

Anybody But A Magician?

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Introduction

“To be aware of limitations is already to be beyond them.”

Georg Wilhelm Friedrich Hegel,
In: Davis (1989, p. 18)

At one of your performances, sitting close to the front of the audience, a middle-aged man watches your every move intently while periodically scribbling in a notebook. After the show, he approaches you, and introduces himself as Tom. He tells you how much he enjoyed your show. Then, after some obligatory small talk, he informs you that he’s a police officer and that he needs your help.

Tom leads a unit that is working on a particularly challenging problem – infiltrating and disrupting a major people trafficking and modern slavery operation. The unit’s challenge involves detecting and understanding the covert logistics network and strategies used by an international criminal organisation to hide and transport vulnerable individuals across borders and through checkpoints using a variety of different routes, vehicles, safe houses, and associated smuggling strategies. His unit wishes to infiltrate the network, placing an undercover officer inside the organisation so they can report back on what is happening. They also want to turn and recruit several members from inside the organisation, to provide information on its people, methods and operations.

Tom says he was blown away by your skills, and he would like to use you to assist his unit with designing their operation. In particular, he is keen to use your abilities to manipulate others psychologically into doing what you want, to read their thoughts, to predict their behaviour, and to make people vanish from the inside of

boxes. However, he warns you that the work is incredibly risky. If the unit gets things wrong based on your advice, people might die. His undercover officers, his informers inside the organisation, the trafficking victims, and even members of the trafficking organisation itself could all be at risk.

Should you, could you, and would you accept Tom’s request to act as deception consultant? What concerns might you have? What questions would you ask? And do you believe that you could *genuinely* help?

This example is fictitious, but such situations do occur in real-life. Indeed, there is a long history of magicians working with organisations such as the military, police, and intelligence services to assist them with their deceptive activities. Magicians hold names like Jean Robert Houdin, Houdini, John Mullholland, Jasper Maskelyne, and others in high regard for their contributions outside of magic (despite such regard sometimes being misplaced – a topic I shall return to in a future article). The deception expert Barton Whaley (whom I shall also discuss in a future article) drew from magic throughout his military and intelligence careers, writing several books that have since become standard references in the magic community (e.g. Whaley, 1990; Whaley et al., 1991; Whaley, 2001). He also worked with several notable magicians, publicly acknowledging his collaborations with Martin Gardner and Jeff Busby; and he successfully used magic as the basis for developing counter-deception training for the US Navy (Whaley & Busby, 2002).

And yet, whenever such organisations approach me about employing magicians, I always urge caution. In this article, I will explain why.

The military and magicians perhaps seem like natural bedfellows (especially from each other’s perspectives!). However, this view may, in part reflect the Dunning-Kruger Effect, a phenomenon identified in research by Kruger and Dunning (Kruger & Dunning, 1999; Dunning, 2014) which suggests that:

“... people who don't know much about a given set of cognitive, technical, or social skills tend to grossly overestimate their prowess and performance...”.

(Kruger & Dunning, 1999)

In simple terms, one needs to know a lot about a given topic to realise that one hardly knows anything. The more you learn, the more you discover there is still to learn.

Consequently, when military commanders engage with magicians (say, as a result of a commander seeing a magician table-hopping in a restaurant), a significant gap in their shared understanding about deception most likely exists, that may not be immediately apparent. However, such differences soon become apparent once they begin working together. As a result, while the military and other organisations have previously approached magicians to support them, these relationships rarely seem to be sustained beyond an initial engagement.

In this article, I shall explore in more detail this relationship, and illustrate how some of the limitations and gaps in deception within magic compromise its ability to generalise and transfer to other domains. The article intends to encourage magicians to consider how an understanding of broader aspects of deception that usually sit outside of their craft, might inform and improve it (as per the opening quotation from Hegel). Later in the article, I will consider where magic *can* make a valuable contribution to other domains and offer some suggestions for how you might learn from other deceptive practices.

Things About Magic That Do Not Translate Well into Other Domains of Deceptive Practice

Magic has a broad set of orientations, intentions and other characteristics that limit the transfer of its principles and methods to other domains. The following examples exemplify these issues.

Magic entertains and provides its target (i.e. audience) with a positive experience.

The ultimate goal of magic is to entertain an audience. While other domains of deceptive practice share this goal (such as movie special effects, narrative fiction, theatre, etc.), it does not transfer to many other fields of deceptive practice. In such domains, entertainment serves no function, the deception does not result in a positive experience for the target, and the deception may deliberately deprive the target of value (for example, police infiltrating a violent criminal organisation to gather evidence to enable arrest and prosecution). Magic is ill-equipped to address the multitude of issues that arise from these kinds of environments, including concerns about risk, ethics, legality, accountability, auditability, etc.

The audience at a magic show always knows when deception has occurred.

Magic always necessitates a reveal that informs the spectator (i.e. target) that the magic (i.e. deception) has taken place. For example, the magician vanishes the coin, locates the selected card, or reveals the spectator's thought of PIN code, etc. In many applications, there must be no reveal - indeed, deception is only effective if it is never suspected, let alone detected. This situation would be similar to a magician performing a show that no audience ever sees, hears about, or acknowledges in any way.

Magic inevitably prompts questioning of the method.

The moment of revelation in magic precipitates a process of backtracking (and potentially, reverse engineering) as the audience attempts to unpick how the effect worked. This moment occurs irrespective of how immersed they were in the narrative. And while magicians often seek explicitly to divorce method from effect, backtracking nonetheless occurs. In other domains, the target must never initiate this process, or develop any awareness of the deceptive method employed (for example, if the

deception has employed covert capabilities).

Magic exploits the audience's naivety about the domain.

Most audience members at a magic show know nothing about the deceptive means used by the magician to achieve his or her effects. Members of the public are not familiar with sleights, gaffs, misdirection, or any other technical aspect of magic. However, in many other domains, a deceiver has to fool targets who are themselves experts in both the domain and deception itself (e.g. in military deception, casino cheating, financial fraud, art fraud, sports, etc.).

Magic performers are not necessarily magic creators.

Many magicians construct their shows based on both classic effects and plots, and on routines that they have learned from other published performers. For example, a performer may base his ambitious card routine on one performer's core plot elements and sleights, with new sleights added from a range of other sources. The process of learning, practising and performing other performer's routines and moves is an entirely valid and practical basis for entertaining an audience. However, this form of professional practice is markedly quite different from the process of *creating* original effects or sleights. Studying how people follow a prescriptive process does not reveal anything about the creative requirements that underpin effective design and execution of deceptive action. Whereas studying original creators of magic may reveal much about the creative process that is exploitable in other domains. If you were hiring a professional to help you write a song, would you hire the original songwriter or the cover artist who performs their songs?

Magic creators are not necessarily magic performers.

Knowing how to accomplish an effect is not the same as being able to perform the effect. This relationship between theory and practice is brought out clearly within the field of magic, where magicians who are

experts on magic theory are not necessarily good performers. Consequently, when transferring magic theory to another domain, a lack of practical execution experience is likely to hamper the effectiveness of both transfer and execution. Lack of practical experience means that there is no basis for anticipating possible problems, which increases operational risk significantly (as it is not feasible to develop mitigation and contingency strategies). If you were hiring somebody to advise you on performing a song in public, would you hire the songwriter or the seasoned professional singer?

Magic creators and performers do not necessarily make good magic teachers.

Knowing how to design and or perform magic does not necessarily mean that you can teach others about how to design or perform it. And nor does it mean that you can teach others about deception. Magicians are often good at describing what is happening in front of their eyes but usually are not good at explaining what is happening behind them. As a result, they may struggle to explain the cognitive processes involved in designing and performing magic, which may limit any transfer achieved. Teaching requires a set of skills that are different from the skills involved in designing and performing magic. If you were hiring somebody to teach you how to sing, would you hire the songwriter, the performer, or the experienced singing teacher?

Magic knowledge does not exist in readily transferable forms.

Published work on magic generally fails to incorporate deceptive approaches that can be applied readily in other domains. Books that describe a set of magic effects are often of minimal value. Books on magic theory tend to have more utility, although translation to another domain can often prove difficult. For example, Lamont and Wiseman's methodological taxonomy of magic (Lamont & Wiseman, 2005, pp. 8-25) provides a readily available set of strategies for accomplishing certain types of effect. These strategies are transferable to any

domain where related effects need to be created (such as vanishes, appearances, transpositions, transformations, or other effects).

Other books (e.g. Tamariz, 1988; Banachek, 1998; Lamont & Wiseman, 2005 etc; Ortiz, 2006; Higham, 2009, 2011; Earl, 2017) contain similarly exploitable principles. However, principles alone have limited utility without an understanding of how they support a deception or counter-deception design process. There is a need for practical knowledge about how to adapt principles to the specifics of the problem space, how to manage the risks associated with such principles, how such principles may fail, and how to maintain the principles and or update them in light of a rapidly changing operational environment.

Publicity is the lifeblood of magicians, and they sometimes exaggerate their capabilities and experience.

Magicians make many exaggerated claims regards the extent of their knowledge about deception (e.g. claiming to be a master 'deceptionist', a master of psychology, or an expert in human behaviour and psychological manipulation). Advertising on magic websites is (understandably) also often exaggerated, selective, or misleading; and many magicians dubiously attribute effects achieved using sleights and gaffs to psychological manipulation, which, while seductive, leads to popular misconceptions about what is feasible. Such situations may also prove perilous if magicians are hired based on this advertising to advise on applications that require genuine psychological manipulation when real lives are at stake.

While there is an emerging and legitimate scientific base of psychological research founded upon the study of magic, a client's ability to assess the potential utility of magic in their domain is clouded by such falsehood and exaggeration. Also, magicians, whose lifeblood is public attention, may consider their association with the military or other organisations as valuable fodder for publicity. Given how these organisations operate, they are likely

to terminate any relationship with those who wantonly exploit them for publicity.

Magic constitutes an impoverished repertoire of deceptive methods.

The deceptive methods employed by magic constitute only a small subset of a broader set of deception techniques that exist across other domains. Magic excels in attention management and perceptual manipulation but is considerably weaker when it comes to strategies for manipulating sensemaking, expectations, emotion and behaviour. A deception designer can, therefore, benefit from using deceptive strategies from across a wider variety of domains to increase the likelihood of their deception working (for example, zoology identifies around 20 different types of mimicry, each of which has its unique features and subtleties). Magic provides only a thin slice of a broader set of deceptive strategies and has little to contribute to the range of other viable manipulation vectors. For example, adversarial deception within cyberspace evolves at a considerable rate and involves strategies that sit entirely outside of any regular magical knowledge.

Magicians publish their deceptive techniques.

Within an adversarial relationship, innovation generates competitive advantage. Using deceptive strategies that your target is already familiar with clearly lessens the likelihood that such strategies will be effective. Consequently, as magicians tend to publish their techniques, an adversary could in principle study and learn these techniques to lessen the likelihood of being deceived by them. When life is potentially on the line, it is imperative that the adversary does not suspect or detect your deception - so using published strategies may not be the most secure option for maintaining operational security! Innovation, craftiness and cunning are critical means to stay one step ahead of your adversaries.

Next, we shall consider various aspects of deceptive practice that magic fails to address.

Aspects of Deceptive Practice That Magic Fails to Address

Professional deceptive practice in other domains includes a broad set of requirements and challenges that magic is generally ill-equipped to address. These factors include the complexity of the operational environment, the adversarial relationship within which deception is employed, organisational issues, innovation and technology, and the necessity for enhanced risk management. The following sections address these issues.

Some domains employ deception in the context of an adversarial relationship.

In many domains of deceptive practice, a target aggressively seeks to do everything in its power to undermine any deception used against them. This active process of counter-deception begins before any deceptive design process has started on your part. The target may be spying on, infiltrating, recruiting people from inside of, and generally collecting all available information on your entire operation, including your design of deceptive action. This situation is akin to a magician designing a new show when the audience has full access to his laptop and notebooks, is talking to all of his colleagues and associates, and is listening-in covertly to all of his conversations.

The target may also pool its resources to uncover you, including its collection capabilities, expertise, reference materials, and various analytical capabilities. To magicians, this situation would be like Penn and Teller's 'Fool Us' on steroids! The audience would comprise only highly experienced magicians, who have access to a vast library of magic books and associated online resources, plus your laptop and notebooks, and have lots of time to study, review and discuss all of your designs to reach a consensus.

To make matters worse, uncovering deception within these other domains may have extreme consequences that sit entirely outside the world of magic. The risk

of violence and threat to life in other domains means that planning and execution process must address a range of critical risk, management, duty of care, and other related considerations that magic has little capacity to address.

Other domains rely on deception as a tool for enabling behaviour change.

Magic achieves its effects primarily through the manipulation of attention and perception, leading the audience to make sense of an apparently impossible event. In this respect, magic stops short at sensemaking and does address strategies that seek intentionally to change the target's behaviour through the deception.

In other domains, behaviour change is a key desired outcome of deception. For example, in warfare, deception may be used by one force to make the target force believe that an attack will occur in location X, so that they move their forces to defend this location while leaving the real location for the attack, Y, undefended.

In contrast, magic does not seek to target and change the behaviour of its audience (although there may be some incidental changes in behaviour, such as the spectator not demanding their money back, etc.). This requirement for behaviour change gives rise to a whole host of subsidiary requirements that magic is not well suited to address, including target audience analysis, behavioural deception strategies, measurement of effect, behavioural analytics, etc.

In most professional deceptive settings, there is a requirement to measure the effectiveness of deception.

A fundamental requirement in many deceptive settings is for the deceiver to be able to measure the effectiveness of their deception. By measuring an ongoing deceptive action, it becomes feasible to take corrective action if things are not going to plan. By measuring the outcome of the action, the proceeding actions can be linked to the outcome, enabling causal analysis that supports experiential learning.

Analysing the aetiology of deceptive failure is also essential to learning. Measures also form part of the audit trail for the operation, enabling better comprehension by external scrutineers.

The notion of measurement in deception tends to be far more prosaic – did the audience clap? There are no formal frameworks for tracing causality within magic, and no means for assessing the degree to which deception itself affects sensemaking and consequent behavioural outcomes.

In many deceptive domains, there is a critical requirement for accountability and establishment of an audit path

In many professional settings where deception is part of the operational tool-bag, there is a critical need for accountability and auditability. Justification for the use of deception as the means to achieve desired operational outcomes must address:

- *Necessity* (there are no other viable means to achieve the desired outcome),
- *Legality* (the use of deception does not break any laws),
- *Proportionality* (the benefit obtained through the use of deception outweighs significantly any negative impacts, such as intrusion, disruption, etc.), and
- *Ethics* (the operational intent, execution and outcomes are all morally sound).

Deceivers are also required to expose their working methods to others for scrutiny and oversight. They must explain and justify their rationale for using deception, their detailed planning process, the critical decisions made, options rejected, how they managed risk, and how intent got translated into action. Magicians are unfamiliar with such fundamental requirements of professional practice and would be surprised by the levels of detail and degree of scrutiny involved.

Some deception needs to operate across multiple spectra.

Magicians primarily work in the visual and auditory fields (although some effects do involve touch, scent, taste, etc.). However, in many other settings, deception has to be executed across a spectrum of different channels. For example, early military decoy tanks were rendered transparent by the development of infrared sensing capabilities, leading to the development of more advanced decoys that could mimic the heat signatures of real tanks. To a magician, the challenges of modern battlefield deception would be the equivalent to trying to design a coin vanish for an audience that is equipped with a bank of cameras covering every angle, real-time x-ray scanners, thermal imaging cameras, 3D scanning systems, body tracking systems, Magnetic Resonance Imaging systems, AI-based image recognition systems, and fingerprint and DNA analysis systems, etc. Magicians lack familiarity with these collection channels, yet they are fundamental to many deception domains.

There is often a requirement to create multiple-order deceptive effects.

In magic, it is the magician who interacts with and deceives the audience. In other domains, the deceiver may need to manage risk by deceiving the target distally via the use of third parties, cut-outs and intermediary technologies. Also, as magic does not address behaviour change, it does not consider secondary and multiple order effects and makes no provision for controlling the associated risks. Managing multiple order effects can be complicated and requires careful planning, execution control, and comprehensive risk management.

Deceptive risks in many domains have severe consequences.

Risks in magic tend to be constrained, and if realised, generally have low-consequence outcomes. The spectator may spot the secret move, forget the card they selected, and equipment might fail, etc. Consequences of the effect failing might include the audience being disappointed,

reputational damage, and in the most unlikely and extreme of cases, the magician dying. However, in most instances where a performance goes wrong, the magician is usually able to bluff, obfuscate the problem, and move on without consequence (the audience being distracted by the next effect). In many other domains, failed deception poses a significant risk to life (potentially in the hundreds, if not thousands of lives), global reputation, international relationships, national security, and organisational continuance. The scale of such risks extends significantly beyond the bounds of any magician's professional practice.

Much deception relies upon Target Audience Analysis.

Magic relies on generic principles of deception that transcend domain, target types, cultures, etc., including strategies for controlling attention and shaping perception. These approaches work without any necessity first to analyse and understand the target, to then tailor the deception towards them. The practice of deception in many other domains requires a specific understanding of the target. For example, the target's cultural norms may need to be understood so that objects and actions can be made culturally relevant, patterns made culturally meaningful, and likely behaviours in response to events and situations understood. Magic does not have the tools to address and translate such requirements into the design of deceptive action.

Deception timescales may be lengthy.

In many domains, deception and its effects have to be executed and sustained over lengthy periods, such as days, weeks, months and sometimes even years. In such cases, the deception may be gradual and cumulative. In contrast, deception in magic occurs over relatively short time frames (usually minutes), and there is no notion of longitudinal sustainment. No magician, for example, is ever required to make the Statue of Liberty disappear for several years.

Much deception requires husbanding of assets.

In magic deception supports a performance, and the structure of the effect dictates its timing. In other domains, the specific timing of deception may prove crucial. The scheduling of particular strategies, the moment of committing scarce resources, and the associated heightening of risk require careful consideration. Axelrod (1979) addresses the dilemma between holding back deception until it is absolutely needed, versus letting the deceptive capability 'wither on the vine'. Such concepts have little relevance in magic.

Deception sometimes needs to be executed under an assumed identity.

Magicians generally desire publicity and adulation, and accept any available credit going! More seriously, a magician's public reputation and recognition is core to winning future business. In other domains, these characteristics are precisely the opposite of what is required to deceive successfully. Indeed, deceivers may need to operate under cover of a legend (false identity) while simultaneously executing a broader set of deceptive actions. This situation would be like a magician performing two, if not three or four, different effects simultaneously.

Within many organisations, deception is a team sport.

Most organisations that have a professional requirement to deceive others do so based on collective effort. Different departments within the organisation bring their specialist skills to bear on the design process. Planning occurs collaboratively in small groups. Proposed deceptive activity progresses through multiple organisational levels of scrutiny and review. And deceptive intent is communicated to other parts of the organisation for execution. Magic does not address collective process for deception planning, including formulation and communication of deceptive intent, organisational processes for managing risk, or the regulatory processes of audit, scrutiny and sign-off.

In other domains, the relationship between deception and counter-deception is symbiotic.

Say you want to be the world's best military deceiver. You might wish to spend as much time as possible with the world's best military counter-deception experts, learning how they detect, unpick and respond to the presence of deception. By learning what you could be up against, you create an opportunity to enhance your deceptive practice to meet and overcome such challenges. This same principle applies to any deceptive craft. Say you wanted to be the world's best undercover police officer. You might wish to spend time with the world's 'best' criminals to identify how they spot undercover cops, what they do about it, and what you need to blend in unnoticed. Deception and counter-deception are symbiotic practices - one practice cannot help but learn from studying the theory, expertise, methods, tools, and hard-won experience of the other.

Who do magicians hang-out with when they want to improve their deceptive practice? In lieu of any viable counterpart, they, unfortunately, tend to hang-out with other magicians.

What Aspects of Magic Can Be Transferred Readily to Other Domains?

Despite all these and other limitations, the good news is that magic *can* make a real and significant contribution to other domains, albeit in specific areas, and with some significant caveats. Examples are now discussed.

Magic has significant utility for teaching counter-deception.

One of the challenges in teaching counter-deception is how to use deception in the classroom. How can students be genuinely deceived in a manner that is safe, controlled, yet still demonstrates fundamental principles about deception

and counter-deception? In my classes, I have successfully used magic to enable students to experience first-hand various fundamental tenets of counter-deception. By first fooling students, then unpacking and deconstructing their experience, it is feasible to create a solid basis for teaching them new processes to detect and counter deception in their professional practice. The use of magic is always a course highlight, and several students have felt sufficiently inspired to pursue magic further. Future articles will explore further the role of magic in teaching counter-deception.

Magic is useful for teaching principles of deception that are counterintuitive.

Teaching students to perform simple magic effects can enable them to learn first-hand many deceptive principles that apply to their domain of practice, including those that are highly counterintuitive. For example, creating psychological invisibility through motivated action is difficult for novice deceivers to understand, to the extent that they often refuse to believe it can work. I have addressed this issue by teaching students to perform the classic 'Twisted Arms', or 'Crossed-Arms' Illusion (Pogue, 1998, pp. 285-288) which additionally helps them to experience the impact of guilty knowledge. Many principles of deception are incredibly counterintuitive and difficult to comprehend. As such, they can be challenging to practise safely as a prerequisite to employing the techniques in the real-world.

Magic is good for the study of perceptual manipulation.

Manipulation of an audience's attention and perception underpins all magic. As a result, magic has generated a large body of knowledge about such manipulation, most of which can be transferred directly to other domains. Formal analyses of these strategies are limited, especially in a form that is exploitable within the design of deceptive action - see Sharpe (1985); Macknik et al. (2011); Bruno (2013); Kuhn et al. (2014), etc. However, other domains that have a requirement to hide, vanish, disguise, transport, change the appearance

of, or otherwise manipulate objects (and processes) could learn much from the study of magic.

Magic provides a valuable repository of knowledge on deceptive improvisation.

In many deceptive domains, there is a need to adapt deceptive action on-the-fly. Moltke (1892) suggests that “No plan survives first contact with the enemy”, meaning that all plans require adaptation as a result of encountering the unexpected. While all improvisation is challenging, improvising while deceiving is especially tricky. If things go wrong, or the target detects an element of the deception, or the target challenges the deceiver, or if entirely unexpected opportunities arise, how might the deceiver most effectively get out of trouble, make the best of the situation, while still fooling the target?

Magic is one of the few deceptive domains that formally considers improvisation. While the information on this topic is somewhat limited, several valuable resources provide a wealth of strategies that can be transferred directly to other domains. For example, Justin Higham’s work on improvisation in card magic (Higham, 2009, 2011) contains strategies that can assist with each of the situations described above. Few other domains have much to contribute to this aspect of deception.

Other aspects of magic that are transferrable across deceptive domains

Many other principles and practices of magic are exploitable in other deceptive domains. Such principles include aspects of character development, practice and rehearsal, performance dynamics, patter, aspects of plot and storytelling, audience engagement and management, mentalism and conjuring with information (which is especially pertinent to cyberspace), aspects of two-person telepathy for covert communications, etc., as well as many others.

What Can Magicians Learn from Deceptive Practice in Other Domains?

“What on earth!?! Why have I just read through a long list of what magic *doesn’t* do? How is this supposed to help me to become a more deceptive magician?”

In case you were wondering, there are two answers.

First, consider again the opening quotation from Hegel. Having read this article, you are now aware of some of the limitations of deception, as it sits within your craft. By being aware of these limits, you have already moved beyond them. You are now better informed, more self-aware, and know things about deception that magic is not well suited to address. When you next hear the term “deception” used in the context of magic, you will understand its limited relevance, which puts you head and shoulders above others in the community who use the term indiscriminately. And if you ever find yourself invited to apply your skills in a domain outside of magic, you now have a list of the challenges you may encounter and can be better prepared to address these issues when they arise. Better yet, you might consider raising these issues with your client before you agree to start work with them!

Second, there are some significant opportunities for learning and creativity lurking behind these limitations. Consider turning each limitation into an opportunity by asking questions such as “Why doesn’t magic...?”, “What would happen if I...?”, “Why don’t I try...?”, etc.

Here are some examples:

- **What could I learn from the practice of deception in other domains?** How might my craft be impacted by a better understanding of animal deception (Stevens, 2016), deception in marketing and advertising (Boush et al., 2009), deception in cyberspace (Malin et al., 2017), art forgery (Hebborn,

- 2004), or military deception (Rothstein & Whaley, 2013), etc.?
- **What strategies used in these other domains could I incorporate into my existing routines to improve their impact?** What principles from other fields of deceptive practice might generate ideas for new effects?
 - **How might my magic improve if I had a better understanding of the psychology of deception?** What could I learn from studying books about how people attend to their environment within the context of magic (Macknik et al., 2011), how people process visual information (Herman, 2016), how expectations shape behaviour (Berdik, 2012), or how people make decisions (Klein, 1998), etc.
 - **Why doesn't magic have any measures for assessing the depth to which audience members have been fooled?** How would I measure this? What could I do if such measures were available?
 - **Why doesn't magic focus more on manipulating sensemaking, emotion, expectations and behaviour?** What new effects might I create if I focused on ways of shaping these processes in an audience?
 - **How might I employ risk management processes from other deceptive domains to help red-team, debug, de-risk and improve my sleights and routines?** What new ways of looking at my effects could help reveal opportunities to make them more deceptive?
 - **What would happen if an audience could view my routines using infrared and x-ray imaging devices?** What would they discover? What might I learn from this?
 - **What could I learn from studying the principles of counter-deception** (e.g. Whaley, 2006; Bennett & Waltz, 2007; Clarke & Mitchell, 2019)? How would this make my magic stronger?
 - **Who is my magic counter-deception counterpart?** Where could I find such an individual? What could I learn from them, and how might they improve my skills? If such an individual doesn't exist, how could I create them? What might I do instead?
 - **What if deception was a scarce and precious resource that had to be used sparingly in my routines?** What ideas might be triggered by employing principles identified by Axelrod (1979)? How could I increase the surprise and impact of my effects using these ideas? How might I achieve the same or more significant impact by minimising my use of deception, and simplifying, reducing and streamlining my effects?

Summary

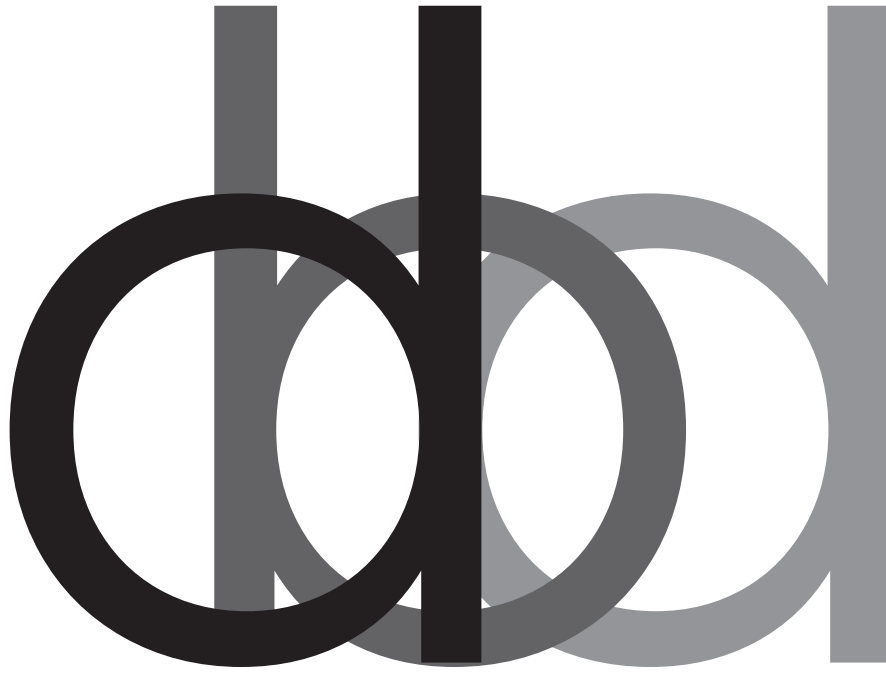
In this article, I have considered how deception in magic has limitations and omissions that make it difficult to generalise and transfer to other domains. The article intends to encourage magicians to consider how an understanding of broader aspects of deception that usually sit outside of their craft, might inform and improve it. And I have also sought to identify where the practice of deception in other domains may benefit from exploiting principles of magic, and vice versa.

As a final thought, knowing what you now know about the relationship between deception and magic, would you be more or less likely to accept Tom's job offer as deception consultant?

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