can Escape was being copied and sold to imitators for \$35. Furious, Houdini retaliated by introducing what he described as "the climax of all my labors -- the Chinese Water Torture Cell."

Some consider it Houdini's greatest trick, and it certainly had all the elements of a Houdini performance: brilliant technical conception, great physical strength, and highly dramatic presentation.

He would hang by his ankles in a tank full of water, with the lid padlocked. A curtain was drawn, the band played "Asleep in the Deep" -- then, agonizing minutes later, Houdini would emerge, breathless



and sodden, to take his bow. "He was so insanely devoted to what he was doing and so disciplined that the ultimate insanity of his life never occurred to him," novelist E. L. Doctorow observes.

From 1907 and throughout the 1910s, Houdini performed with great success in the United States. He would free himself from jails, handcuffs, chains, ropes, and straitjackets, often while hanging from a rope in plain sight of street audiences. Because of imitators and a dwindling audience, on January 25, 1908, Houdini

put his "handcuff act" behind him and began escaping from a locked, water-filled milk can. The possibility of failure and death thrilled his audiences. Houdini also expanded his challenge escape act — in which he invited the public to devise contraptions to hold him — to include nailed packing crates (sometimes lowered into the water), riveted boilers, wet-sheets, mailbags, and even the belly of a Whale that washed ashore in Boston.

Brewers challenged

Houdini to escape from his milk can after they filled it with beer. In 1918 he registered for selective service as Harry Handcuff Houdini.



Many of these challenges were prearranged with local merchants in what is certainly one of the first uses of mass tie-in marketing. Rather than promote the idea that he was assisted by spirits, as did the Davenport Brothers and others, Houdini's advertisements showed him making his escapes via dematerializing, although Houdini himself never claimed to have supernatural powers.

A poster promoting Houdini taking up the challenge of escaping an "extra strong and large traveling basket" In 1912, Houdini introduced perhaps his most famous act, the Chinese Water Torture Cell, in which he was suspended upside-down in a locked glass-and-steel cabinet full to overflowing with water. The act required that Houdini hold his breath for more than three minutes. Houdini performed the escape for the rest of his career. Despite two Hollywood movies depicting Houdini dying in the Torture Cell, the escape had nothing to do with his demise. Houdini explained some of his tricks in books written for the magic brotherhood throughout his career. In *Handcuff Secrets* (1909), he revealed how many locks and handcuffs could be opened with properly applied force, others with shoestrings. Other times, he carried concealed lockpicks or keys, being able to regurgitate small keys at will. When tied down in ropes or straitjackets, he gained wiggle room by enlarging his shoulders and chest, moving his arms slightly away from his body, and then dislocating his shoulders.

His straitjacket escape was originally performed behind curtains, with him popping out free at the end. However, Houdini's brother, who was also an escape artist billing himself as Theodore Hardeen, after being accused of having someone sneak in and let him out and being challenged to escape without the curtain, discovered that audiences were more impressed and entertained when the curtains were eliminated so they could watch him struggle to get out. They both performed straitjacket escapes dangling upside-down from the roof of a building for publicity on more than one occasion.

For most of his career, Houdini performed his act as a headliner in vaudeville. For many years, he was the highest-paid performer in American vaudeville. One of Houdini's most notable non-escape stage illusions was performed at New York's Hippodrome Theater when he vanished a full-grown elephant (with its trainer) from a stage, beneath which was a swimming pool. In 1923, Houdini became president of Martinka & Co., America's oldest magic company. The business is still in operation today. He also served as President of the Society of American Magicians (aka S.A.M.) from 1917 until his death in 1926. In the final years of his life (1925/26), Houdini launched his own full-evening show, which he billed as "3 Shows in One: Magic, Escapes, and Fraud Mediums Exposed".

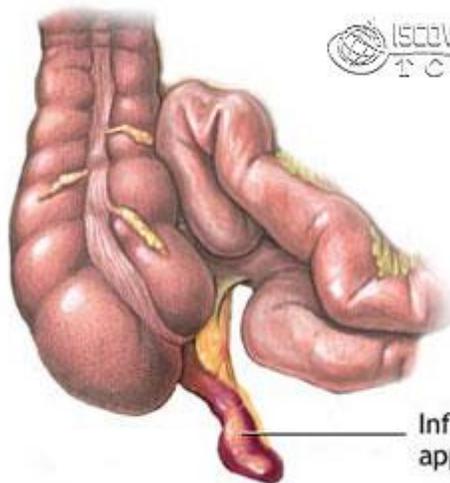
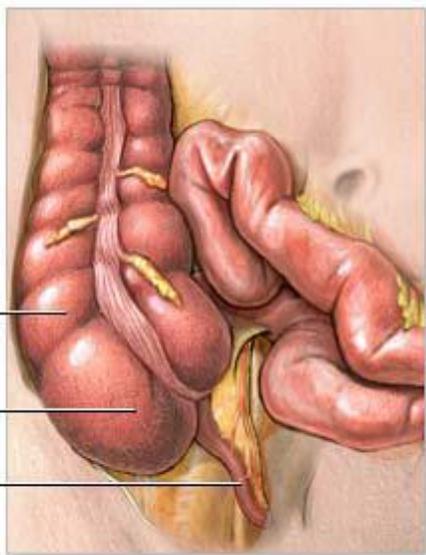
Despite his promise to Bess to retire, Harry, now in his 40s, could not step out of the limelight. In 1925, he launched a one-man show on Broadway that featured magic tricks, escapes, and exposés of spiritualists. For a time, it seemed that the man was invincible. "He would say, 'Hit me, hit me as hard as you can,'" recalls Al Hirschfeld. "And I would hit him, but I would hurt my hand before I would hurt him." But Houdini would not stay invincible much longer. At McGill University in Montreal he gave a lecture, then was resting before his performance. A student came in and challenged Houdini to withstand a blow to the stomach. Before Houdini could prepare, the young man struck him a painful blow. "That will do," mumbled Houdini.

The stomach blows -- which he had invited as a test of his legendary strength -- aggravated a case of appendicitis, and he soon became seriously ill. In a final display of stamina and willpower, Houdini

performed the next day and again in Detroit, he struggled through his performance, then fell ill on the train to his next stop. Physicians later found widespread infection from a burst appendix. (The appendix, which is about the size and shape of a pinky finger, gets very inflamed until, in one area, its muscular wall gets so thin that it breaks open, releasing the bacteria-laden fluid inside. But the fluid doesn't explode out like a splatting water balloon; it seeps and oozes out as if the balloon had sprung a leak.) His appendix was removed on October 25th, but the delay had allowed an infection to set in, and he died in Detroit on Halloween. He was 52 years old. After a life spent in pursuit of fame, Harry Houdini would now assume his place in history.

Banner headlines, long obituaries, and a crowded public funeral in New York marked Houdini's passing. These were but a few of the signs that the world knew it had lost one of the most original and beloved entertainers of all time.

And in the last analysis there is Houdini himself, who once said simply, "I do tricks nobody can explain."

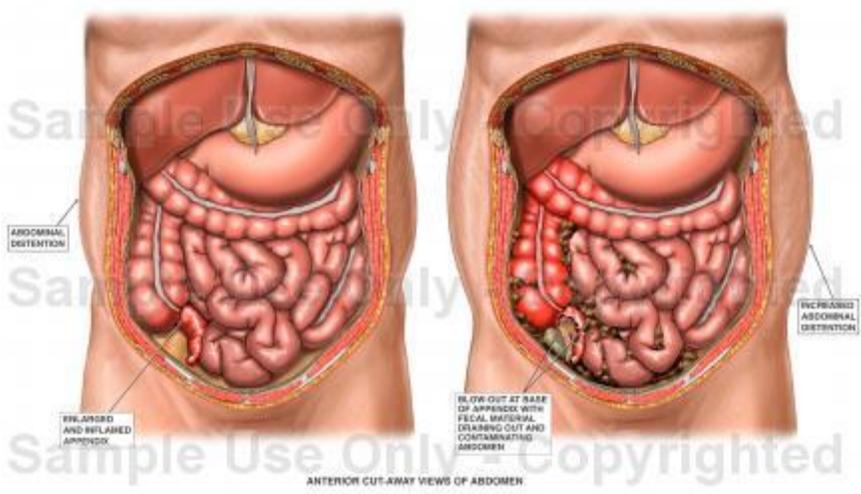


Infected appendix

ADAM.

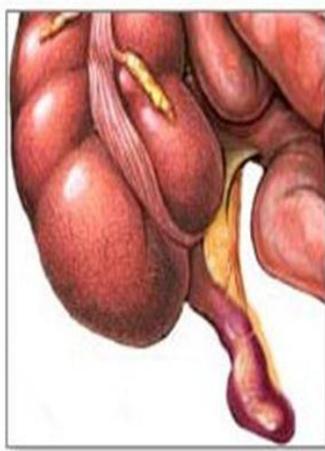
Acute Appendicitis with Subsequent Ruptured Appendix

CONDITION PRIOR TO RUPTURE CONDITION AFTER RUPTURE



Before

After



Watch <http://www.pbs.org/wgbh/amex/houdini/sfeature/film.html>

How did the world's greatest escape artist make his escapes? Learn about some of his techniques here.

Escape Secrets: Handcuff Escapes

When vaudeville impresario Martin Beck "discovered" a struggling Harry Houdini in 1899, it was Houdini's ability to escape from handcuffs which caught his attention. Although Houdini was hardly the first or only performer to do handcuff escapes, he would take the act to a new level over the next several years, and it was as the "Handcuff King" that he gained his first measure of fame.



There was no one "secret" to Houdini's ability to escape from handcuffs, but a combination of technical knowledge, physical skill, and trickery. It all started with what one locksmith who knew him called his "remarkable knowledge of locks and locking devices." Houdini collected and studied locks all of his life and claimed that he had "photographic eyes" that helped him remember how each type worked and could be opened.

Most of the time Houdini used a key hidden in or smuggled into the cabinet or jail cell, either on his person or by an assistant. Depending on how he was bound, Houdini would manipulate the keys with his hands -- sometimes using specially designed extension rods -- or with his teeth. But he also knew tricks for opening many of the simpler types of cuff without keys.

In "Handcuff Secrets," a book he published in 1910 to discourage the legion of imitators trying to ride his coattails, Houdini wrote that "you can open the majority of the old-time cuffs with a shoestring. By simply making a loop in the string, you can lasso the end of the screw in the lock and yank the bolt back, and so open the cuff in as clean a manner as if opened with the original key." And as he demonstrated in his own defense during the slander trial in Germany in 1902, some cuffs could be opened simply by banging them against a hard surface, which might include a lead plate fastened at the knee under his trousers.

Houdini also used tricks that didn't involve opening locks. If presented with a particularly difficult lock, he might insist it be placed higher on his forearm, then simply slip these cuffs over his wrists once the easier cuffs placed there had been removed. And he was not above using trick cuffs, designed to pass inspection but easily opened by means of a fake rivet.

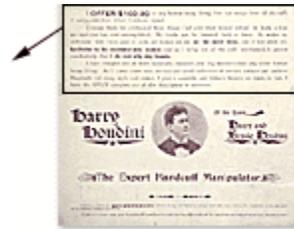
But as he reminded us in "Handcuff Secrets," the unique magic of his escape act lay in its presentation: "You will notice that some of these tricks are very simple -- but remember it is not the trick that is to be considered, but the style and manner in which it is presented."

The Expert Handcuff Manipulator.

IMPORTANT.
NOTICE.

Important Notice

I offer \$100,000 to any human being living that can escape from all the cuffs I carry, and from which I release myself.



I escape from the celebrated Bean Giant Cuff with them locked behind my back, a feat no one else has ever accomplished. My hands can be fastened back or front. It makes no difference how many pair of cuffs are locked on me (at the same time), and I will allow the keyholes to be stamped and sealed, and as I bring out all the cuffs interlocked, it proves conclusively that I do not slip my hands.

I have escaped out of more handcuffs, manacles, and leg shackles than any other human being living. As I carry a very rare, curious and costly collection of torture, antique and modern Handcuffs (of every style and make), I give a scientific and historic lecture on them; in fact, I have the only complete act of this description in existence.

Harry Houdini

Of the team Harry and Bessie Houdini

The Expert Handcuff Manipulator

Crazy Man's Handcuffs!

This trick gives the impression of two rubber bands, one held between your left hand's thumb and forefinger and the other between your right hand's thumb and forefinger, interlocked, melting through each other by just rubbing them together.

CRAZY MAN'S
HANDCUFFS



Watch the following and then follow the instructions below. <http://washingtosexaminer.com/office-magic-tricks-revealed-escape-from-rubber-band-cuffs-trick/video/gm-4958345> and another version is at <http://www.goodtricks.net/crazy.html>

Effect: Two rubber bands separate from each other mysteriously. This is a baffling and quite visible penetration.

Secret: Place one rubber band around the left thumb and forefinger. Your fingers should make a C formation. Causing the rubber band to be tight between your fingers. Point these fingers toward your audience. (This hand is set and does nothing else).

Drape the other rubber band over your first finger on the right hand and lower it behind the other rubber band. Slip your right thumb into the bottom of the draped rubber band. The back of your right hand should be facing your audience. This is the locked position. From here it should look like that there is no way possible that the rubber bands can separate. Stretch the rubber bands showing that they are behind each other.

If you do this a few times people begin to get lazy and don't notice you make the tricky move; Stretch the rubber bands back towards your wrist. The middle finger of the right hand slips through the bottom part of the rubber band and your thumb releases it.

This should be hidden by the back of your right hand. The audience has seen you make the same motions twice already so they don't expect anything. Your thumb comes up and places itself next to your right forefinger, sliding in behind around the rubber band. Bring your hands back together and the rubber



band slips off your middle finger as you separate your forefinger and thumb.
Wave your hands magically and separate the rubber bands.

Escape Secrets: Ropes Escapes

Houdini, always the student, learned everything there was to know about ropes and various methods of tying them. But to a much greater degree than with handcuff escapes, he relied on brute physical strength and endurance to set himself apart from the average escape artist.

In his 1921 book "Magical Rope Ties and Escapes," Houdini explained many of the strategies he used. The most important phase of the act was the actual tying up process. "There are many types of rope ties," Houdini wrote, "and in all of them the secret of escape depends on the ability of the one being secured to gain the necessary slack for a starter." The following excerpts from "Rope Ties" describe some of the techniques he would employ while being bound with a sixty-foot rope:



Taken from Ladies Home Journal, June 1918 - Written by Harry Houdini

The whole secret lies in the fact that it is quite impossible to tie a man while in a standing position, with such a length of rope, so that he cannot squirm out of it with comparative ease, if the tying **BEGINS AT ONE END OF THE ROPE** and finishes at the other . . .

It is the experience of all who have used this tie, that the first few knots are carefully tied, but after a time it will be found that the rope is being used up very slowly, and they will begin winding it around the body and making very few knots . . .

If the committee . . . begin to make more knots than suits you, it will be well to swell the muscles, expand the chest, slightly hunch the shoulders, and hold the arm a little away from the sides. After a little practice you will find that such artifices will enable you to balk the most knowing ones. You should always wear a coat when submitting to this tie, as that will be found to be an added help in obtaining slack . . .

Houdini's famously powerful physique, flexibility, and general athleticism made him one of the most adept performers in history when it came to rope escapes. His mental and physical toughness came into play as well, since he seemed to believe escaping from a rope tie was merely a matter of time, and he refused to ever give up.

But he wasn't opposed to a little trickery, either: "A sharp knife with a hook-shaped blade should be concealed somewhere on the person, as it may be found useful in case some of the first, carefully tied knots prove troublesome. A short piece cut from the end of the rope will never be missed."

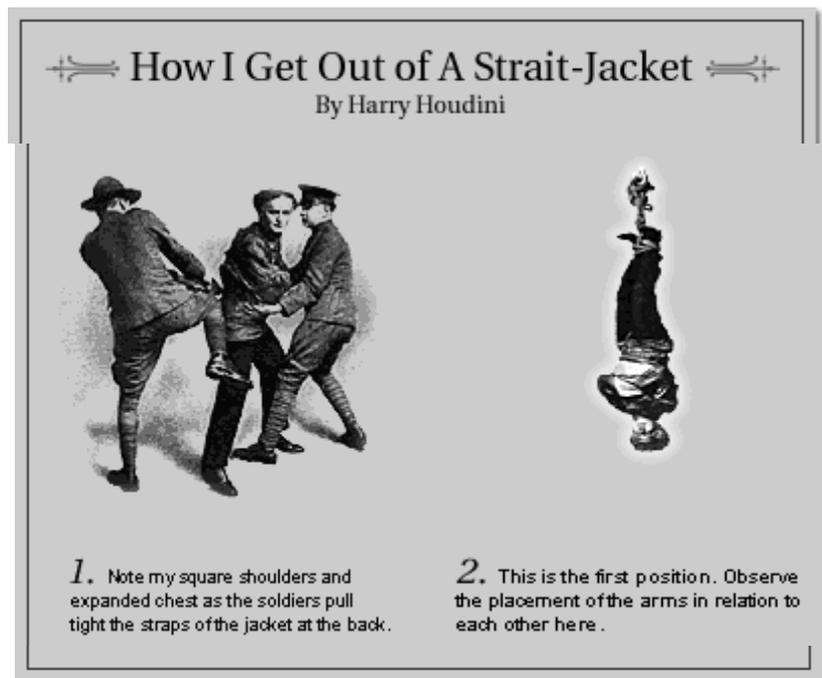
Escape Secrets: Straitjacket Escapes

By his own account, Houdini first thought of introducing the straightjacket into his act while touring an insane asylum in Canada. Peering into a padded cell, he saw a "maniac" struggling against the device, "rolling about and straining each and every muscle in a vain attempt to . . . free himself from his canvas restraint." Houdini began experimenting the next day, and soon the straightjacket, with all its sadistic fascination, had entered into his repertoire.

Much like his handcuff and rope escapes, Houdini's basic straightjacket escape required both technical know-how and brute physical strength. But the major difference was that he usually performed it in plain sight, at once increasing the drama and convincing the audience that there was no "trick" involved. In his 1910 book "Handcuff Escapes," Houdini described how he did it:

The first step necessary to free yourself is to place the elbow, which has the continuous hand under the opposite elbow, on some solid foundation and by sheer strength exert sufficient force at this elbow so as to force it gradually up towards the head, and by further persistent straining you can eventually force the head under the lower arm, which results in bringing both of the encased arms in front of the body.

Once having freed your arms to such an extent as to get them in front of your body, you can now undo the buckles of the straps of the cuffs with your teeth, after which you open the buckles at the back with



Taken from Ladies Home Journal, May 1918 - Written by Harry Houdini

your hands, which are still encased in the canvas sleeves, and then you remove the straitjacket from your body.

The dry, technical nature of this description belies what the escape actually looked like. As old film clips show, (**watch his escape here: <http://www.pbs.org/wgbh/amex/houdini/sfeature/film.html>**) Houdini looks like a madman writhing and jerking about; it looks painful and one gets tired just watching it. Doubtless this was part of the fascination.

Houdini often turned his straightjacket routine into a public spectacle by performing it upside down, suspended from one of the towering new skyscrapers which had begun to dominate city skylines. While requiring more strength to undo the buckles, this actually made it easier to get his arms over his head, the key to the escape.

With more difficult straightjackets, Houdini would perform shielded from view. If using a jacket he supplied, this enabled him to use specially designed devices built into the jacket; if the jacket was supplied by someone else, he was sure to have a concealed or hidden tool to cut the laces or help himself some other way.

Escape Secrets: Milk Can Escapes

Houdini called the Milk Can "the best escape that I have ever invented." What made it great was not its difficulty -- it was perhaps the simplest of all his escapes -- but his dramatic presentation. Houdini biographer Kenneth Silverman describes the whole routine:

In performance Houdini poked and pounded the can to demonstrate its solidity. When he walked offstage a moment, stagehands filled it to overflowing with twenty or so pails of water. Returning in a bathing suit, he first invited the audience to experience what long submersion might be like. He asked them to time themselves while holding their breath. Then he squeezed himself into the can, the displaced water splashing onto the stage. Long before a minute elapsed, most spectators gave up, gasping. Houdini, however, stepped out of the can, smiling, to perform the actual test.



Kukol [his assistant] appeared onstage with an ax. Houdini explained that if something went wrong, Franz would after a certain time smash the milk can open. Now handcuffed, he again folded himself inside. This time the steel cover was slammed on, the hasps latched, the cover padlocked. The ghost house was pulled forward to surround the can. The audience waited nervously, watches in hand, Kukol standing ready to hack. After little more than two minutes Houdini walked from the cabinet, dripping, puffing, blowing, breathless. The ghost house was withdrawn, revealing the milk can with its six padlocks still closed and in place.

Just a few years after Houdini died, a man named Walter Gibson published the book "Houdini's Escapes and Magic," which explains how many of Houdini's routines worked. Claiming in the preface that "had Houdini lived he would have written this book," Bernard M.L. Ernst explains that the book is based largely on his friend Houdini's own notes and drawings, which he had been collecting for just such a book. Here's how Gibson describes Houdini's famous Milk Can Escape:

It is understood, of course, that the milk can will bear a close examination. Its simple construction and the fact that it is made entirely of metal make it appear very secure and free from trickery. The simple method of escape depends on the fact that the collar of the tapering portion is not riveted to the top of the large cylindrical portion of the can. The rivets are there, but they are shams. Inside the milk can, the performer can separate the two portions at the joint. This is very practical, and despite its simplicity, it cannot be detected.

The secret is safe because the collar fits tightly to the cylinder. It cannot be pulled from its position; no one can obtain a good hold on it. The sides of the collar are slippery (they may even be slightly greased), and there is no possibility of any one's budging it.

But from within the can, the performer is in an ideal position to work. With ordinary effort he can break the neck away from the cylinder and thus escape. The stronger the performer, the easier the escape. By removing the loose section and sliding it out of the way, all difficulties are overcome; and after the escape it is necessary merely to replace the loose portion and make sure that it is firmly in position so that it will again stand inspection.

While the Milk Can may sound easy, and certainly was simpler than most of his other escapes, folding oneself into such a tiny space while under water required nerves and stamina few possessed. But above all, as advertisements for the act attest -- "FAILURE MEANS A DROWNING DEATH" -- the Milk Can demonstrates Houdini as master showman.

"Save Houdini" Game

Harry Houdini became the world's greatest escape artist by continually inventing new ways to make his escapes. Although he kept many of his techniques secret, he did reveal some. What were these techniques? In this feature, students have to find out...or else.



Play at: <http://www.pbs.org/wgbh/amex/houdini/sfeature/save.html>

From Close-Up to Table Hopping

While the spotlight was falling on Harry Houdini, whose stunning escapes made him a media icon and international star, a new style of magic was developing: “close-up.” In England and the US the evolution of close-up was partially driven by amateur magicians who formed clubs to share their expertise, wrote books, and organized conferences. Professional magicians began to specialize in close-up, which they performed in cabarets and fancy restaurants, circulating among the tables to show off their magic skills at close range. In so doing, they created a new speciality: “table-hopping.”

A Plain Brown Wrapper

In the mid-20th century, conjuring became a popular hobby. Young children commonly received magic sets as birthday or Christmas presents and, in the US, the famous Tarbell Magic Course was on sale in major department stores!

The Tarbell Course in Magic is still a notable encyclopedia of magic amongst professional and amateur magicians today. It has eight volumes; the first five were part of the original home-study correspondence course compiled in 1928 by Dr. Harlan Tarbell, the remaining three volumes being added on later.

This magic volume series was originally designed as a correspondence course for budding magicians. Once they were collected and bound, the series has become an unparalleled reference standard for magicians. In its impact on the magic world, it is second perhaps in its influence on the art of magic only to Hoffman's Modern Magic, and many professional magicians have based their careers on the Tarbell Course.



The entire collection comprises more than one-hundred lessons in every aspect of magic including micromagic/close-up magic, escapology, mentalism and stage illusions. It is the most comprehensive literary work in magic history. The original five volumes contained sixty correspondence lessons with more than 3,000 illustrations.

In addition to teaching specific tricks, The Tarbell Course also teaches patter, marketing, the history of magic, ethics, advertising, routining, presentation, diction and elocution, magic theory, performance theory, acting, misdirection, timing and showmanship.

Publishers T. Grant Cooke and Walter A. Jordan hoped to produce a correspondence course in magic in the mid-1920s and approached Harlan Tarbell and Walter Baker to work on the project. Baker

abandoned the project early on to concentrate on his performances. Tarbell was thus dropped from the project.

Cooke and Jordan then approached Harry Houdini to create the course. Houdini declined due to lack of time but recommended Tarbell. Ultimately, the publishers agreed and offered Tarbell \$50,000 for the course.

The series sold 10,000 copies until Cooke and Jordan discontinued it in 1931. In 1941, Louis Tannen purchased the rights to the course and reworked the correspondence lessons into book form and ultimately added three additional volumes.

The course was ultimately so successful that it became a textbook for magicians all over the world. A magician travelling in India offered to buy some of the secrets of a Hindu Fakir and was surprised to learn that they came from the Tarbell Course. In Africa, tribal medicine men asked that the volumes be sent in a plain brown wrapper to keep their followers from learning that their magic came from Chicago.

Bringing Magicians Together

While a number of specializations had emerged from close-up (cards, coins, ropes, etc.), related fields (mentalism, pick-pocketing, balloon sculpture, Chinese shadows, ventriloquism, etc.) gained importance as well, becoming arts in their own right. French magicians suggested the creation of a new umbrella organization, the F.I.S.M, that would bring together all the magic clubs across the world. France organized the first World Championships in magic. At the same time magicians made their peace with television, and made frequent appearances on variety shows and children's programs.

As a form of entertainment, magic easily moved from theatrical venues to television specials, which opened up new opportunities for deceptions, and brought stage magic to huge audiences. Famous magicians of the 20th century included Okito, Alexander, Harry Blackstone Sr., Harry Blackstone Jr., Howard Thurston, Theodore Annemann, Cardini, Joseph Dunninger, Dai Vernon, John Scarne, Tommy Wonder, Siegfried & Roy, and Doug Henning. Popular 20th- and 21st-century magicians include David Copperfield, Lance Burton, James Randi, Penn & Teller, David Blaine, Criss Angel and Hans Klok. Well known women would include Dell O'Dell and Dorothy Dietrich. Most TV magicians perform before a live audience, who provide the remote viewer with a reassurance that the illusions are not obtained with post-production visual effects.

Bigger is Better!

In the 1960s, the Englishman Robert Harbin created a new sensation with the Zig-Zag, a variation of the sawing-a-woman-in-two illusion. The dashing Channing Pollack became famous for his elegant dove routine. This was the heyday of magicians in coat-and-tails and top hats and white gloves, which lasted until mega-illusions became popular in the US. David Copperfield brought back the tradition of huge traveling magic shows from the 1950s and set the tone for a new era of excess in magic by making the Statue of Liberty disappear.

In the 1970s, Las Vegas gave magicians free reign to let their imaginations run wild. Shows with huge stage illusions reached a level of unparalleled sophistication. Theatres were created for star magicians first and then casinos were added on as an afterthought!

Lance Burton once starred in his own show at the Monte Carlo Resort and Casino. His original 13-year contract was the longest legal agreement ever given to any entertainer in Las Vegas history and the \$27 million Lance Burton Theatre was built especially for him and designed to his specifications.

The German duo Sigfried and Roy also represented the pinnacle of this phenomenon. Night after night thousands of enchanted spectators witnessed the appearance or disappearance of cars, elephants, white tigers, and pink Flemish by the dozen. Las Vegas became—and remains—the City of Magicians, where a casino without a celebrity magician is a casino destined to fail.

Today you can see Criss Angel at the Luxor, Simon Winthrop at the Bellagio, Penn & Teller at the Rio and more.

Close-Up Grows Up

Meanwhile, while shows were getting bigger in Vegas, close-up was coming into its own. Today a lot of dads know a card trick or two to entertain their kids, and magicians often perform close-up magic on television. Table-hopping has firmly established itself; it's not uncommon to find a magician entertaining at private receptions or in exclusive restaurants.

Conjuring has become a popular hobby, accessible to everyone: it stimulates creativity and the imagination, hones concentration and attention to detail, and encourages contact with others. An increasing number of women are getting involved in magic, to everyone's benefit.

Street magic has grown as well. Street magic is a more realistic, gritty, form of closeup magic that is performed in random, public locations, such as people you meet on the street, in malls, parking lots, on campus and other well-populated places. David Blaine redefined street magic with his TV specials.

What modern magicians like about it is that some say, "it feels more like magic than anything else we've found." When magicians perform strolling or close-up magic at parties, corporate events, weddings or other gatherings, their audiences expect to be entertained. But a person off the street, with their own agenda and schedule, has their walls up a bit. They are more skeptical and inquisitive.

Street magic props are everyday items: No top hats and rabbits here. We're talking about playing cards, coins, bills, water bottles, cans and other common things that people usually carry with them. Those types of items add to the realism.

CARD MAGIC: Hands down, the most popular form of street magic. Magicians love playing cards, because there's so much you can do with them. You can learn sleight of hand with normal playing cards, so that you can drop jaws with a borrowed deck of cards. Or throw in some gaff cards or trick decks to kick it up a notch.

MONEY MAGIC: This is a street magic staple, because everyone has money (yes, even in this economy). So when you bend borrowed quarters, or move the inks on dollar bills, or change their denominations with just a flick of the wrist, the reactions you'll get will be priceless.

LEVITATION: Magicians can't be bothered with little things such as gravity. Making things float is another staple of street magic, and there are lots of ways to do so. Street magicians have ways to levitate crumpled up dollar bills, cards, coins, matches and even their own bodies.

Have students watch a few videos of modern magicians performing street magic such as:

Quantum: <http://www.ellusionist.com/quantum-by-justin-miller.html>

Neo Coin Table Matrix: <http://www.ellusionist.com/neo-coin-table-matrix-by-justin-miller.html>

The 21st Century Will Be Spiritual or Nothing

In the 1980s, the Israeli Uri Geller made headlines in England and then all over Europe by bending teaspoons and stopping watches...with the power of his mind!

Watch him on the Today show: <http://www.youtube.com/watch?v=BLXdLAzYIsQ>

Geller was able to convince millions he had psychic powers when he was really just a talented showman using a few simple tricks. He even fooled a team of scientists at the Stanford Research Institute, which just shows you can have an MA (Master's Degree) and a PhD (Doctorate degree/be a doctor) and still fall for the tricks of a master showman.

Mind Bending Spoon Bending

Like any trick there are as many variations of spoon bending as there are magicians who perform it. We'll practice a few and students can pick their favorite.

Here's an easy variation that is fast to learn. You grab any spoon, press down on it with your hands and appear to bend the spoon. As your stunned spectators register what you just did (the gall of you!), you lift up the spoon and show that it is unbent, just as you found it.

While it looks as if you bent the spoon with your bare hands, you actually haven't harmed the spoon in any way.

Materials: A spoon

Secret: It's all in how you hold the spoon, which we'll explain.

Using both of your hands, grasp the spoon and press the bowl of the spoon, open side up, onto a table. Don't let the top of the handle peek out over your thumbs.



The following image shows the location of the spoon's handle in your hands. We've removed one hand to show you the positioning, which is crucial.



As you appear to press down on the spoon's handle towards the table, the handle of the spoon slides through your hands until it's at the base of your hands, nearest the table. The image on the left shows how the effect looks to spectators, the image on the right shows what is actually happening.



This image shows the position of the spoon's handle when it appears that you have bent the spoon. The arrow shows the circular path of the handle. Of course, this action is covered by your other hand that is gripping the spoon. This trick will take some practice to be convincing.

When you're done, simply pick up the spoon off of the table with both hands and then show that the spoon is unbent.

Another More Convincing Version

While this version is similar, it's more convincing because spectators can see the tip of the spoon's handle peeking out above your hand after the spoon is bent.

As before, you grab any spoon, press down on it with your hands and appear to bend the spoon. As your stunned spectators register what you just did, you lift up the spoon and show that it is unbent, just as you found it.

While it looks as if you bent the spoon with your bare hands, you actually haven't harmed the spoon in any way.

Materials: A spoon and a nickel.

Secret: It's all in how you hold the spoon and nickel, which we'll explain.

As in the first version, place your hands together, grasp the spoon and press the bowl of the spoon, open side up, onto a table. In the setup, you'll be holding the nickel against your thumbs. To the spectators, the nickel appears to be the tip of the spoon's handle.

Once again the handle slides down in your palms, of course, this action is covered by your other hand that is gripping the spoon. The nickel remains in place, maintaining its role as the "tip" of the spoon's handle.

This trick will take some practice to be convincing.

When you're done, simply pick up the spoon off of the table with both hands and then show that the spoon is unbent. Hold and hide the nickel in one of your hands. Most of the spectator's attention will be focused on the spoon, so you should have no problem hiding the nickel.

Uri's Method



Geller's best known stunt was making a spoon or key bend by merely rubbing it. In reality he'd surreptitiously bend the spoon or key beforehand, then keep the bent part concealed in his hand. When show-time came around, he'd display the spoon or key to the audience with the bowl or flat side facing out, from which angle it looked straight. Then he'd commence rubbing, all the while keeping up a furious line of chatter. By and by he'd extrude the bent part of the spoon or key from his fingers, if you follow me, giving the appearance that it was bending before the audience's eyes.

It sounds like there's nothing to it, but that's like saying the Sistine Chapel is just paint on plaster. Execution is everything to a magician, and Geller is a master of the art. Witnesses would claim they'd never taken their eyes off him, but videotapes would later show he'd distracted them just long enough to make whatever preparations he needed. Occasionally somebody would slip him a key or spoon too stiff to bend, in which case he'd claim his powers just weren't up to snuff that day. Paradoxically, these failures reinforced the idea that Geller was for real — if it was a trick, it'd always work, right?

So watch the following video, practice all of the following methods, and then if you go to a restaurant tonight where they use relatively cheap cutlery (i.e., easy to bend) you'll be able to amaze your friends and family!

<http://www.youtube.com/watch?v=mxSNulx4m5k> (HQ version at YouTube link) or
<http://old.richarddawkins.net/videos/3498-how-to-bend-a-spoon-with-just-your-mind>

Prepare for this trick by gently bending back and forth the handle of the spoon, where the handle joins its bowl. The objective is to weaken the metal without breaking the spoon. Bend it back and forth repeatedly.

What you are doing, as far as materials science is concerned, is subjecting the neck of the spoon to low-cycle fatigue, or weakening.



Bend the weakened spoon back into position so that it has an appropriate shape and appears whole and unaltered to your audience.

Display the spoon by pulling gently on both ends of the spoon to show your audience it is intact. You can also tap it gently against something, such as a glass or tabletop.



Keep the spoon moving around at this stage if there are any tiny cracks at the fatigue point. It will help to keep your audience from seeing your preparations.

Place the spoon, handle towards you and bowl upwards, between your first finger and thumb.



Gently rub and push the weakened spot in the spoon until it becomes hot to the touch, approximately 20 seconds. You can add drama and distraction by 'meditating' or 'concentrating' if you wish.

Help the spoon along by "supporting" it at the tip of the bowl, as you rub and push.



Bend the spoon or allow the spoon to bend so that it droops. If you can, quickly loop the bowl around several times, winding toward the handle. The spoon may also break in two.



If the spoon breaks, go with it. Pinch your fingers over the break, then gradually loosen them so the spoon appears to bend. Holding the spoon vertically and letting the bowl sag to one side will intensify the effect. Then, dramatically drop the two separate halves with a clatter.

Set the spoon down. By the time your applause ends, the spoon will be cool to the touch and no one will be the wiser.

Method 2 of 2: Misdirecting Your Audience

1. Talk about your "psychic" or "telekinetic" powers and spin a story around what you are about to do.
2. Direct the audience's attention elsewhere for a moment. Make a broad gesture or create some other distraction.
3. Conceal the spoon under a table or elsewhere out of sight while you talk about your powers.
4. Brazenly ask your onlookers to close their eyes so that they can better focus their energy on the spoon.
5. During the moment of misdirection, bend the spoon. Practice this maneuver so that you can perform it discreetly and with only one hand.
6. If your hands are strong enough, jam your thumb into the bowl of the spoon, with your fingers on the spoon's neck and the back end of the handle against the heel of your hand.



7. Alternatively, set the tip of the spoon against some other surface, like a table or your knee, and push your thumb firmly into the neck of the spoon.



8. Display the handle of the spoon horizontally, but conceal the fact that the spoon is already bent. Use the top hand to rub the spoon, to give the illusion that something is happening. To further the illusion, grunt, chant, or remind your audience to focus, envision the liquid state, etc.



9. Gradually extend the bent end of the spoon so that it appears to bend and droop.
10. Try the process called "ratcheting", which basically works just as it sounds. Each time you stroke or jiggle the spoon forward, push it out, just a notch.



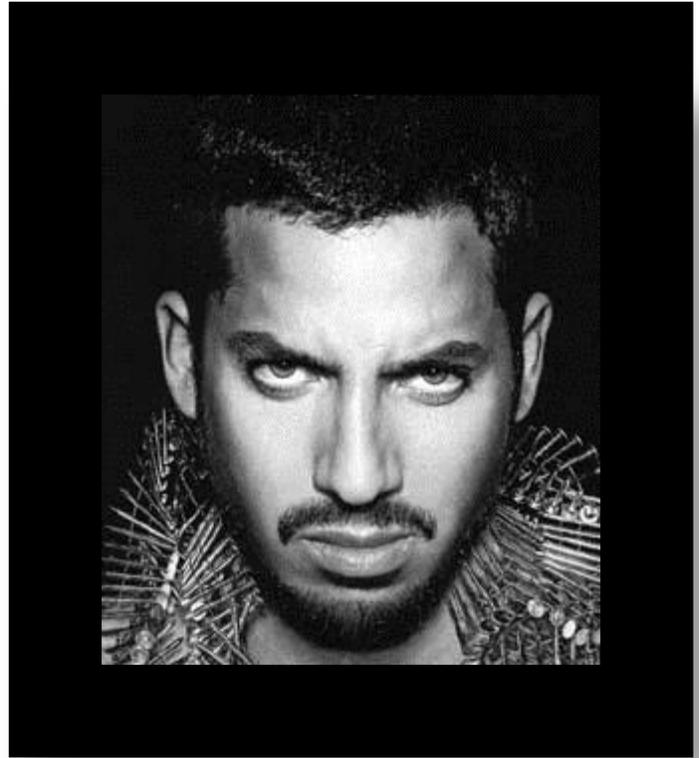
11. Display the bent spoon and accept your applause!



The Information Age

Towards the end of the 1990s the US took the lead again, and out of New York came David Blaine, an American illusionist and endurance artist. Believing that many audiences were no longer surprised by simple card tricks, David Blaine began playing with the threshold between mentalism and close up (he does a lot of street magic). He capitalized on a widespread interest in the mysterious, framing his tricks like paranormal phenomena.

To this, he added spectacular demonstrations of physical endurance to enhance his mysterious image. Drawing inspiration from ancestral rites and Christian iconography, he had himself buried alive in New York City for a week, encased inside a six-ton block of ice for three days and nights, he stood atop a 100-foot-tall pillar in Bryant Park for 36 hours without a safety net, survived on nothing but water inside a transparent box in London for 44 days, and spent one week submerged in a sphere-shaped aquarium at Lincoln Center, at the end of which he attempted to break the world record for breath holding. A year later, he succeeded in breaking that record live on The Oprah Winfrey Show, holding his breath for 17 minutes and 4 seconds. In 2008, Blaine hung upside down for over 60 hours in New York's Central Park. Most recently, in October of 2012, he stood in the middle of a million volts of electricity for 73 consecutive hours. Magic was coming full circle, back to its mysterious roots.



Remember when we said magicians have a harder time tricking kids?

David Blaine says, "I could imagine nothing more difficult than creating a magic show for kids. Even when I was 5 years old, I was always performing for adults. I never performed for other kids."

In His Own Words

Have students watch: https://www.youtube.com/watch?v=XFnGhrC_3Gs or it's also at http://www.huffingtonpost.com/david-blaine/how-i-held-my-breath_b_3399769.html?ir=TED+Weekends&ref=topbar Have students watch the talk above, read the blog post below, and become part of the conversation!

As they listen students should listen for details to fill in the answers of the questions selected by the teacher from the included list. Inform them that they will be playing a game with their answers and that they should listen closely and fill in as many details as they can.

Auction

Level: Any Level

PREPARATION

- Choose what questions you will ask out of the 59 listed, or make up your own
- Make fake money

PART ONE

1. Watch the video.
2. Divide the students into teams, for example groups of 5 or so.
3. The students then have 10 minutes to study the chosen list of questions and decide and mark which questions they think they know the right answers to.

PART TWO

1. Each team receives a set amount of money.
2. The instructor(s) reads one sentence (select sentences from the list in random order).
3. The instructor begins to auction off the sentence. The students should try to buy only the questions to which they know the answers, or else they're taking a risk! The students bid and the instructor sells to the highest bidder. (This is really fun!)
4. The instructor tells whether or not the answer is correct, making this as dramatic as they wish.
5. IF the answer is correct the team wins the amount which they bought it for. If it is incorrect the team loses the amount which they bought it for. ANY team may win the lost money by stating the correct answer.
6. Option: If there is a question and NO ONE bids on it, ALL TEAMS must pay a fine.
7. After all the questions have been read the team with the most money wins!

Listen Up!

In this highly personal talk from TEDMED, magician and stuntman David Blaine describes what it took to do his stunts, his obsession with Houdini, matching Houdini's personal breath-holding record as a teen, and what it took to hold his breath underwater for 17 minutes -- a world record (only two minutes shorter than this entire talk!)

Warning: do NOT try this at home. -- and what his often death-defying work means to him. Discover that discovered

that what might seem like a death wish was actually his mantra for living life. For David Blaine, the act of trying is sacred. And, watch as David Blaine explains why he embraces death-defying stunts, but speaking at TED was the scariest thing he'd ever tried! Famous or not, everyone gets scared when they risk failure -- even David Blaine. Blaine might be famous, but he'd always had something between him and the audience before: his magic. Take away the glass coffin, the giant block of ice, or his card tricks... he was anxious. He was challenging himself to do something a magician never does: go on stage to reveal an intricate web of failures, the opposite of magic.

Watch it at:

https://www.youtube.com/watch?v=XFnGhrC_3Gs or it's also at http://www.huffingtonpost.com/david-blaine/how-i-held-my-breath_b_3399769.html?ir=TED+Weekends&ref=topbar

Option: Students in general, but children especially, are accustomed to teachers projecting their voices to fill the classroom, especially if the class is in a large room or lecture hall. Additionally, students in larger classes often interact with each other instead of listening when the instructor is talking. To work on strengthening overall listening skills play the video at lower volumes, forcing the students to work harder to listen for the key information.



The Science of Stage Fright!

One thing can strike fear into the heart of the fiercest warrior, the most powerful CEO and the smartest person in any given room: having to speak in public. The thought of it makes the palms sweat, the heart beat faster and the limbs start to shake. An estimated 75% of people have a fear of speaking in public

This TED-Ed lesson, the science of stage fright, just might help. The lesson explains exactly what happens in the body before speaking in public and, of course, gives obvious and not-so-obvious suggestions on how to calm stage fright. Watch and learn at:

<http://blog.ted.com/2013/10/16/required-watching-for-any-ted-speaker-the-science-of-stage-fright/>

His Biggest Fear

An original blog post by David Blaine http://www.huffingtonpost.com/david-blaine/how-i-held-my-breath_b_3399769.html?ir=TED+Weekends&ref=topbar

I never feared heights, sharks, being shot, drowning, starvation, or even death. A couple of years ago, I was faced with the one thing that actually did intimidate me -- speaking at the TED Conference in front of some of the greatest minds in the world, people whom I have always admired.

For years I would attend the conference, do magic to all of the speakers, and then get blown away by their talks. The most interesting was when I watched these amazing people on stage presenting world-changing ideas, I almost found it funny that they would even consider asking me to speak.

Learning to hold my breath for 17 minutes was an exciting challenge, but here, there was no block of ice, or coffin lid, or even a deck of cards separating me from the crowd. Standing on stage for 20 minutes to talk about the experience was terrifying, and I spent most of my time leading up to it locked in my hotel room, obsessively writing and re-writing my notes on playing cards.



David Blaine's 2009 TEDMED talk written on a deck of cards.

Photo courtesy of David Blaine

Pushing myself comes naturally to me. When I'm doing something like learning how to hold my breath for the world record, I suddenly have no distractions, everything becomes clear to me, and I am completely focused. I cannot easily explain it because I don't really understand it myself. I just know that in that place I feel like I have a purpose.

Maybe it's because I was born with my feet turned in, and wore leg braces until I was 5 years old [picture with my mom, below]. I also had asthma and no distinct physical advantages. As a result, I wanted to prove to myself that I could compete with the most athletic kids. That led me to constantly challenge myself, and eventually I learned how to hold my breath longer and swim faster than other kids who didn't have the same physical setbacks I did.



I love performing magic, sleight of hand, logic puzzles... but what drives me is pushing past my limits to accomplish a goal that should be impossible. Speaking at TED was an amazing opportunity to share my story, but beyond that, being able to overcome my fear of public speaking in front of my heroes made it one of the most memorable experiences of my life.

David Blaine and his mother. Photo Courtesy of David Blaine.

Auction! Questions Over In His Own Words & His Biggest Fear

1. As a magician, David Blaine tries to create what?
2. He challenges himself to do things that who says are not possible?
3. What was the one thing he was intimidated by or afraid of doing?
4. What famous journal used his stunt for research for science?
5. What did he say was the most amazing journey of his life?
6. He wore what until he was five years old?
7. What preparation did he first do as a young kid to match Houdini's underwater challenges?
8. Why did he want to compete with the other kids?
9. By the time he was a teenager how long could he hold his breath for?
10. What was Houdini's personal record?
11. As a magician what does David Blaine think is possible?
12. How long did the neurosurgeon say it was possible to go without breathing without brain damage?
13. How long did David Blaine last in his first attempt at holding his breath in the ice water tank?
14. What alternative to holding his breath did his doctor friend first come up with?
15. What is perflubron?
16. What did the doctor say breathing perflubron was like?
17. What did David Blaine say was the craziest of all the ideas he had related to holding his breath?
18. Who did he start researching?
19. Static apnea is what?
20. Should you move when holding your breath? Why or why not?
21. How long did David Blaine practice holding his breath every morning?
22. While he practiced, out of 52 minutes how many was he breathing?
23. How did he feel when he was done each morning?
24. Who is Tom Sietas?
25. By eating well and training hard David Blaine's resting heart rate dropped to what?
26. After four months of training how long was David Blaine able to hold his breath?
27. How long was the world record for breath holding?
28. What was the critical mistake he made when first trying to break the world record?
29. What happened at 7 minutes, at 7:08, and then at 7 minutes and 30 seconds?
30. What was the length of the second record (pure O2 static apnea record) that he wanted to break?
31. How long did Oprah give him to prepare?
32. What does sleeping in a hypoxic tent do to your body?
33. On his first attempt on pure O2 how long did he go without breathing?
34. Who pulled him out?
35. What did Tom Sietas do when David Blaine announced he was going to try and break Sietas's record, publicly?
36. What was the record pushed to?
37. How much longer was it than the time he had prepared for?
38. Who did he want to document his public world record attempt?

39. What happened when he tried to show off in the Cayman islands and dove down 160 feet?
40. How did he practice for his second attempt?
41. What part of the attempt could he not prepare for?
42. How did they want him to do it on the show?
43. What was the problem with the suit?
44. What did they put right next to the sphere that made him even more nervous when it beeped?
45. What did he spend the first five minutes of his attempt trying to do?
46. He was 100 percent certain of what?
47. What happened at 10 minutes?
48. When his arm went numb what did he think was happening?
49. At 15 minutes what started happening to his heart?
50. What did he do at 16 minutes into the attempt?
51. What did he think had happened when he heard screaming?
52. How long did he hold his breath in the second attempt?
53. Where did he go immediately after his second attempt?
54. What did they do to him when he went there?
55. What question did the kid in New York ask him the next day?
56. What does David Blaine try to do as a magician?
57. Does pushing himself come naturally to David Blaine?
58. On what did he write his notes for his talk?
59. What is magic to David Blaine?

A hand is shown pulling back a thick, red, vertically-pleated curtain. The curtain is pulled back from the right side, revealing a dark space behind it. The lighting is dramatic, highlighting the texture of the fabric and the hand.

Pulling Back the Curtain

Meanwhile, a masked magician began making appearances on a major television station in the US giving away the secrets of classic magic tricks. A global outcry arose from enraged magicians, which really helped the television show out as ratings went through the roof, but the death knell had already been sounded for the notion of secrecy in magic. From then on, information would be accessible to anyone who bothered looking it up.

The Present Day...

Today, magic has become a profitable business open to everyone who is willing to learn and practice. If the notion of secrecy isn't what it used to be, secrets remain hard to come by because they are lost in the vast sea of information. In fact, today literally thousands of specialty videos, books, DVDs, and magic tricks are available from thousands of magic shops, websites, and dealers with variations on nearly every kind of trick. New internet sites on magic seem to spring up every day. There are conventions, conferences, and magic clubs where magicians meet. Even members of the ordinary public, at one time totally ignorant about magician's tricks and techniques, are now better

educated and often highly skeptical: many people know a few tricks themselves and know if a magician is good or bad. Today, the trick doesn't only reside in knowing HOW a trick is done, but in the art of presenting it well.

The methodology behind magic is often referred to as a science (often a branch of physics) whilst the performance aspect is more of an art form.

Categorizing Magic

There is discussion among magicians as to how a given effect is to be categorized, and disagreement as to what categories actually exist—for instance, some magicians consider "penetrations" to be a separate category, while others consider penetrations a form of restoration or teleportation. Some magicians today, such as Guy Hollingworth and Tom Stone have begun to challenge the notion that all magic effects fit into a limited number of categories. Among magicians who believe in a limited number of categories (such as Dariel Fitzkee, Harlan Tarbell, S.H. Sharpe), there has been disagreement as to how many different types of effects there are. Some of these are listed below.

- **Production:** The magician produces something from nothing—a rabbit from an empty hat, a fan of cards from thin air, a shower of coins from an empty bucket, a dove from a pan, or the magician him or herself, appearing in a puff of smoke on an empty stage—all of these effects are productions.
- **Vanish:** The magician makes something disappear—a coin, a cage of doves, milk from a newspaper, an assistant from a cabinet, or even the Statue of Liberty. A vanish, being the reverse of a production, may use a similar technique, in reverse.
- **Transformation:** The magician transforms something from one state into another—a silk handkerchief changes color, a lady turns into a tiger, an indifferent card changes to the spectator's chosen card.
- **Restoration:** The magician destroys an object, then restores it back to its original state—a rope is cut, a newspaper is torn, a woman is sawn in half, a borrowed watch is smashed to pieces—then they are all restored to their original state.
- **Teleportation:** The magician causes something to move from one place to another—a borrowed ring is found inside a ball of wool, a canary inside a light bulb, an assistant from a cabinet to the back of the theatre, a coin from one hand to the other. When two objects exchange places, it is called a transposition: a simultaneous, double teleportation. A teleportation can be seen as a combination of a vanish and a production.
- **Escape:** The magician (an assistant may participate, but the magician himself is by far the most common) is placed in a restraining device (i.e., handcuffs or a straitjacket) or a death trap, and escapes to safety. Examples include being put in a straitjacket and into an overflowing tank of water, and being tied up and placed in a car being sent through a car crusher.
- **Levitation:** The magician defies gravity, either by making something float in the air, or with the aid of another object (suspension)—a silver ball floats around a cloth, an assistant floats in mid-air, another is suspended from a broom, a scarf dances in a sealed bottle, the magician hovers a few inches off the floor. There are many popular ways to create this illusion, including Asrah levitation, Balducci levitation, Looy's Sooperman, and King levitation. The flying illusion is often performed by David Copperfield and more recently by Peter Marvey (who may or may not be using a technique similar to that of David Copperfield). Harry Blackstone's floating light bulb, in which the light bulb floats over the heads of the public, is also spectacular.[peacock term]

- Penetration: The magician makes a solid object pass through another—a set of steel rings link and unlink, a candle penetrates an arm, swords pass through an assistant in a basket, a saltshaker penetrates the table-top, a man walks through a mirror. Sometimes referred to as "solid-through-solid".
- Prediction: The magician predicts the choice of a spectator, or the outcome of an event under seemingly impossible circumstances—a newspaper headline is predicted, the total amount of loose change in the spectator's pocket, a picture drawn on a slate.

Many magical routines use combinations of effects. For example, in "cups and balls" a magician may use vanishes, productions, penetrations, teleportation and transformations as part of the one presentation.

The methodology behind magic is often referred to as a science (often a branch of physics) whilst the performance aspect is more of an art form.

Ladies and Gentlemen, Prepare to Amaze!

It's now time for students to research additional magic tricks and design their own magical performance. Some great starting points may be:

Free Magic Tricks 4 You: <http://www.freemagicktricks4u.com>. They have tutorials for card tricks, street magic, coin tricks and much more!

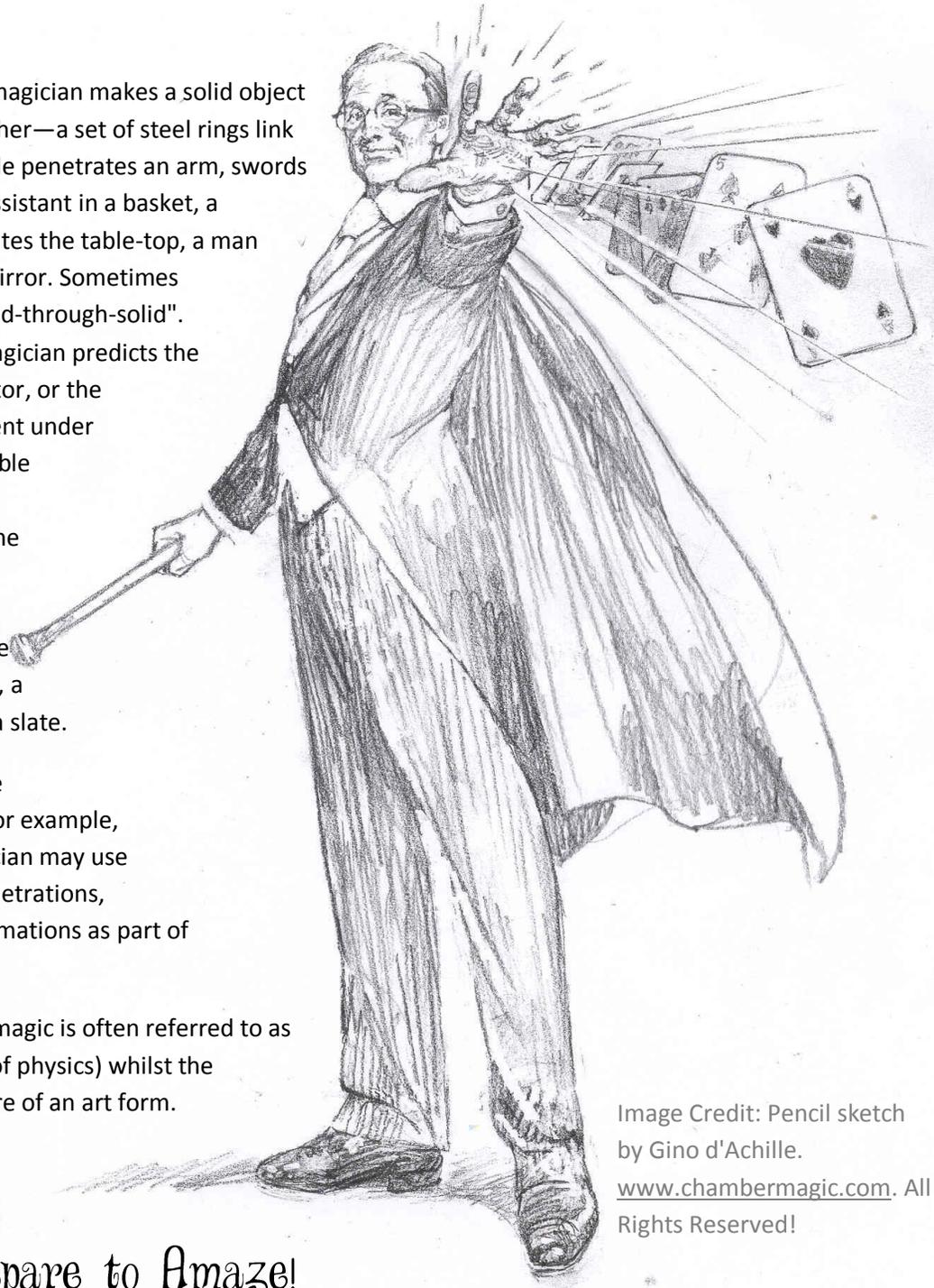


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Howcast. <http://www.howcast.com/videos/500548-How-to-Do-the-Linking-Paper-Clips-Trick-Magic-Tricks> The secrets to 23 easy magic tricks are revealed by magician Roger "Rogue" Quan in these Howcast magic videos.

About.com easy magic tricks for kids. The tricks are ultra easy and only require materials that are found around the house. <http://magic.about.com/od/libraryofsimpletricks/ig/Easy-Tricks-for-Kids/>



