

Fake knowledge-how

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Knowledge, like other things of value, can be faked. According to Hawley (2011), know-how is harder to fake than knowledge-that, given that merely apparent propositional knowledge is in general more resilient to our attempts at successful detection than are corresponding attempts to fake know-how. While Hawley's reasoning for a kind of detection resilience asymmetry between know-how and know-that looks initially plausible, it should ultimately be resisted. In showing why, we outline different ways in which know-how can be faked even when a given performance is successful; and in doing so, we distinguish how know-how can be faked (no less than know-that) via upstream and downstream indicators of its presence, and within each of these categories, we'll distinguish (in connection with detection resilience) both faking symptoms and (various kinds of) criteria. The unappreciated resilience of faked knowledge-how to successful detection highlights a largely overlooked dimension of social-epistemic risk – risk we face not just in our capacity as recipients of testimony, but in our capacity as both (would-be) apprentices and clients of knowledge-how.

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1. Introduction

Here is a general truism: if something is valuable, those without tend to try to 'fake' it – viz., to signal the appearance of having the valuable thing when they lack it. This kind of strategy is

common in all kinds of organisms, from animals ‘mimicking’ features they lack, to traders selling iron pyrite as ‘fool’s gold’.¹

Knowledge is valuable. And it is all too commonly faked. Better fakes are harder to detect. In the case of knowledge, as in nature, what makes fakes hard (or easy) to detect is how well they track the *indicator properties* (Craig 1991) of the genuine article – viz., properties a good fake shares with the genuine article and which socially signal, whether intentionally or unintentionally, that one has the genuine (valuable) property.²

Information that gets past rigorous peer review is an indicator property that it’s of high epistemic quality; it’s hard to fake that. But, if one manages to fake such a *convincing* (i.e., difficult-to-fake) indicator property of knowledge, the fake (*ceteris paribus*) is not an easy one to detect as such. Other fakes exploit less-demanding indicator properties. For instance: the mere fact of having been asserted is also an indicator property (generally much weaker than the peer review indicator) of knowing³. Assertions ‘faking’ knowledge vary greatly when it comes to whether we can detect them as fakes, depending on the way the assertion is made, the social expectations of hearers, relationships of trust, etc.⁴

In an illuminating discussion of ‘faking knowledge’, Katherine Hawley (2011) suggests that, generally speaking, faked propositional knowledge is more resilient and harder to detect than (faked) knowledge-how. Here is Hawley:

there is less scope for deception in the transmission of knowledge how and correlatively less need for epistemic trust. You may refuse to teach me how to ride a bicycle, but it is difficult for you to mislead me about how to do so; any such deception is likely to be

¹ As Pasteur (1982) notes, mimicry in biological organisms characteristically occurs in systems with protagonists usually playing three different roles: ‘being a model, being a mimic, and being a dupe’ (1982: 169). In epistemic communities, these roles take the form of a knower, a faker, and a dupe (who takes the faker to be a knower).

² The signalling here invites an explanatory inference: the that the possessing of the indicator property would be best explained by the obtaining of the genuine property.

³ This is the case, at any rate, if we grant the idea that by asserting that p one *presents oneself* as knowing that p (e.g., Williamson 2000).

⁴ Along these lines, Green (2007) put forward an account of speech acts as social signals that are hard to fake (‘handicaps’), based on the analogy with mimicry in biological organisms.

exposed after I have fallen off a few times. I must trust you not to push me under a car while I'm learning, but after a while, I will not need to trust that you have taught me how to ride a bike; it will be obvious that this is what you have done. This flows from the point ... that we are often in a position to recognize successful performance even before we can achieve this ourselves (2011: 296).

I do not claim that teaching how never leaves room for dishonesty, only that in many cases there is less scope for dishonesty than in typical cases of teaching that (2011, 297).

Hawley was careful enough to allow for some exceptions, but even so, her point motivates the following qualified *Resilience Thesis*:

Resilience Thesis: All else equal, for any subject S, proposition p and activity ϕ , S's faking knowledge-that p is more resilient to successful detection than S's faking knowledge-how to ϕ .

Hawley's overarching rationale for the Resilience Thesis can be put simply. Detecting impostors who fake know-how seems to be easier than detecting impostors who fake knowledge-that because we, as apprentices (who might wish to learn how to ϕ) or clients (who might wish to have one ϕ for us), may, even without knowing how to ϕ , still be capable of plainly assessing the quality of their ϕ -ing.⁵ Someone faking knowledge how to pick a lock can't fool us very easily when it comes time to 'put up or shut up': we can tell whether a lock is picked without knowing how to do it ourselves. The safe will open or it won't; it's easy enough to spot a fraud.

By contrast, as recipients of testimony, we oftentimes aren't positioned to assess the truth of what is asserted. If someone asserts to us, for example, a (false) historical 'fact', or a (false) description of an event we didn't attend, it is of course in principle possible to detect this through fact checking, but we can't so easily detect the fake *in the assertion itself*, at least in the

⁵ Williams (1973: 146) famously criticized the predominant focus of epistemology on the perspective of the *examiner*, who seeks to determine if someone else possesses the knowledge that one already has. He emphasised instead the perspective of an *inquirer*, who endeavours to ascertain who possesses the knowledge that she lacks. In the context of knowledge-how, Craig (1999: 156) introduced the perspective of the *apprentice*, after which Hawley (2011: 287) introduced the perspective of the *client*.

absence of suitable background knowledge.⁶ As the thought goes, it's easier to 'bust' the know-how imposter: we can spot bad performance easier.

Our aim in what follows is to call the Resilience Thesis into doubt. While we agree with Hawley's observations that (i) we needn't already know-how to ϕ in order to easily spot someone else who can't ϕ successfully (when they try), and that (ii) without propositional knowledge already it can be very difficult to spot 'fake propositional knowledge', it's nonetheless *not* the case that 'fake knowledge-how' is comparatively less resilient to detection.

We investigate this line of thinking by developing, beyond Hawley, a taxonomy of ways in which know-how is fakable; we consider both *upstream* and *downstream* know-how fakes, and within each category, we'll distinguish (in connection with detection resilience) between both faking *symptoms* and *criteria*. We do not deny that knowledge-that may also be faked in various equivalent ways—an idea we will revisit in §7. On the contrary, our objective is to demonstrate that resilience to the detection of epistemic counterfeits may, despite Hawley's initial suggestion, be quite similar in both cases.

Our approach to challenging the Resilience Thesis has more general implications in epistemology, and for social epistemology in particular. Traditionally, know-how's pedigree as a topic with epistemological import has been closely tied with research questions about its propositional nature (a point we don't take a stand on here). An appreciation of why the Resilience Thesis fails highlights the epistemic significance of risk associated with know-how deception and our capacity to uncover it, and regardless of whether one accepts or rejects intellectualist approaches to the nature of know-how. As we'll see, in successful collaboration with others, we rely on indicator properties of reliable *cognizers* and *informants* (essentially, what we track with the concept of 'knowledge-that'), but also on indicator properties of reliable *performers* and *instructors* (essentially, what we track with the concept of 'knowledge-how').⁷ These latter indicator properties may also be susceptible to social abuse with an

⁶ Research in psychology is generally not optimistic about individuals' capacities for deception detection; see for instance Vrij (2000) and Bond and DePaulo (2006).

⁷ According to Habgood-Coote (2019), knowledge-how is associated with the social functions of pooling capacities (allowing us to make discernments amongst potential teachers) and fostering mutual reliance (helping us identify whom to rely upon to do stuff for and with us) —, even if they may actually be in tension.

underappreciated resilience. We hope that acknowledging this will bring attention to this largely neglected dimension of social-epistemic risk, one that we encounter especially in our roles as aspiring apprentices and recipients of knowledge-how.

2. Cases

Know-how can be faked in different ways, which ‘prey’ on different types (and species) of its indicator properties. Consider the following spectrum of cases:

LOUSY LAWYER. Although she holds an undergraduate and Masters degree in Law from renown institutions, Sadie took little advantage of these learning opportunities. Even so, her diplomas allowed her to obtain a job at a good law firm. She now gets many cases thanks to her excellent credentials, which she regularly brings into the conversation, but the truth is that she is a woefully incompetent lawyer, unable to prosecute or defend even the simplest case.

MARTIAL ARTS MASTER. May works as a recognized instructor in an esoteric form of martial arts. He studied the discipline directly from renowned masters for years and internalised its most fundamental norms and principles. Imitating his masters’ teachings, he is now able to communicate those principles with confidence to his pupils, correcting their technique and guiding their performance accordingly. However, he has always hidden the fact that, as a performer, he has always been a disaster; he was never able to master of the techniques that he pretends to have.⁸

ALTERNATIVE THERAPIST. Marion owns a fashionable clinic for alternative therapies in one of the city’s most exclusive neighbourhoods. He always makes a dazzling impression on his prospective patients thanks to his clinic’s luxurious and chic decor, his fancy clothes, and his technical vocabulary. However, his therapies are hardly ever medically efficacious; when patients improve, this is usually just due to the placebo effect and good luck.

⁸ The case of martial arts master is based loosely on Bengson and Moffett’s case of Pat, the ski instructor (see their 2011a).

PROSPEROUS SALESPERSON. Pat is a car dealer applying for a new job. Her CV is outstanding: after years working for different prestigious companies, she has managed to accumulate an overwhelming sales record. However, she is a terrible salesperson, with hardly any skills. She just happens to have been employed in prosperous companies with excellent client portfolios, which is what explains the good sales record.

DOPED CHESS PLAYER. Vladimir is an excellent chess player who has always used a certain substance—Adderall Pro, an experimental and highly potent version of Adderall—that his trainer recommended before his matches to enhance his cognition. Adderall Pro helped him concentrate very well, and enabled him to be a successful tournament player. No one knows, besides him and his trainer, that he is taking this drug, which is strictly banned in these tournaments. Without the banned substance, he loses focus very easily, and would have finished towards the bottom rather than the top of these tournaments.

ART PRODIGY. Milly made a huge impact on the art industry with an array of works that were astonishingly mature for her young age. Interviews showed that she could converse fluently, using art jargon, about what she meant by them, the techniques that were employed, and how she was influenced by other painters. It turned out though that most of the works were painted with significant, nearly total, help from her parents.

What these six characters have in common is that each appears – and can reasonably be inferred by prospective apprentices or clients – to possess know-how while in fact lacking it. Each of our six characters exploits (regardless of whether they do so intentionally⁹) some reliable indicator property or properties of know-how – properties we rely on to track good performers – while nonetheless lacking the genuine article. But paying attention to the details will show that the way they achieve this by exploiting imitator properties is importantly different, sometimes subtly so, in each case. In the next section we clarify *two distinct axes* with reference to which indicators of one’s knowing how to do something are exploited: first, we can ask whether a given indicator that is exploited by the faker is an *upstream* or a *downstream* indicator of know-how, where this pertains to know-how’s acquisition vs manifestation (as will

⁹ For our purposes, we are not assuming that all ways of faking know-how are intentional, just as a biological organism might fake having a property of another species without having any such intention.

be described in §3.1). Second, and separately, we can ask whether the indicator exploited by the faker is a *symptom* of or a *criterion* for the target know-how state (according to a distinction we will introduce in §3.2); third, our account will be developed further by incorporating the idea of *tells*, as higher-order defeaters of know-how (§3.3).

III. A taxonomy of reliable indicators

III.1 Upstream and downstream indicators

One important dividing line that distinguishes our cases is, in the first instance, the *temporal relation* that the indicator that is being exploited has with respect to the (faked) knowledge-how state. Here it will be useful to distinguish between *upstream* and *downstream* faking in terms of upstream and downstream knowledge indicators¹⁰.

Upstream indicators: Property X^* is an upstream indicator of the obtaining of property X in S iff S 's having X^* offers (defeasible) propositional justification for believing that S acquired X .

Downstream indicators: Property X^* is a downstream indicator of the obtaining of property X in S iff S 's having X^* offers (defeasible) propositional justification for believing that S manifests X .

This distinction captures the point that something valuable may be faked (i.e., know-how) by exploiting the type of indicator that (purports to) show how the faker was *in a position to have acquired* the good in question, or by purporting to show that the good *has already been acquired* (and by inference sustained) by the faker and is now manifesting.¹¹

¹⁰ A similar distinction has been made by Cath (2015a, 2023), but based on the revisionary intellectualist assumption that knowledge-how is a species of knowledge-that, even if of a distinctively practical kind.

¹¹ In most cases, downstream indicators will also function as upstream indicators (though not vice versa). For example, indicators that S is manifesting of know-how (e.g., to cook a certain meal) in action, on a given occasion, provides justifiable grounds for believing that S had at some point been in a position to acquire the relevant (e.g., culinary) know-how. However, evidence that someone had acquired know-how to cook that meal is by contrast not a good indicator that they are presently cooking that meal, manifesting that know-how. To maintain clear boundaries between our two categories, we will confine the concept of upstream indicators to features that are not manifestations of the property in question.

III.2 Symptoms and Criteria

In order to introduce a second dividing line among our cases, it will be helpful to distinguish, inspired by Wittgenstein (1953/2009), something's (i) *entailments* from its (ii) *symptoms*; and (iii) *criteria*. Entailment is a logical relation that is strictly necessary. When x entails y , and we know that x , (and that x entails y) we are in a position to competently deduce that y .¹² A *symptom* of something, in contrast, is an *inductive* rather than deductive indicator; one's epistemic support consists in inference from empirical generalizations rather than in deductive inference. x is a symptom of y when x is often accompanied by y , and we know (or justifiably believe, etc.) this empirical generalization. This generalization may be based, for instance, on mere co-variance, causation, or even proper function.¹³

A more complicated kind of indicator category is that of *criteria*. When x is a criterion for y , the connection is not merely empirical, but constitutive. Being a y (rather than something else) consists in x 's implementation of certain features that are or ought to be the case (in Geach's (1956) sense that a knife ought to be sharp) of x given the type of thing it is. This relationship is constitutive, but still defeasible. It could be the case that x but not y (not all knives are sharp, even though all knives ought, constitutively, to be sharp).¹⁴

We may apply the distinction between entailment, symptoms, and criteria to many different phenomena, whereby we infer the existence of one thing out of the perception of another.¹⁵ Let's begin with a simple sports example; consider the inferences we make about whether someone is a good tennis player. It is usually the case, as an empirical generalization, that a truly elite-level tennis player is well known among tennis aficionados, e.g., that other good tennis

¹² See, e.g., Hawthorne (2005).

¹³ See below note 31, for instance, on how do diplomas function to signal competence, while they are not parts of the constitutive features of the competence.

¹⁴ In line with a conception of philosophical analysis as a linguistic endeavor, the notion of criterion was originally linked to semantic elucidations. However, we prefer a constitutive interpretation, focusing what 'being an x ' consists in.

¹⁵ Wittgenstein (1953/2009) discusses the distinction in the case of pain; criteria of being in pain might include certain behaviour (e.g., wincing) by which we understand the meaning of pain; contrast this with the inference we make that one is in pain by observing that they have taken an aspirin. We here make a *symptomatic* inference of pain, on the basis of the empirical generalisation that people who are in pain often take aspirins (rather than that taking aspirin is part of what it is to be in pain).

players have heard of the player. But fame within tennis is not a direct manifestation of tennis capacities. If a tennis player is world-famous, we are in a good position to *infer* that she has a good forehand and serve, etc., but being famous and well-known, endorsed by high-profile tennis brands and other companies, etc. is not (in any way, at all) constitutive of what we take playing well to involve. The same could be said about international rankings: the fact that some players have them provides us with good *signs* that they play tennis well because such rankings are socially designed to show this, but having the ranking is not constitutive of the competence. Players do not play better or worse in virtue of having those rankings. What being a good tennis player *consists in* is that the player is able to satisfy in practice evaluative norms that govern what counts as good tennis.¹⁶ Such norms are *criteria* for playing well, not mere symptoms of such play: the fact that good tennis players are able to play well (e.g., have a good serve, a good backhand, etc.) is not merely an empirical generalization about tennis players. It is part of what we attribute implicitly to a player by referring to them *as* a good tennis player.

Even so, the relationship here is not the kind of strict entailment that would support a deductive inference: a good tennis player may in unusual cases have a weak forehand, or not be particularly good at serving. Or she could have a bad day, and play poorly even against a weak rival. And a poor tennis player may have an excellent serve, or play gloriously on a good day, and surprise us on occasion, even if she is not really a good tennis player.¹⁷

III.3 Tells

Consider now the relationship between indicators and what we can call ‘tells’. A *tell* is best thought of as a kind of ‘higher-order’ indicator.¹⁸ It is an indicator that ‘defeats’ the (first-order) indicator (of the relevant property being faked) that the faker is exploiting in order to *appear* to

¹⁶ For discussion of the prescriptive/evaluative norm distinction, with reference to attributive as opposed to predicative goodness, see McHugh (2012: 22) and Simion et al. (2016: 384–86).

¹⁷ Compare here with Sosa’s (2007: Ch. 2; Sosa 2010) point that a given performance might be competent without being successful and successful without being competent.

¹⁸ A famous example of a ‘tell’ that outs a faker to her intended audience is from a scene in Quentin Tarantino’s *Inglourious Bastards*, where a spy – undercover as a German officer – asks a bartender for “Drei Gläser” (three glasses) while holding up three fingers, his index, middle, and ring finger. This, however, was the spy’s tell: a German would have ordered three glasses with an index finger, middle finger, and *thumb* – rather than ring finger – extended; the spy was outed by this tell.

have that property.¹⁹ Someone faking – poorly so – tennis know-how might give a tell: by holding the racket the wrong way.

While some tells are obvious (such as holding the tennis racket the wrong way), others aren't. This brings us back to the point that simply witnessing a successful performance of ϕ -ing isn't enough to suffice as an indicator that know-how is possessed; if the observed success were merely accidental or lucky, more so than genuine know-how tolerates, there might not be any easily observable tell (e.g., a random-looking serve of the ball, rather than an intentional, deliberate serve) to pick up on that would distinguish such merely successful performance from bona fide know-how manifestation.²⁰

IV. Abilities as criteria for know-how

When we witness a successful performance that also appears *intentional*, then this appearance licenses a (defeasible) inference to know-how possession. Regardless of one's particular theory of the nature of know-how, the following 'Intentionality/Know-How' connection is more or less platitudinous in our theoretical as well as folk thinking about intelligent behaviour:

(Knowledge-how/Intentionality): If S intentionally ϕ s, S knows how to ϕ .²¹

Because our default behaviour is *intentional* behaviour, whenever we witness someone succeed and lack any reason (as we have in the novice's no-tells success) to think the success *wasn't* intentional, we have a criterial indicator of know-how: the indication is that the criteria needed for knowing how to do something are met.²²

¹⁹ See Carter and Navarro (2017) for an account of epistemic defeaters for know-how. According to the framework defended there, *tells* would be epistemic know-how defeaters (that may themselves, of course, be defeated).

²⁰ The idea that an action, in order to be intentional, must not be too lucky is captured in various ways in action theory, typically, by a control constraint on intentional action. See, e.g., Pavese (2021) and Beddor and Pavese (2022b).

²¹ See Pavese (2022a: sec. 5). Though cf., Carter and Shepherd (2023) for critical discussion.

²² The point is also supported by a normative expectation resulting from the plausible idea that knowledge-how is the norm of intention, as defended by Habgood-Coote (2017).

So what, specifically, *are* these criteria? As is well known in the philosophy of knowledge-how,²³ different substantive stances – viz., intellectualism²⁴ and anti-intellectualism²⁵ – on the *nature* of know-how appear to give different answers here. That said, one substantive point about the criteria for being in a know-how state that both anti-intellectualist and most leading contemporary intellectualists are in agreement about is that being in a state of knowing-how to ϕ implicates possessing, to a first approximation for now, the *ability to ϕ* ; this is as such a plausible *criterion* for knowing how to do something, in contrast with other features that agents may exhibit that have a merely symptomatic connection with the know-how state.

While the anti-intellectualist is trivially committed to the idea that know-how involves ability (or at least some kind of disposition) possession, intellectualists such as Stanley (2011) and Pavese (2015b) are *non-trivially* committed to (a version of) this claim. In particular, both Stanley and Pavese take ability possession to be implied by the special *way* that one must have propositional knowledge of an action-guiding proposition in order for that item of propositional knowledge to rise to the level of know-how. For Stanley, this implication owes to the fact that knowing a proposition under a practical mode of presentation is ‘disposition entailing’ (see Stanley 2011, 182-3). To know how to use a hammer, for Stanley, you must know that the hammer is a way for you to hit (e.g.) a nail, but you must *also* think of this proposition in a distinctively *practical way*, as a way for you to use it, and this is something you can do only if it’s true of you that you *would* behave in certain ways (e.g., be disposed to pick the hammer up the right way, making a hitting motion with it when the time comes, etc.). Pavese, (2015b) also an intellectualist, has her own preferred approach to practical modes of presentation, what she calls ‘practical senses’; but the basic idea that propositional knowledge (of an action-guiding proposition) rises to the level of know-how only if one possesses certain abilities entailed by knowing the relevant fact in the right kind of way is more or less the same for Pavese as it is for Stanley: as Pavese (2015b) puts

²³ See Navarro (2021) or Pavese (2022a) for overviews.

²⁴ See, e.g., Stanley (2011), Pavese (2015a, 2021b, 2017, 2021a), Williamson and Stanley (2001), Cath (2015). For a different variant on intellectualism, non-propositional intellectualism, see Bengson and Moffett (2011).

²⁵ See, e.g., Ryle (1949: Ch. 2; 1946), Noe (2005), Carter and Navarro (2017), Carter and Pritchard (2015b, 2015a), Poston (2009), Cath (2011), Carter and Poston (2018).

it, “So representing practically a task entails that one has the ability to perform the corresponding task.”

We will assume, then, that knowing how to ϕ entails possessing the ability to ϕ , and this is an assumption it should now be clear we can make *without* assuming any theoretical *priority* of abilities in the theory of know-how.

It is worth introducing now some additional theory before we return to our example cases. The *kind* of ability that is befitting know-how surely isn’t just the kind of ‘trivial’ ability that, as Lewis (1976) thought, is entailed by one’s simply succeeding²⁶. E.g., it is ‘Lewisian-trivial’ that if you win the lottery then you had an ability to win the lottery. This sense of ‘ability’ requires no modal robustness.²⁷ Let’s distinguish a Lewisian ‘trivial’ ability to ϕ from the more robust kind of ability to ϕ that is plausibly implicated by one’s knowing how to do something, where a robust ability to ϕ requires a disposition to succeed (i) not merely just once, or in fluke circumstances (e.g., where one is helped by an angel), but (ii) reliably when one tries in the kind of shape and conditions that are the *normal ones* for ϕ -ing.

Our characterisation of a robust ability of the sort implicated by knowing how to do something lines up closely with what Sosa (2010) calls a *competence*.²⁸ For presentational simplicity, we’ll use Sosa’s Seat/Shape/Situation (hereafter, SSS) account of the structure of competences to think about the structure of the kind of abilities that are implicated by knowing how to do something. Here’s Sosa (2015):

Competences are a special case of dispositions, that in which the host is disposed to succeed when she tries, or that in which the host seats a relevant skill, *and is in the proper shape and situation*, such that she tries in close enough worlds, and in the close

²⁶ Analogously, see Craig’s “minimal conception of ‘can’” (1999: 159).

²⁷ For Lewis, the context determines the relevant compossibility that matters for assessing the truth of ability attributions. In some contexts, having an ability to ϕ will be relatively ‘cheap’, as cheap as it is to be such that you ‘can’ speak Finnish simply because you have vocal cords, and even if you’ve never studied the language.

²⁸ See Löwenstein (2017) for a defence of this idea within an anti-intellectualist framework; cf., Author-a and Author-b (2017).

enough worlds where she tries, she reliably enough succeeds. But this must be so in the right way (Sosa 2015, 23, our *italics*).

For Sosa, the term ‘complete competence’ is reserved for a competence compresent with the SSS conditions appropriate for its exercise. Given that intentional actions implicate know-how exercise (i.e., per Knowledge-how/Intentionality), the *appearance* of ϕ -ing intentionally is such that we can reasonably infer from it that the performer exercised – reframed now in Sosa’s terms – a *complete competence* to ϕ – viz., that they exercised disposition to ϕ reliably when conditions are appropriate (SSS conditions, in Sosa’s sense) for ϕ -ing, and that those conditions obtain when they appear to be ϕ -ing intentionally.

The reader will see where this is now headed. We might justifiably believe that one knows how to ϕ through a symptomatic or criterial inference, depending on whether we rely on a mere empirical regularity or on the observation of features that are constitutive of manifesting a (complete) competence to ϕ – viz., in appropriate SSS conditions for ϕ -ing. In our view, the latter distinction, between symptomatic and criterial indicators criss-crosses the former one, between upstream and downstream indicators, generating four categories of indicators: (i) upstream symptoms, (ii) downstream symptoms, (iii) upstream criteria, and (iv) downstream criteria.

V. Considering the cases

Let’s now revisit the cases we began with, starting with those that fake know-how by exploiting specifically upstream indicators, distinguishing now faking via upstream *symptoms* (LOUSY LAWYER) as opposed to upstream *criteria* (MARTIAL ARTS MASTER).

V.1. Upstream symptoms fake.

In LOUSY LAWYER, notice that Sadie doesn’t bluff to would-be clients or apprentices with lawyer-sounding jargon. Nor does she exaggerate her skills by, e.g., recurrently bringing up her previous achievements, etc. No inference that she possesses the relevant know-how would be made on the basis of such indicators. Rather, Sadie simply exhibits diplomas from prestigious institutions. In doing so, she exploits the social-signalling role of these diplomas – viz., that people who went *there* would likely have had every opportunity to have acquired (law-relevant)

know-how. By exploiting this *upstream* indicator of possessing law-relevant know-how, Sadie effectively fakes knowledge-how without ever relying on anything her (law-relevant) performance would signal about her possessing it. Realistically, the kind of upstream indicator that's exploited could (and perhaps in many cases would) be accompanied by the faking of downstream indicators as well, e.g., regarding the alleged professional success that she had attained; but the case is presented in such a way as to highlight a simple way in which know-how is fakable via an upstream (symptomatic) indicator that is clearly separable from other kinds of indicators that might often accompany it.

V.2. Upstream criteria fake

May's case in MARTIAL ARTS MASTER is similar to Sadie's in that he also, like Sadie, exploits upstream indicators that he possesses the relevant know-how. But notice that, in MARTIAL ARTS MASTER, May doesn't rely on features that would have merely symptomatic connections (e.g., diplomas) with his acquisition of the know-how state. Instead, what this case presents is someone who actually engaged in prolonged and significant learning from creditable epistemic authorities (his "renowned masters"). This is now manifested in his capacity to guide others into performing the relevant moves and giving explanations, a capacity to teach how the martial art technique should be performed; that is a different from the capacity he is attributed - viz., a capacity to perform himself. While he was in the right situation to acquire the know-how to perform (and not merely to teach), he never did.

The above point can be articulated with reference to the distinction between *deontic* and, as is the more familiar type of interest in the philosophy of know-how, *non-deontic* know-how. Considering May's familiarity with the practice and his knowledge of the rules exhibited in his teaching, it may certainly be expected of him that he has not acquired merely *deontic know-how* - i.e., *knowledge of how one (should) perform the art*, or of how it's done -, as sports coaches or trainers might possess by knowing what's required of the body and knowing the rules of the martial art, etc., regardless of whether they know *how to do it* themselves (*non-deontic know-how*). Thus, given the way May presents himself (by exploiting the upstream indicators that he does), we might reasonably - *mistakenly* - attribute *non-deontic* know-how to him just as we

attribute it to those we expect are skilled at *performing*, and who are not merely familiar the procedures that satisfy the norms that are internal to the performance type.²⁹

In spite of their resemblance, the way (non-deontic – hereafter without qualification) know-how is faked by May in MARTIAL ARTS MASTER is importantly different from the way it’s faked by Sadie in LOUSY LAWYER, which justifies its belonging to a different category in our taxonomy. A diploma, such as those exhibited by Sadie, is a good *sign* of the acquisition of know-how, but it is by no means *constitutive* of possessing it.³⁰ You do not lose your know-how in any sense simply by having the diploma withheld, for instance – even if you may not then be permitted to *exercise* that know-how as a professional. In contrast, training and learning are more internally connected to the practice – to the criteria of the martial art – than a mere diploma³¹. For that reason, we hold that May is faking know-how by exploiting (upstream) *critical* indicators, and not merely symptomatic indicators, of knowing how.

V.3. Downstream symptoms fake

The rest of our characters fake know-how in a way that is fundamentally different from how Sadie or May fake it via indicators (symptomatic or critical) that they would have acquired it. By exploiting (in different ways) *downstream* indicators of know-how, each of our remaining characters provides would-be apprentices/clients a (defeasible) reason to think that they possess and manifest the kind of know how that would be of interest to them, with no particular reason to think (as with Sadie or May) that that know-how would have been *acquired* in any particular way, through any favourable opportunities, etc.

Let’s look now at our character Marion, in the case ALTERNATIVE THERAPIST. Marion, not unlike many who make a profit through non-efficacious therapies, displays the expected trappings of success in professional medicine. These trappings indicate success as a therapist,

²⁹ See Stanley (2011) and Carter and Poston (Ch. 2).

³⁰ Notice that the social function of the diploma is one of accreditation – namely, that the person instantiates the relevant upstream criteria (i.e., to allow us to infer that the agent has been in a position to acquire knowledge). However, this does not make the diploma *constitutive* of the know how; one does not know better or worse *in virtue of* having or lacking the diploma.

³¹ Relatedly, different accounts of know-how emphasize the requirement that this epistemic state be acquired through training and forwards-looking self-regulation according to the standards of the practice (see Ryle 2009: 17; Elzinga 2023: 202).

not what one would expect of a dilettante, but not the kind of success that would *directly manifest his competence*, but only indirectly, in so far as it is causally related to it.

The relevant know-how being faked in this case is know-how, specifically, to heal or otherwise medically benefit patients (and not just know how to make money under description of doing those things). And there is a decent capacity here to fake this know-how successfully: we, Marion's prospective patients (suppose we are shopping around for clinics in a new town), will typically not have access to his former patients. We may perhaps not be able to assess how reliably he manages to treat disease pathology or the specific impact that his treatments have on his patients' health. We are practically forced to rely on just what seem to be good *symptoms* that he is doing presently very well at his work (and not merely that he would have been in position to have acquired or learned medical know-how). Furthermore, note that in faking know-how as he does, Marion does *not* exploit criterial indicators; doing that would require undertaking different deceiving strategies, such as those we will highlight in next section.

V.4 Downstream criteria fake

Our remaining three downstream cases do not exploit a symptomatic indicator, but a *criterial* indicator: each of these agents – Pat (PROSPEROUS SALESPERSON), Vladimir (DOPED CHESS PLAYER), and Milly (CHILD ART PRODIGY) – appear to exercise know-how because what they (at least partially) *produce*, by means of the performances we attribute to them, actually seems to *meet performance-success criteria in the relevant domain*. This feature is what makes those fakes especially resilient to detection, and therefore a special kind of epistemic problem for prospective apprentices and clients. Clarifying the mechanisms by which indicators are exploited in these cases will require the theoretical resources we introduced in §4.

In order to conceptualize the ruse in each of our three 'downstream criterial' cases, it will be helpful to remember that seeing someone succeed won't always suffice for justifying us in thinking that they succeed *through know-how* (see §4).

On the contrary, our final cases (i.e., PROSPEROUS SALESPERSON, DOPED CHESS PLAYER, and CHILD ART PRODIGY) are shown to feature three different ways in which know-how possession can be mimicked by exploiting various types of downstream criterial indicators. Regarding the agents in these cases, it seems (with no obvious tells to the contrary) that they possess the kind

of competence that would be implicated by being in a state of know-how. The problem with these cases is that different features of the performance are hidden from the assessor, who takes the agent to be performing in the relevant SSS conditions when they are not. In fact, each of those fakers would be unable to perform intentionally under the relevant SSS conditions, in ways to be specified.

Consider again PROSPEROUS SALESPERSON. Pat is able to sell cars reliably only in unusually favourable conditions for doing so. She would not succeed reliably in the kind of *typical* situations that we – perhaps, as her prospective boss, considering whether to hire Pat – would be interested in. Looking at Pat’s track record of selling while unaware of the abnormally favourable circumstances in which her track record is established, we might reasonably infer that she has the kind of valuable car-selling know-how that would make her worth hiring, or worth training us as her apprentice. Suppose we then do hire her for such a purpose. We will have been duped; just as soon as Pat faces more typical circumstances for selling cars, where she is not relying on a pre-existing wide and excellent client portfolio, she’d show her true colours. Pat accordingly fakes knowledge how in a way that is both (i) downstream and criterial, and moreover (ii) the *way* that Pat fakes know-how is through an indicator that she’s got the kind of ability that would be implicated by know-how, an ability to succeed reliably in normal (and not just unusually favourable) circumstances for that performance type. Call this a *situational* downstream criterial fake – one that exploits, specifically, the *situational* criteria on a know-how implicating ability.

What about Vlad in DOPED CHESS PLAYER? What we have here is also, like in PROSPEROUS SALESPERSON, a case of faked knowledge-how, faked by means of exploiting a downstream criterial indicator – Vlad’s performance on the chess board. But it’s of a slightly different type. Vlad clearly succeeds and does so across the spectrum of chess tournaments he plays in. His tournament record is a testament to this fact. He also, like Pat, lacks the relevant know-how on account of lacking the kind of robust ability (to succeed reliably when you try, in the appropriate conditions for that performance type) that such know-how would implicate. But the specific criteria pertinent to this kind of robust ability that we’d be duped into thinking Vlad satisfies is importantly *different* from the specific criteria we’d have been duped into thinking that Pat satisfies. Vlad’s lack of focus absent the illegal substance masks the fact that he doesn’t have a robust ability to perform well in the *relevant* conditions. The criteria for such a chess ability,

after all, include cross-situational success while in at least in tournament-*legal* shape, in accordance to, in this case, the formalised rules that determine this. Vlad, in short, *imitates* success in the kind of shape one would need to be in to possess the relevant know-how. Call this a *shape* downstream criterial fake.

Let's consider now ART PRODIGY. Milly is a downstream criterial faker in a way that is different from both Pat and Vlad. Pat faked know-how by deceptively masking a lack of a capacity to perform well in appropriate *situations* (and not just easy ones). Vlad faked know-how by deceptively masking a lack of a capacity to perform well in appropriate *shape* (and not just when his otherwise debilitating shape is compensated for by an illegal drug). Milly, by pretending to have succeeded to the extent that she did, fakes know-how by deceptively masking a lack of the *seat* or physical basis of the relevant ability. In ART PRODIGY, Milly's lack of a seat is masked because it is, in short, *not just her own* (as implied) that is manifest in the work presented as her own, but rather hers in interaction with her parents, who have helped her to a significant extent in producing her works. Milly is good at explaining her work and interpreting it in the light of influences, but the most relevant skill, the capacity to paint, is not just hers; it is not fully attributable. Call this a *skill* downstream criterial fake.

In sum: in each of these three final cases, the agent appears to manifest know-how despite lacking the kind of SSS – skill/shape/situation – competence that know-how implicates; what differs across the cases is just *which* of the three SSS components (skill, shape, or situation) is lacked while being mimicked. Moreover, what is exploited in these final three cases is not merely *symptoms* of know-how implicating competence possession, but actually criteria thereof.³²

³² A referee for *Philosophical Quarterly* proposes an alternative approach to these final cases, focusing on descriptions of the tasks that include the SSS conditions. Under these fine-grained descriptions, our agents would be able to perform intentionally: Pat sells cars relying on a pre-existing wide and excellent client portfolio, Vlad plays chess while under the influence of an illegal substance, and Milly paints with the assistance of her parents. However, we note that under these descriptions, they are *not* impostors as such; they genuinely possess the know-how to perform each of these tasks. They are impostors precisely because we attribute to them the coarse-grained described activity that is manifested under the appropriate SSS conditions.

The table below offers a taxonomy of the ways in which we've classified our menu of cases, with reference to whether what is exploited are upstream symptoms or criteria, or downstream symptoms or (SSS) criteria:

Mechanisms of faking know-how	<u>Symptoms</u>	<u>Criteria</u>
<u>Upstream indicators</u>	LOUSY LAWYER	MARTIAL ARTS MASTER
<u>Downstream indicators</u>	ALTERNATIVE THERAPIST	Situation: PROSPEROUS SALESPERSON Shape: DOPED CHESS PLAYER Skill: CHILD ART PRODIGY

Table 1: Faked Know-How: A Taxonomy

VI. The Resilience Thesis, Revisited

Let's take stock. In §3, we looked at two distinctions that help us classify ways in which know-how is 'fakeable' - viz., by exploiting upstream and downstream indicators, and symptoms or criteria, all of which are in principle capable of being defeated by the presence of relevant tells. The upstream/downstream and symptom/criteria distinctions cut across each other so as to generate four categories of fakes that invite (defeasible) inferences that an individual who lacks know-how possesses it.

The resulting picture, we think, is quite different from the idea we began with, captured by Hawley's initially very plausible looking rationale for the Resilience Thesis. What we've seen, in short, is that - contrary to the idea that in most cases we'd simply spot a know-how imposter by easily observing bad performance - the mechanisms of faking know-how are multifarious. Each of the six examples are cases where, crucially, *we may have excellent justification to attribute*

know-how, and yet, it is not (for various different reasons, corresponding with different ways know-how might be faked) present.

What is more, in each of the six distinct ways we've seen that know-how is fakeable, it is fakeable in a way that needn't accompany any obvious tell. And, we have good reasons to think that the types of cases described here are not idiosyncratic ones. Such faking, we want to suggest, is broadly analogous, rather than disanalogous, to the ways in which propositional knowledge might be faked in a way that would deceive those looking for reliable information rather than reliable performance. In our cases though, the concern is not directly about the potential formation of false beliefs, which is often portrayed as "veritic risk",³³ but rather about the possibility that one may either end up acquiring 'fake know-how' (as opposed to mere propositional ignorance) as an apprentice or client.

VII. Objection and Reply

Suppose an objector reasons as follows: even if we're right that know-how is multifariously fakeable in the various ways captured in Table 1 (§3) above, and thus more easily fakeable than Hawley suggested in supporting the Resilience Thesis, might it not still be the case that knowledge-that is, all else equal, *more easily* faked and systematically so? For one thing, knowledge-that can *also* be faked by exploiting combinations of *its* upstream and downstream, symptomatic and criterial indicator properties. That is, fakers of knowledge-that (e.g., bluffers and liars) might deceive us into believing that they know certain truths *either* by indicating that they were in a position to have acquired that knowledge or more directly by faking its manifestation (e.g., via assertion). Rather than to suppose the situation 'breaks even', we should, as our anticipated objector submits, think knowledge-that is on balance more difficult to detect when faked on account of an asymmetry in the prevalence of (respective) *tells*. The envisioned objector's point is particularly salient in the case of the *client's* perspective. As clients, we identify the quality of the practical performance of others quite easily, even if we lack the know-

³³ Pritchard (2014). For a recent discussion on the nature of epistemic risk within this veritistic framework, see Navarro (2023).

how ourselves; in contrast, we cannot with similar competence identify the epistemic credentials of other people's knowledge-that when we lack that knowledge ourselves.

We recognise the strength of the objection – centred on the client's perspective – but we have two lines of response. The first is to dispute that the above observation supports an all-things-considered asymmetry in client cases. In *some* cases where we are prospective clients Hawley is right, and it will be easier to spot faked know-how than faked know-that. But other cases seem to support the opposite. For example: it's *easy* to fact check many falsehoods with a moment's effort on a smartphone; by contrast, there are plenty of cases where a client may really struggle to figure out if the work is well done unless she knows how to do it herself. For instance, clients of home repair know-how might have to wait years to find out whether the worker really knew how (at the time of the performance) to fix the boiler properly, when its malfunctioning would only occur (if it were to malfunction) if certain conditions held. Analogously, clients of Sadie in LOUSY LAWYER might not have an easy time at all spotting her poor performances in the domain of law, when they themselves lack personal acquaintance with such practice, and could perhaps explain her failures only by inference from results afterwards.

But suppose we simply *grant* for the sake of argument that, from the perspective of would-be clients observing performance, faked know-that 'tells' are often more resilient to successful detection than fake know-how tells. Would this be enough to establish the Resilience Thesis? We think not. The reason – at least in so far as we are right that downstream criterial indicators of know-how include all three types (skill/shape/situational) – comes to the fore once we shift from the perspective of the client to the perspective of the *apprentice*. From the point of view of those aspiring to *learn* from more knowledgeable agents, faked know-how tells are plausibly going to be *more* resilient than fake knowledge-that tells to successful detection.

To see why, consider first our case of May in MARTIAL ARTS MASTER. His familiarity with the practice and his knowledge of the rules is actually manifested in his teaching, but, recall, he exhibits mere *deontic know-how* (i.e., knowledge how one does the relevant moves – of how they ought to be done³⁴), while he lacks the *non-deontic* know-how that good performers have, and the abilities that we are entitled to expect from them. Those deficiencies will very easily go

³⁴ Recall here the comparison with Bengson and Moffett's (2011a) case of the ski instructor.

undetected by May's apprentices, who could actually acquire the know how thanks to his instructions. In contrast, there is no straightforward analogue deception from the client's perspective in the case of knowledge-that, where there is no relevant distinction between it being possessed in a deontic or in a non-deontic way, given that propositional knowledge operates on not infinitival phrases.

The same point may also be illustrated with our case *DOPED CHESS PLAYER*. Suppose we seek out Vlad not as clients but as *apprentices*, and as such, we want to learn how to play tournament chess for ourselves. We observe his performance and ask him to coach us. Vlad teaches us well, performing (in illustrating how to solve chess problems, etc.) in a way that does not involve mistakes, and which includes helpful explanations, etc. While we could (if we so choose) verify whether what Vlad says is *true* on our smartphones during our lessons (checking the truth of his suggestions about the practice against manuals and the view of other experts, for instance), and so would not be that easily duped by his false assertions, we *would* be much more easily duped into thinking *Vlad knows how to play tournament chess*. Per the case description, he lacks this know-how, but in a way that would be undetectable for us as his apprentices.³⁵ Put simply: we would have no method at all at our disposal to clue us in that Vlad's performance in tournaments is deceptive as an indicator that he knows how to play and win in tournament chess; a 'tell' here would require consultation with his doctor and drug tests.

The Resilience Thesis is an asymmetry thesis. Our classification of ways in which know-how can be faked (§3) counts against the kind of simple characterisation that would support such an asymmetry. In this section, we considered an objection that would purport to regain the alleged asymmetry the Resilience Thesis maintains even *granting* our taxonomy of ways know-how can be faked. We've defused objection by focussing on the resilience of fake know-how detection from the perspectives of seekers of knowledge that lack it themselves (in particular, clients and apprentices). First, we challenged whether the objection has bite *even from* the client's

³⁵ Of course, this point is compatible with conceding that as apprentices we might not care, for practical purposes, whether Vlad is merely mimicking tournament chess know-how in virtue of mimicking the shape via drugs. Compare, by way of analogy, with a practical objective in mind (getting to Larissa) we might not care whether a testifier knows what she says, so long as it is true and actionable. We take it a similar point applies here; though, for our purposes, the relevant point is that regardless of whether as apprentices we would be happy for practical reasons to settle for less than to be taught by one with genuine know-how in the relevant domain, their lack of such know how would be highly resilient to successful detection, assuming the drug use was not obvious.

perspective, where a case like LOUSY LAWYER shows that spotting poor performance is not easy at all for those unacquainted with the practice; second, we granted that even if the objection worked for clients, the situation looks the opposite from the apprentice's perspective. In this respect, cases like MARTIAL ARTS MASTER or DOPED CHESS PLAYER illustrate how the faking of know-how would be much more resistant to successful detection than corresponding knowledge-that for those aiming to acquire the relevant know-how. Whereas a belief's being false or unjustified entails a lack of propositional knowledge and blocks or at least severely impedes (propositional) learning through testimony, the situation is different for know-how in the following respect: one can fake possessing (non-deontic) know-how while teaching very well without being detected. There's a good case then for thinking that ascertaining whether someone *really* knows how to do something may accordingly be much more complicated than checking if someone knows that something is the case.

VIII. Concluding Remarks

This paper had two main aims, one negative and the other positive. The negative aim has been to challenge a *prima facie* plausible idea – captured by the Resilience Thesis – and which is consistent with the wider narrative in recent social epistemology, that the kind of ‘fake knowledge’ of particular interest (given its resilience to successful detection) is knowledge-*that*, or propositional knowledge.³⁶ We've argued that the Resilience Thesis is mistaken, and as a result, in so far as we should be interested in ‘fake’ knowledge as a topic in social epistemology, there is good reason to expand the purview of these discussions to deception in connection with *knowledge-how*.

The positive aim of the paper was to clarify, for the first time, just *how* it is that know-how can be faked, and by extension, the varieties of ways we can be potentially duped as prospective apprentices or clients of know-how. Our taxonomy, illustrated through cases that differ depending on whether they involve the exploitation of upstream or downstream symptoms or criteria, clarify not only the structure of how know-how can be faked (and what its tells might be in its different varieties), but it at the same time highlights a wider and more general point about

³⁶ For some useful representative discussion, see, e.g., Bernecker et al (2021).

social-epistemic risk. It is typical to think of epistemic risk in connection with propositional knowledge loss and the spread of falsehoods or in terms of propositional ignorance, where the obtaining of the (epistemic risk) event is conceived of as a risk for potential (propositional) *knowers*. We hope that our paper has shown that this perspective is importantly limited. Both the positive and negative aims of the paper support a broader picture, one that highlights the significance of know-how deception as a largely overlooked dimension of (social) epistemic risk, one we face as prospective clients and apprentices of know-how.³⁷

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³⁷ The authors would like to thank Dani Pino, two anonymous referees at *The Philosophical Quarterly*, and audiences at the Vrije Universiteit Amsterdam and UNED for helpful comments which have improved the paper. Carter’s research is supported by the Arts and Humanities Research Council’s Expanding Autonomy (AH/W005077/1) and Digital Knowledge (AH/W008424/1) projects. Navarro’s research is supported by the European Union – NextGenerationEU initiative and two research projects: The Nature and Normativity of Inquiry (PID2021-123938NB-I00), and Meta-Attitudes, Deep Disagreements, and Moral Progress (PID2021-124152NB-I00), both funded by MCIN/ AEI / 10.13039/501100011033 / FEDER, UE.

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