Magic: A New Belief-Based Account

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Various attempts have been made to solve what seems to be an interesting philosophical puzzle about magic performances, viz., given that they believe magic isn't real, how do we explain the audience's behaviour without suggesting they are irrational or stupid? First, doxastic accounts which end up modifying our conception of belief, either by introducing "emotional beliefs" or by introducing degrees of certainty in belief (Grassi & Bartels 2021; Kuhn & Pailhès 2022; Ortiz 1994). Second, non-doxastic accounts which appeal to exotic and arguably controversial mental states like alief (Leddington 2016). I argue that the puzzle depends on the assumption that the appropriate object of appreciation in magic performance just is the illusion of an impossible event in the first place. Rejecting that assumption opens the door for a different kind of doxastic account that does not lead to the puzzle. It also provides a different option for appreciating magic performance.

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1.0 Introduction

In his now famous *Flying* performance, we see David Copperfield flying. I argue, counterintuitively, that the illusion of flying is the wrong object of appreciation. If that is right, then going away from Copperfield's performance thinking "obviously he wasn't really flying" very possibly misses the point. In a related sense, one critique of a painting by Matisse was that they had never seen a woman like the one in his painting, to which Matisse reportedly replied, "That is not a woman that is a picture" (Dewey 1934. P. 113). Clearly, Matisse thought the critic was appreciating the wrong thing.

The assumption that the illusion of Copperfield flying is the appropriate object of appreciation leads to what seems to be an interesting philosophical puzzle about magic performances, *viz*, how do we explain the behaviour of audiences given that they believe magic isn't real without suggesting they are irrational or stupid?

To be clear, it is *not* puzzling that viewers might react in surprised astonishment when watching magic. For instance, when audiences see Copperfield fly around the stage it isn't puzzling that they might initially respond by exclaiming "No way!" or "That's impossible!". After all, it looks as if he is actually flying. Surely, however, upon the slightest bit of reflection, they will come to believe that their perceptual experience is simply non-veridical, or illusory. At this point, "No way!" or "That's impossible!" might seem disingenuous at best. Yet it seems as if there is something in Copperfield's performance which causes genuine astonishment even after a viewer believes they are witnessing a visual illusion of someone flying and so are fully aware that he is not actually flying.

It seems as if they are experiencing a *cognitive* conflict, in addition to a conflict between perception and belief. For instance, suppose you come to believe that Copperfield is suspended by invisible wires, but then he flies through hoops or while inside a sealed glass container. At some point, after Copperfield continues with this sort of activity, you might be caught in what Jason Leddington (Leddington 2016) suggests is the kind of "cognitive bind" (P. 256) a magician wants to catch you in: you believe that (i) Copperfield is not flying – that magic isn't real – yet (ii) as far as you can tell, it is happening anyway. In other words, even though you believe your perceptual experience of someone flying must be non-veridical, as far as you can tell, it is veridical.

Given that a viewer always believes that magic *isn't* real, the puzzle that preoccupies the literature is to describe what sort of mental state a viewer is in when watching magic, while avoiding the following result:

Contradiction (C1):

> S believes that ((p) and (not p)).

For instance, someone believing both that magic is not real and that it is.

Existing accounts in the literature attempt to solve the puzzle in one of two ways. First, doxastic accounts argue that the mental state a viewer is in regarding the second proposition, that magic *is* real, is a belief but attempt to avoid (C1) by modifying the concept of belief itself (Grassi & Bartels 2021; Kuhn & Pailhès 2022; Ortiz 1994). These accounts either posit a difference in *kinds* of belief *or* degrees of certainty of belief. Second, 'non-doxastic' accounts argue that what best accounts for the audience's behaviour is a different kind of mental state altogether. One that causes behaviour consistent with belief but that falls short in important ways (Leddington 2016).

After considering some of these accounts while pointing to potential problems with them, I will offer a different kind of solution the puzzle. We can avoid (C1) altogether by rejecting the premise that the responses which seem to mark Copperfield's success reflect the audience's mental state toward the apparent flying in the first place. With respect to the apparent flying, not only will the

audience believe it is illusory, but they will have explained it; Copperfield is supported by something physical. Nevertheless, I shall argue that there are brief moments in Copperfield's performance which involve a viewer in a conflict of the following form:

> S believes that (p) *and* S believes that not (p)

It's just that 'p' in this conflict is neither 'magic isn't real' nor 'magic is real'. If Copperfield can get the beliefs I will describe to clash, then for a moment it will seem to a viewer as if a straight contradiction is true, even though they will never believe this. It is this cognitive experience of conflict which explains their responses after they come to believe the flying is merely apparent. It is also what differentiates a performance of magic from a performance involving illusions of impossible events. And if that is right, then it seems that this conflict is the appropriate object of appreciation for a magic performance.

I shall proceed as follows. First, I will elaborate on the nature of the puzzle and suggest that we can think of it in terms of two underlying incompatible propositions which come before a viewer's mind. Then I will summarise three solutions in the literature as well as pointing out some potential worries or objections. I will then offer a different kind of solution to the puzzle, which involves rejecting the premise on which it is based, namely, that the apparent flying is part of the cognitive conflict at the heart of the experience of magic in Copperfield's performance. I conclude that, though this seems to make the illusion of flying the wrong object of appreciation, there are good reasons to prefer it to other kinds of accounts.

2.0 The Puzzle: A Cognitive Conflict

Theorising about magic often begins with the following kind of thought: though it looks impossible, when we see Copperfield flying, has he already performed magic? In a technically sophisticated production of Peter Pan, we also cannot see what is supporting the floating actors. Does this part of the performance count as magic?

In Copperfield's performance, what we likely come to believe about what we are seeing is that he is supported by *something*, and that our experience representing someone flying is just getting things wrong. A motivating part of my paper, as well as much of the literature on magic, is that the experience of magic cannot consist in this kind of experience alone. Indeed, this merely points to the fact that sometimes we believe our perceptual experience isn't getting things right. Magic clearly makes use of illusion, but the experience aimed at by magic, as a practice, seems to be a cognitive conflict of some kind.

When Copperfield first rises into the air, it would be sufficient to explain the audience's behaviour by appeal to a conflict between perceptual experience and belief:

Perception/Belief (PB):

> S believes that (p)

Conflicts with:

> *S* perceives that (not p)

In the case before us, this equates to believing that Copperfield is not flying and one's perceptual experience representing that he is.

But it seems likely that the audience will overcome the conflict in the following way:

Non-veridical (NV):

> S believes that (p) and infers from a perceptual experience (PE) representing that (not p), that (q)

That is, they believe Copperfield is not flying and infer from their perceptual experience representing that he *is* flying that this perceptual experience is non-veridical or illusory.

What seems to differentiate Copperfield's performance from the "special effect" in Peter Pan is that, in Copperfield's performance and not in Peter Pan, the audience reaches a point where they seem unable or unwilling to reconcile their perceptual experience with their beliefs in this way. Perhaps because it seems as if Copperfield himself really is flying, there, in the theatre, and not in the imaginary world of Peter Pan. For instance, Copperfield not only appears to actually be flying, but he appears to fly while encircled by metal hoops and while sealed inside a glass container. Jason Leddington (Leddington 2016) characterises the audience's response after Copperfield flies up outside of the box as follows:

> What the...? Clearly there can't be wires. What else? Magnets? A fan? No. None of that makes sense. I'm completely baffled. This seems altogether impossible. And yet, it's happening. I don't know what to say. (P. 259)

Consequently, it seems as if they are experiencing a genuine conflict between two cognitive mental states, and not merely a conflict between perception and belief.

But then there seems to be an interesting philosophical puzzle to solve. Suppose the propositional contents of the conflict are (i) Copperfield is not flying and, (ii) Copperfield is flying. Surely, the attitude a viewer is taking toward these contents cannot both be *beliefs*. As Leddington argues, on this hypothesis:

Copperfield is successful only if he gets you to somehow believe and disbelieve that he is flying. But presumably Copperfield's audience does not typically come to believe a contradiction, no matter how good his performance. (P. 257)

Yet it seems as if the "complete bafflement" Leddington describes after Copperfield flies up out of the box would not be what it is if a viewer were merely imagining, supposing, or considering (ii), that Copperfield is flying, despite believing (i), he isn't. Instead, their "complete bafflement" at this point seems to reflect some sort of commitment or mental endorsement that what they are seeing is, unbelievably, actually happening, despite their belief that it could not be.

Leddington describes this "cognitive bind" (P. 256) as follows. You:

Believe that Copperfield is not flying – that magic isn't real

Yet:

As far as you can tell, it is happening anyway (P. 256)

The literature on magic supposes that the task at hand is to describe what sort of mental state a viewer is in regarding the latter propositional content. It is a puzzle since, if it were a belief, this will not only seem to make Copperfield's success dependent on the audience affirming a contradiction, but that magic performance depends on their irrationality or stupidity. On the other hand, clearly Copperfield does not want you to believe that the flying involves perceptual illusion while merely imagining, supposing, or considering that it doesn't. That much is achieved by the theatrical "special effect" we see in Peter Pan. Flying through hoops, and so on, seems to reflect his intention that a viewer responds to the idea that he is actually flying, not that it merely looks as if he is.

In what follows I will consider the "cognitive bind" Leddington describes as involving the following underlying contradictory propositional contents, toward which a viewer takes some sort of cognitive attitude:

Propositional Content #1 (PC1): My perceptual experience is non-veridical

Propositional content #2 (PC2): It is not the case that my perceptual experience is non-veridical (or PC1 is false)

Before turning to what I think is a better solution to the puzzle, I will canvas the kinds of the solutions that have been offered in the literature.

2.1 Solutions to the Puzzle

(A1): Audiences undergo a conflict between kinds of beliefs: intellectual and emotional.

(A2): Audiences undergo a conflict between degrees of certainty of beliefs.

(A3): Audiences undergo a conflict between full-fledged belief, on the one hand, and some other mental state, on the other, that does not itself amount to a belief but is also more than an imagining or supposition.

I call the first two, (A1) and (A2) 'doxastic solutions' to the puzzle, since they appeal to beliefs in order to effect its resolution. The third type of account, (A3) I call 'non-doxastic' since it appeals to non-doxastic states to effect its resolution. (A3) differs from (A1) and (A2) insofar as it can come in different forms: different (A3) accounts may solve the puzzle by appealing to different non-doxastic states.

As for (A1), perhaps what is going on is that "[y]our intellectual beliefs tell you that magic is impossible, but on a more emotional level, the magic performance induces a belief that magic is actually happening" (Kuhn & Pailhès 2022, P. 59; See also, Ortiz 1994 pp. 25-26; See also Kuhn 2019 for a similar account). So, on the proposed model, a viewer believes intellectually (1), that magic isn't real, yet, they "believe" on an emotional level (2), as far as they can tell, it is happening anyway. Or they "intellectually believe" (PC1), that their perceptual experience is non-veridical, and the performance causes them to "emotionally believe" (PC2), that their perceptual experience is veridical.

The difficulty with this account is that "emotional" belief is not fully explained. It may be true that looking at Copperfield flying really *feels* like what it would be like to see someone actually flying. But unless "emotional belief" is explained more fully, this doesn't seem to clarify the situation very much. More importantly, the fact that looking at Copperfield on stage *feels* like what it would be like to see someone actually flying is more simply explained by the fact that Copperfield has arranged things on stage such that the situation before viewers is visually indistinguishable from what it would be like to see someone actually flying. That is, the concept of 'emotional belief' may simply be a misnomer for 'visual experience of a known illusion'.

This is evident from how the view is sometimes described: "[f]rom a psychological perspective, the magic experience is best described as a conflict in beliefs. We can think of it as a conflict between the things that we believe to be possible, and the things we believe to have experienced" (Kuhn & Pailhès 2022, P. 59). But again, we can believe full well that we are experiencing Copperfield to be flying, without endorsing the experience and forming the belief that Copperfield is flying. That is, our perceptual experience may represent it as the case that Copperfield is really flying unsupported, but the whole puzzle seems to be precisely that we do not believe this. In the end, this account seems more like a restatement of the puzzle and not a solution. Or it collapses into the perception/belief conflict account, like the one I suggest.

As for (A2), instead of a conflict between kinds of beliefs, perhaps magic could "be understood as the experience of *surprise* evoked by the sudden increase of prediction error due to a profound mismatch between memory-based expectations and sensory observations" (Grassi & Bartels 2021. P. 517, emphasis mine).

What this view is claiming is that the experience of impossibility in magic amounts to no more than the experience of surprise.

> Essential for this is the understanding of the experience of "impossibility" in magic "just" as the experience of surprise and not as a distinct mysterious phenomenological experience. (P. 524)

This surprise does not amount to a contradiction of belief, merely something highly improbable.

> Observers of magic might indeed describe a specific occurrence as "impossible", but this just reflects that a specific belief with a high degree of certainty is being contested. Clearly, a magician guessing a card out of a deck of cards is not impossible but just improbable, and yet, magic. (518)

Their account is based on a Bayesian probability model.

> Bayesian beliefs are represented as degrees of beliefs as probability distributions that are the result from inductive learning of statistical regularities. Thus, while high degrees of certainty can be achieved, not so a final state of certitude. Accordingly, the understanding of magic effects as the experience of "impossibility…has, in the Bayesian view, to be rephrased with "highly unlikely" or "not yet accounted by our model. (P. 518, emphasis mine)

I include this as a doxastic account because "unexpected events are only so in the light of background *beliefs*" (P. 517, emphasis mine). Using the example of a coin appearance:

> [T]he viewer believes that the magician's hands are empty (lower-level prior belief) and knows that objects do not arbitrarily appear (higher-lever prior or hyperprior), so that seeing a coin in the opening hand (sensory data) elicits a large prediction error (mismatch between expectation and sensory data) that is experienced as surprise." (Grassi & Bartels 2021. P. 517)

Note, especially, that one of the beliefs not amounting to a "final state of certitude" -- that the hands really are empty-- is tantamount to asserting its (potential) falsity. By contrast, positing a belief with a high degree of certainty is tantamount to asserting its (likely) truth. So, this model proposes that the conflict obtains between a belief that is highly likely to be true and a belief that is at least potentially false.

At least one point of worry here is that what seems to differentiate Copperfield's performance from the visual illusion of someone flying is precisely that it is more than just surprising. This account would seem to fail to explain the genuine astonishment *after* the audience comes to believe the flying is merely apparent.

As for (A3), this is Leddington's own view, and it is, perhaps, easily the most ingenious in the literature on magic. He rejects both that the conflict involves a distinction between emotional and intellectual belief as well as degrees of certitude between beliefs.

If translating Leddington's "cognitive bind" into my propositional contents is right, then, on the one hand, he would think that the relevant propositional contents (PC1), one's perceptual experience is non-veridical, and (PC2), one's perceptual experience is veridical, cannot both be contents toward which the audience takes the attitude of 'believing that', or else, Leddington argues, a successful magic performance would be one that brings a viewer to believe a contradiction. Consequently, for Leddington, "the point of a magic performance is not simply to generate cognitive dissonance…but to maximize this dissonance" (258).

So, he takes as a basic assumption that the conflict in viewers' minds when watching magic does not obtain between beliefs.

However, the attitude toward the idea that one's perceptual experience is non-veridical must be a belief; "the audience's active disbelief [that magic is real] is a critical ingredient in the experience of magic" (255). For instance, in the classic sawing-in-half illusion, if a viewer believed that the magician or their assistant was really being cut in two pieces, they would rush out of the theatre and call the paramedics (or police!), not applaud.   But if that is the case, this puts pressure on what sort of mental state a viewer is in regarding (PC2), the proposition that their perceptual experience is veridical.

'Considering that', 'imagining that', 'entertaining that', and so on seem to be ruled out by Leddington as the attitude the audience takes toward such propositions as 'the person is flying', because they are initiated voluntarily. The audience's astonishment even after they come to believe the flying is a visual illusion arises involuntarily. Moreover, Copperfield does not seem to want you to believe (PC1) -- the flying involves perceptual illusion -- while merely supposing or imagining (PC2) -- that it doesn't. More importantly, however, the state of "complete bafflement" Leddington supposes is the aim of the performance seems to be where the audience believes that "clearly there can't be wires", magnets, and so on. That is, for every conceivable explanation, a viewer has inferred that it is false. Consequently, their "complete bafflement" reflects the *belief* that, despite this, there *must be some explanation*. In effect, "No way!" or "That's impossible!" would express the idea that there seems to be no "way" that one's perceptual experience could be non-veridical, even though they believe it must be. Or that there must be an explanation for how it is non-veridical, but there seems to be none and if that is the case then "that is impossible!". And certainly, for this to be the case one had better not be merely supposing or imagining that there is no "way", no explanation.

So, the question remains. What sort of mental state are they in regarding the proposition that their perceptual experience representing someone flying is veridical if it is neither a belief nor a voluntary attitude?

The solution Leddington offers involves the technical philosophical content of a concept called 'alief' which, when instantiated in the audiences' mind, conflicts with their belief that magic isn't real. Leddington argues that "[t]he experience of magic essentially involves a belief–discordant alief that an impossible event is happening" (258).

For reasons of space, I won't cover this concept in too much detail. Briefly, alief is an involuntary state of mind introduced by Tamar Gendler (Gendler 2008) to explain cases where we experience strong emotions against our better judgments. For instance, despite firmly believing a roller coaster to be safe, I may 'alieve' that it is dangerous, explaining my fear and my behavioural impulses; I may experience a strong desire to get off the ride, despite believing it is safe. Leddington suggests that the experience of magic is similar. Despite firmly believing that the person in front of me cannot be flying, I may 'alieve' that they in fact are, explaining my shock.

But unlike a belief, aliefs do not involve mentally endorsing any represented content. The way Leddington thinks this applies to magic is modelled on Gendler's example (Gendler 2008) of someone standing on The Sky Walk, a glass platform extending out over The Grand Canyon:

> On her analysis of the Sky walk, the visual stimulus induced by the transparent bridge causes a mental state with the following associatively linked contents:
>
> – Representational: Really high up; no support!
>
> – Affective: Unsafe!
>
> – Behavioral: Get off (Leddington 2016. P. 257)

Leddington does not fully explain how these components carry over to the case of magic. In Copperfield's case, the representational component is arguably something like "Flying; no support!". Like 'really high up; no support!' in the case of the Skywalk, it is meant to be "present in

the subject's cognitive system" (Leddington 2016. P. 257), but not mentally endorsed – as beliefs are. Nevertheless, as an alief, it is not simply idle; it remains possible that it is "linked to affective and behavioral contents" (P. 257) making you "feel, and [inclining] you to act, in certain ways" (257). Basically, responses like "No way!" can be involuntary even if a viewer does not mentally endorse that Copperfield *is* flying with no support, just as responses on the Skywalk like "I want to get off" can be involuntary even if someone does not mentally endorse that they are high up without support

Gendler is also at pains to point out that "[a]t its core, alief involves the activation of an associative chain -- and this is something that can happen *regardless of the attitude* that one bears to the content activating the associations" (Gendler 2008. P. 650 emphasis mine).

Recall the propositional contents underlying the conflict:

Propositional Content #1 (PC1): My perceptual experience is non-veridical

Propositional content #2 (PC2): It is not the case that my perceptual experience is non-veridical (or PC1 is false)

So, if it is the content of an alief that factors in the conflict, it is less a question of what kind of *attitude* a viewer is taking toward (PC2), the proposition that one's perceptual experience is veridical. Rather, the situation is as follows.

First, the state of "complete bafflement" Leddington claims viewers are in presupposes that a viewer has inferred that each given possible explanation is false. On his account this only occurs after Copperfield flies up out of the box. The explanations have thus been "cancelled" in Leddington's terms. (Pp. 258 – 259)

Second, against the background of *all* explanations having been "cancelled", or taken off the table, "Flying!; no support!" persists, and it continues to activate it's associated affective and behavioural contents. As Leddington puts, it, the alief refuses to "budge" (P. 259). It is this situation which Leddington describes as a belief-discordant alief that an *impossible* event is occurring, where the failure to come up with *explanations* constitutes the impossibility.

Since alief is a mental state that is meant to occupy a kind of middle ground between full-fledged beliefs, on the one hand, and imaginings or suppositions, on the other, Leddington thinks it is the kind solution we are after.

He therefore likens the state a viewer is in at this point to the state of philosophical aporia:

> [T]he spectator does not give up on the idea that there is an explanation for the apparent impossibility; instead, the spectator's attitude is: "There must be an explanation, but I have no idea how there could be. All the possibilities *seem to* have been exhausted. (P. 261 emphasis mine)

Ingenious as this account is, alief is a rather exotic mental state and is not uncontroversial (Currie and Ichino 2012; Kwong 2012; Mandelbaum 2013). Also, the 'wires' in "clearly there can't be wires" seem to be a stand-in for any physical *object* that might be supporting Copperfield which we can't see, as contrasted to an invisible physical *force* such as magnets or wind. In the next section I will show that a viewer will likely reject the belief that an invisible force is supporting Copperfield. But then, unless they come to believe that he is supported by nothing physical, they will never believe that "clearly there can't be wires", even when they see him apparently encircled by hoops or flying inside a box. This means that, in Copperfield's performance, they will never reach the aporetic state Leddington suggests is Copperfield's aim.

I will leave a more comprehensive analysis of this account to a later opportunity. Suffice it so say that I think there is a different option.

3.0 A different *kind* of doxastic account:

I have been interested in magic as far back as I can remember. But the first time I can recall realising that the experience of magic was about more than experiencing illusions was when I was around 8 years of age. Mike the magician would come around to our table at the Holiday Inn Sunday brunch buffet in Pittsburgh presenting close-up magic. Once, he introduced two little red sponge balls. He put one in his hand and gave the other to me to clasp tightly. Then, with a magic wave, he opened his hand, and it was empty. As an 8-year-old I was fascinated by the disappearing ball. But what caused me to have a sort of revelation was that, though I had no idea where his ball went, I believed I still had my ball inside my clenched fist. But when I opened my hand, there were two.

Seemingly, his ball disappeared and reappeared in my hand. But even at 8 years old, I didn't believe that. The thing that fascinated me was that, up until the time I opened my hand, I believed there to be one ball inside. When I opened my hand and there were two, what I experienced was a complete reversal of what I *believed* to be the case. In effect, Mike got me to *believe* that (p), there was one ball in my hand, and to *believe* that (not p), there were two balls in my hand. I can bring the mental state I was in at the time before my mind even now. The problem now as then is that I was equally justified in believing both propositions. Even though I now believe that what felt like one ball in my hand must have been two balls, the moment when these beliefs clashed was what made the experience something I still value. In other words, what made an illusion of a ball disappearing and reappearing in my hand truly magic was this clash of belief.

Often in life, believing things that aren't true can be harmful, even dangerous. The intuition behind my approach is that magic is a practice where the phenomenon of believing falsities can be experienced safely and, indeed, with pleasure. Moreover, what distinguishes magic as a practice from genuinely inexplicable illusions is just this experience.

The challenge faced by doxastic accounts of magic is that the conflict they are trying to describe obtains between mental states whose contents are something like (i) 'magic isn't real' and (ii) 'as far as you can tell, it is happening anyway'. Supposing a viewer always believes (i), it is a challenge to describe what mental state they are in regarding (ii) while avoiding (C1):

Contradiction (C1):

> S believes that ((p) and (not p)).

But it is important to note why a viewer never believes that, for instance, Copperfield is flying. It is not because they believe it would be impossible in principle for someone to defy gravity -- it isn't -- but because they believe what they are watching is a magic performance representing this. That is to say, "as far as they can tell" what is "happening anyway" is that Copperfield is giving them a *performance representing 'flying'*. Though it is, perhaps, as exact a likeness as one can get, it is still a *likeness* (Walton 1970. Pp. 343, 344,346). I will take the following assumption by Leddington as my starting point:

"There is cognitive dissonance in [the experience of magic]" (P. 257),

But:

"not the sort that demands resolution on pain of contradiction" (P. 257).

In other words, Leddington claims that audiences are not placed in an irrational frame of mind when appreciating magic. And this makes a lot of sense if the cognitive conflict involves disbelieving that Copperfield is flying – that magic is real.

I will now show that there are moments in Copperfield's performance that do involve a viewer resolving a cognitive conflict on pain of contradiction, and it does not involve the proposition that Copperfield is flying, or that magic is real. This proposition simply does not factor into my account

of the conflict. In other words, magic performances, appreciated correctly, involve placing audience members into an irrational frame of mind and then, perhaps, inviting them to resolve that situation. On that assumption, the puzzle will simply not arise.

Think of it this way. The illusion of flying is like the illusion of the ball disappearing and reappearing in my hand. And since audiences are not stupid, they believe they have an explanation: Copperfield is suspended in the air by a physical object or force which they cannot see. Alternatively, they believe Copperfield is not supported by any physical object or force, in which case the assumption is that they would not appreciate the performance *as* performance magic. They would mistakenly think Copperfield has genuine powers of levitation. Similarly, I have an explanation: Mike made it look as if his ball was in his hand when it wasn't, and the second ball was, somehow, in my hand the whole time. It would be a mistake to believe that Mike the magician has the power to cause objects to vanish and reappear, or that he was even trying to get me to believe this.

In Copperfield's case, the most likely scenario is that a viewer will infer that there is a physical *object* in the region of space surrounding Copperfield which they cannot see. Primarily since if they thought there was an invisible force like magnets or wind supporting him, *flying* through hoops would not be impossible in the first place. Clearly, flying through hoops is offered by Copperfield as the action that is meant to astonish the audience on the assumption that they disbelieve that an invisible force is supporting him. Moreover, audiences are more likely to think that Copperfield is supported by some physical thing we cannot see, like the actors in Peter Pan, than that Copperfield has installed giant apparatus involving magnets or fans for his one-night performance here in Des Moines Iowa. As for wind force, Copperfield's long hair and loose clothing is not being blown about.

So, most likely, audiences have already decided that, somehow, there is a physical object of some kind in the region of space surrounding Copperfield which they can't see, perhaps invisible wires. And it is simply implausible to think that apparently flying through hoops and so on justifies the belief that "clearly there can't be wires" in the way one is justified in believing there is some physical object supporting him. If that is right then, *at any point in the performance*, they are likely thinking something like the following: they believe that Copperfield is supported by a physical object they can't see, and that the region of space surrounding him is therefore non-empty. From this belief they likely infer that *all* of their perceptual experiences from which they might infer that "clearly there can't be wires", and so on, are non-veridical.

But consider the following option. At first, it seems as if flying through hoops, and so on, is to get you to infer that "clearly there can't be wires". But consider that, before he does this, and before you even contemplate that this supposed demonstration itself involves non-veridical perceptual representations, as Copperfield is hovering there and the giant hoops are brought out from each wing of the stage, you are in the following situation:

Hypothesis 1 (H1):

> S believes that (p), the region of space surrounding Copperfield is non-empty

And:

> S believes that (p), the region of space through which those hoops are passing is *empty*.

In other words, you are justified in believing the region of space surrounding him is non-empty and you are justified in believing that, if solid hoops pass through a region of space, that region of space is empty. Then the hoops pass through the region of space surrounding Copperfield, and you are in a position of there being justification for two beliefs which cannot both be true.

> S believes that (p) *and* S believes that not (p)

Neither of these involves the proposition that magic is real and both seem to be equally justified beliefs. Importantly, this avoids (C1), the idea that a viewer affirms the contradictory proposition that ((p) and (not p)), since being in this situation doesn't imply what a viewer will do when confronted with this clash of belief. Yet, the cognitive dissonance you feel in this moment had better be resolved, or else contradiction. And it seems to me that this would be an interesting situation to be confronted with on any account. In other words, if the perceptual experience of the hoops passing over Copperfield were veridical, then it *would be the case* that ((p) and (not p)), which is strictly speaking *impossible*. It is something impossible in principle, or necessarily not the case.

The alternative is to suppose that, when the hoops pass, you infer that "clearly there can't be wires". And if this perceptual experience were veridical, then it would entail that Copperfield is defying gravity, which is not *strictly speaking* impossible, or impossible in principle, though it might be fascinating.

So, the *kind* of impossibility in each case is very different. In the former it is necessarily impossible that two equally justified but incompatible beliefs are both true, while in the latter it is nomological impossibility; it is impossible insofar as one lacks an explanation for how Copperfield is defying gravity. Moreover, viewers will always go away from the experience of Copperfield flying explaining it as involving perceptual illusion. At least on my account the kind of impossibility they experience really is impossible.

It seems to me that if magic essentially deals in illusions representing nomological impossibility, then it could not be sufficiently differentiated from perceptual illusions of any sort, such as theatrical "special effects". By contrast, is there any art form that offers the experience of something necessarily impossible? Even the "impossible" objects in an Escher drawing do not involve a situation in which you believe that (p) and believe that (not p).

In any case, though you must resolve the conflict I describe on pain of contradiction, you might still go away appreciating that moment when Copperfield put you in a position of there being equal justification for two incompatible beliefs. Just as I still appreciate that moment when I was 8 years old, even though I resolved this by coming to believe that the second ball must have been there all along.

Moreover, the only ways to resolve the conflict I am describing would be to come up with some way in which the perceptual experience which caused this clash of beliefs was non-veridical, or to revise your beliefs. And in Copperfield's actual performance, none of these seem like good options. In other words, though a viewer will come to believe that Copperfield tricked them, at least one important aspect of magic performance is to make this as difficult as possible. That doesn't change on my account.

Rather than argue for how Copperfield makes it difficult to revise your beliefs or to believe that the hoops didn't really pass over him, I refer you to his performance to see if, at any point in time, you can *believe* that the region of space surrounding him is empty *or* that the space through which those hoops are passing is non-empty. Perhaps you will figure it out. But I think that, as a magician and not as a "special effects" technician, Copperfield's hope would be that you appreciate the *gift* of it seeming as if a straight contradiction is true, even if just for a moment.

4.0 Conclusion:

Our puzzle was to explain how audiences can be astonished or wowed by magic, given they believe that magic isn't real and so there is not really someone flying before them. We saw that standing attempts to resolve the puzzle are not satisfactory. In their place, I have offered my own doxastic solution to the puzzle. What makes an illusion count as magic is a moment when equally justified beliefs clash. The illusion is merely a device to set up this conflict, which does not involve the

proposition that magic is real in the first place. Consequently, the puzzle about why audiences respond the way they do to an illusion of an impossible event does not arise.

Admittedly, it seems as if my argument overall would entail an unwelcome or at least counterintuitive result about what it is to experience magic. That is, "do you mean to tell me that that the entire performance, involving dramatic storytelling, music, lighting, and, more importantly, the visual experience of a person flying, is all to get a viewer to experience a clash of beliefs about the seemingly unrelated issue of some region of space in their environment on the stage before them?"

Yes.

But this is not as unwelcome or counterintuitive as it might seem at first.

Firstly, what my account suggests is that Copperfield's emphasis on the apparent flying is really just a matter of contingent style. Reflecting on other performances that involve levitation can help illustrate this: in a performance by the duo Penn & Teller, Penn announces that Teller will perform the following trick using just a thread. Teller proceeds to interact with a red ball that seems to float around the stage and behaves as if it is a small pet, like an excited dog. Since we cannot see the thread, it looks as if the ball is levitating. And since the explanation for the levitation is already given, it seems the kind of "complete bafflement" Leddington describes could not possibly occur, at least with respect to explaining how the ball is floating. Crucially, there are moments during the performance when the audience's belief that the ball is suspended by an invisible thread, which amounts to the belief that the region of space surrounding it is non-empty, clashes with their belief the region of space through which a hoop is passing is empty. Yet, the routine ends with Penn cutting the thread and the ball dropping to the ground. It seems that, if Penn and Teller think the illusion of a floating ball counts as magic, it is because of this clash of belief, since the illusion is already explained.

Secondly, so long as we suppose the audience's responses are directed to the conflict I describe, it is not puzzling that they remain astonished even *after* they have come to believe that the flying itself is a perceptual illusion. Indeed, on my account, believing that the region of space surrounding Copperfield is non-empty, despite the visual illusion of it being empty, is crucial. Moreover, *both* components of the conflict taken by "p" are equally justified. So, if Copperfield can get you to experience a clash of these beliefs, he will have offered you an experience that is arguably not to be had in any other art form. Moreover, by locating the impossible aspect of the performance in the moment when two incompatible beliefs clash, we explain the audience's behaviour without having to resort to modifying the concept of belief with additional concepts like 'emotional belief' or by introducing exotic, not to mention controversial mental states like alief (for criticisms of alief, see Cavedon-Taylor 2025; Currie and Ichino 2012; Kwong 2012; Mandelbaum 2013).

Finally, it seems that what distinguishes Copperfield's performance from the illusion or "special effect" in Peter Pan, for example, are precisely the moments throughout the performance when a viewer experiences the kind of clash of belief I have described. It seems clear, then, that insofar as the experience of magic is to be differentiated from the experience of illusion, this clash of equally justified beliefs ought to be a primary candidate for the appropriate object of appreciation.

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Endnote: