# A Defense of Parrying Responses to the Generality Problem

(~Penultimate Draft~, Forthcoming in *Philosophical Studies*, please *only* cite published version)

Jeffrey Tolly

University of Notre Dame

The generality problem is commonly seen as one of the most pressing issues for process reliabilism. The generality problem starts with the following question: of all the process types exemplified by a given process token, which type is the *relevant* one for measuring reliability? Defenders of the generality problem claim that process reliabilists have a burden to produce an informative account of process type relevance. As they argue, without such a successful account, the reasonability of process reliabilism is significantly undermined. One way for the reliabilist to respond is to attempt to construct such a theory of type relevance. But another way of responding is to argue that, if finding an account of type relevance is a burden for the reliabilist, then it is also a burden for everyone (or, mostly everyone) else. Thus, the generality problem doesn't present some unique reason to reject process reliabilism. I call this latter strategy a *parrying response*. In this essay, I examine the contemporary parrying responses of Michael Bishop and Juan Comesaña, which have both faced recent criticism. I respond to these critics, and argue that parrying responses are far stronger than defenders of the generality problem have appreciated.

Epistemology, Process Reliabilism, Justification, Warrant, Externalism, Generality Problem

## 1. Introduction

Process reliabilism is an important contemporary externalist approach for analyzing epistemic concepts. Both a process reliabilist theory of warrant and a process reliabilist theory of justification have been presented and defended in the literature. Process reliabilism about justification and process reliabilism about warrant share this common feature: they both claim that the agent's use of a reliable belief-forming process to arrive at her belief is the key

<sup>&</sup>lt;sup>1</sup> By warrant, I use this term in the functional sense much like Plantinga does, where warrant is the state the possession of which grounds one's having knowledge that p so long as she also possesses belief that p and p is true (Plantinga (1993: v)).

ingredient that grounds the belief's possession of the relevant epistemic property (whether warrant or justification).<sup>2</sup>

While there have been many criticisms of reliabilist theories of warrant and justification, I want to address one particular objection that's become rather popular throughout the past three decades: the generality problem.<sup>3</sup> The generality problem begins with a puzzle. Processes can be thought of as general repeatable types, or as precise one-off tokens. Plausibly, only the former can be evaluated for reliability or unreliability.<sup>4</sup> As both defenders and critics of reliabilism have noticed, a given process token exemplifies *many* types. A given case of seeing a red ball at close distance—and then coming to believe *a red ball is in front of me* on the basis of that visual experience—exemplifies the following types: [belief formation], [visual belief formation], [visual belief formation in good light at a close distance], etc. Reasonably, not all of these types are measured for reliability in determining whether the target belief has warrant or justification. Indeed, perhaps only one of them is relevant for determining justification or warrant.<sup>5</sup> But *which* type is the relevant one? This very question constitutes the starting off point for the generality problem.<sup>6</sup>

According to the literature, this generality problem *question* turns into the generality problem *objection* to reliabilism upon realizing that humans—including the best philosophers—do (and have done) a poor job answering the generality problem question. It is *our lack of understanding* into the notion of type relevance that constitutes the key premise in the generality problem objection. Over the course of the past three decades, various philosophers have presented theories of process type relevance—i.e., theories of what determines type relevance for belief-forming process tokens.<sup>7</sup> These theories are typically constituted by principles or conditions stating which sorts of features of a token are "held fixed" in the relevant type

\_

<sup>&</sup>lt;sup>2</sup> For an early formulation of a reliabilist account of justification, see Goldman (1979:13-14) for an account *prima facie* justification and pg. 20 for the additional no defeater condition (for *ultima facie* justification). For an account of warrant in which reliability figures as the central grounding feature, Goldman (1986:44-5) presents a reliabilist theory requiring that an agent's belief-forming process has both "local" and "global" reliability in order to confer warrant.

<sup>&</sup>lt;sup>3</sup> See Goldman and Beddor (2015). In their overview of the work done on reliabilist epistemology, they include the generality problem as one of the top six "problems," or, "objections" to reliabilism.

<sup>&</sup>lt;sup>4</sup> Richard Feldman (1985) and Goldman (1979) are key figures who highlighted this important distinction for making sense of reliabilism. Most philosophers agree that types, rather than tokens, are the entities that can be measured for reliability. Although recently, Juan Comesaña (2006) articulates a way in which tokens could be evaluated for reliability with respect to some space of possible worlds as a reference class. Even if this way of conceiving *measuring a token for reliability* makes sense, Comesaña, correctly, recognizes that framing reliabilism like this doesn't get the reliabilist out of the generality problem. The reliabilist still would have to provide an account of which possible worlds were contained within the reference class used to evaluate the token's reliability. See §2.3 for a discussion regarding the close connection between the reference class for measuring reliability and the relevant type.

<sup>&</sup>lt;sup>5</sup> For example, presumably, [belief formation] isn't the type that gets evaluated for reliability. Consider someone who, sadly, is a BIV, such that their *perceptual* beliefs are all systematically false. Such a person, presumably, can still have reliable and justified *intuition* beliefs in *a priori* claims. But, if the relevant type for these intuition belief tokens was just [belief formation], then the reliability measurement would be significantly decreased from all of the false perceptual beliefs formed by the agent (since *perceptual belief formation* is contained within the more general category of *belief formation*)

<sup>&</sup>lt;sup>6</sup> See Feldman (1985:160) for the introduction of the term "relevant type," which has become standard terminology in the generality problem literature to denote the type exemplified by a token whose reliability measurement determines whether or not a given epistemic property is exemplified.

<sup>&</sup>lt;sup>7</sup> For examples of relevance theories, see Schmitt (1992), Beebe (2004), Leplin (2007), Wallis (1994), Heller (1995), and Becker (2008) Adler and Levin (2002), Alston (1995) and Lepock (2009), Comesaña (2006), Sosa (1991), Goldman (1986), Greco (2010).

descriptions for those tokens. Critics have been quick to point out crippling difficulties with the relevance theories that have been proposed. Earl Conee and Richard Feldman are the arch defenders of the generality problem objection, and it turns out that others are inclined to agree with them in their critical stance towards the relevance theories currently on offer.<sup>8</sup> Conee and Feldman conclude that the generality problem objection makes "process reliability theories of justification and knowledge look hopeless."

Here, it is important to point out that very little work has been done to formulate exactly just *how* our lack of ability to answer the generality problem question generates a defeater for reliabilism. How might such an argument go? It is beyond the scope of this paper to attempt to formulate an argument that represents the strongest version of the generality problem objection. However, I contend that proponents of the generality problem objection hold that the strongest formulations of this objection all in some way (either explicitly or implicitly) depend on the following key claim: Reliabilist theories have an explanatory burden to produce an informative relevance theory because they invoke type relevance as playing an important explanatory role, and that failure to fulfill this burden significantly undermines the reasonableness of reliabilism. Presumably, one who defends this key idea thinks that it follows from a more general principle about explanatory burdens that come with invoking relevant process types, rather than following from some other particular features of reliabilist epistemic theories. We can formulate this general principle as follows:

#### Process Type Burden (PTB)

Necessarily, for all epistemic theories, if an epistemic theory invokes relevant process types (as playing a grounding or explanatory role) that share a similar degree of complexity to the relevant types invoked by reliabilism (either about justification or warrant), then that epistemic theory has an explanatory burden to provide an informative theory of type relevance.

Hence, in some way, we should conceive of the most reasonable formulations of the generality problem objection as being *PTB-based arguments*.

\_

<sup>&</sup>lt;sup>8</sup> For the most thorough and popular criticism of many of the relevance theories on offer, see Conee and Feldman (1998) and then supplementary critical articles by Brueckner and Buford (2013), Conee (2013), Dutant and Olsson (2013), Matheson (2015), and Conee and Feldman (2002). According to Feldman (1985), a solution to the generality problem falls into the no-distinctions problem if it types processes too broadly, so that intuitively justified cases of belief formation get ruled as unjustified (or vice versa). A solution to the generality problem falls into the single-case problem if it types processes too narrowly, such that any true belief will come out as justified, and any false belief comes out as unjustified (which is intuitively incorrect). Conee and Feldman (1998) argue that every candidate relevant theory presented in the literature either falls into one of these two problems, or fails to deliver specific verdicts on which type is relevant.

<sup>&</sup>lt;sup>9</sup> Conee and Feldman (1998: 24). For similar sentiments on the force of the generality problem objection to reliabilism, see Plantinga (1993: 28-29), Matheson (2015).

<sup>&</sup>lt;sup>10</sup> Here's an illustrative quote that references the sorts of considerations that are present in the way defenders of the generality problem objection explain how the argument works:

Of course, the arguments of this paper do not show that no acceptable version of the reliability theory can be constructed. However, it is fair to say that The Problem of Generality is a serious problem for the theory... To make the reliability theory plausible, then, some other way must be found to specify processes, some way that assures that only reliable processes operate in cases in which one's evidence does support a belief adequately and only unreliable processes operate when one's evidence fails to support a belief. While it may be possible to come up with a general account of processes that satisfies this requirement, I believe that the prospects for doing so are not good. (Feldman 1985: 172, emphasis mine)

One rather straightforward way to respond to PTB-based arguments that readily suggests itself is simply to find and defend a correct relevance theory. If reliabilists make significant progress on a relevance theory in the future, then any PTB-based arguments will at that point be undermined. Call this response strategy the "head-on" response.

But there's another way to respond to PTB-based arguments. Let's say that a given epistemic theory satisfies PTB just in case it satisfies the antecedent of PTB, i.e., just in case it too invokes relevant process types roughly as complex as those invoked by reliabilism as playing some important explanatory role. If it can be shown that other reasonable candidate epistemic theories satisfy PTB, then it follows that PTB would generate an objection to these other theories insofar as they too lack successful relevance theories. Showing that some other theory T1 satisfies PTB as well would constitute a sort of tu-quoque objection to those who both hold to T1 and defend the generality problem objection against reliabilism. Call this sort of response to PTB-based arguments parrying responses. Let's say that a parrying response R applies to a given theory T if and only if R successfully shows that T satisfies PTB. Parrying responses can be stronger or weaker depending on the number of competitor theories to which they apply. For simplicity's sake, call a strong parrying response a parrying response that applies to many epistemic theories. Strong parrying responses, in addition to constituting a tu-quoque response to individual epistemic theories to which it applies, offer further reason to reject the generality problem objection in virtue of showing that the generality problem objection simply proves too much. Objections that undermine almost every candidate view in a domain can often be reasonably dismissed.

Given the differences between warrant and justification, one can technically distinguish a generality problem objection that uniquely targets process reliabilism about justification from a generality problem objection that targets reliabilism about warrant. Because of this, one can also distinguish two different sorts of parrying responses:

<u>Justification Parrying Responses</u> to the generality problem objection argue that other candidate theories of justification satisfy PTB.

Warrant Parrying Responses to the generality problem objection argue that other candidate theories of warrant satisfy PTB.

It is possible that one kind of argument might constitute a strong warrant parrying response, while failing to constitute a strong justification parrying response (and vice versa). This would be the case if, for instance, the argument successfully shows that many candidate theories of warrant satisfy PTB, while failing to show that many candidate theories of justification satisfy PTB.

In this paper, I'm concerned with developing three sorts of parrying responses that have recently received attention in the literature, and arguing that they are in fact *strong* parrying responses. In §2, I present Michael Bishop's *reflective justification* parrying response, which I take to be both a warrant parrying response and a justification parrying response. I then respond to Earl Conee's strategy for undermining Bishop's parrying response. In §3, I engage with Juan Comesaña's head-on response to the generality problem, and then briefly recount Alex Arnold and Jon Matheson's criticisms of it. After taking stock of how Comesaña's head-on response fails, I formulate two distinct new parrying response arguments one could glean from his discussion of the generality problem. The first parrying response exploits the notion of evidence possession, and constitutes both a warrant and justification parrying response. The second parrying response invokes the notion of *competent basing*, and constitutes only a

warrant parrying response. I argue that both of these, just like the reflective justification parrying response, are strong parrying responses.

# 2. Reflective Justification and Bishop's Parrying Response

## 2.1 Bishop's Parrying Response

Michael Bishop thinks that every good epistemic theory of justification needs to account for how reflective justification can contribute to one's doxastic justification for believing some target proposition p. According to Bishop, S's belief that p has reflective justification just when "S's belief is justified on the basis of S's knowledge that she arrived at it as a result of a highly (but not perfectly) reliable way of reasoning" (Bishop 2010: 286). So, reflective justification is a sort of inferential justification. More precisely, S's belief that p is reflectively justified if and only if S competently infers p from a chain of reasoning constituted by one premise that identifies a particular belief-forming method M as being reliable, and another premise identifying that M delivers the judgment that p, where S is justified in believing these premises and the premises are true. 12

Here's a testimonial example of reflective justification inspired by one of Bishop's cases. 13

#### **SUSAN**

You know that Susan studied US history in graduate school. You have good reason to believe that she is a reliable testifier in the domain of US history. From this you come to justifiedly believe that

S1 Deferring to Susan about US history is a reliable way to form beliefs about US history.

You ask Susan a US history question, and she delivers the answer that p. You then believe that

S2 Deferring to Susan about US history would lead me to believe p.

<sup>&</sup>lt;sup>11</sup> Reflective justification should not be confused with higher order justification (i.e., justification to believe one is justified in believing p). Here, Bishop is introducing reflective justification as a technical term that refers to a kind of belief formation that he thinks is rather common in normal everyday life.

<sup>&</sup>lt;sup>12</sup> Technically, the inference pattern in a case of reflective justification could include other supporting premises to the two main ones given here. Also, in the quote on 286, Bishop claims that it is one's *knowledge* of the premises constitutive of a reflective justification inference that's important, rather than mere justified belief. In my own reconstruction of reflective justification, I only require that the agent justifiedly believe these two premises and that the premises are true. I do this for two reasons: First, I think knowledge of the two premises is too demanding for an account of reflective justification. Secondly, my weaker account of reflective justification still gets Bishop's argument off the ground, and invokes necessary conditions on reflective justification that would also be accepted by those who prefer the more demanding knowledge condition as well

<sup>13</sup> Bishop (2010: 289)

Then, you competently perform the inference from S1 and S2 and come to hold p as a result.

We could multiply examples here. For instance, one could replace a reliable testifier about US history with a reliable thermometer giving temperature readings in a particular region and then make the relevant question about the temperature for that region. Bishop claims that, in everyday life, we frequently solve problems and form beliefs in ways that exemplify the general pattern of reflective justification. He also claims that inferences that satisfy the requirements for reflective justification clearly confer justification on their target beliefs (288).

Given that reflective justification in fact confers justification on our beliefs, Bishop argues that any plausible epistemic theory has to account for how cases like this confer justification (289). Now, consider S1. Every epistemological theory will need to capture how facts like S1 ground or explain why competently performing a reflective justification inference confers justification on the target belief. Yet notice, the notion of a reliable way to form beliefs about x is a constituent of S1. The phrase "a way to form a belief" just refers to a belief-forming process. Also, belief-forming processes are only reliable or unreliable considered as belief-forming process types. Here, the generality problem emerges: what is the correct relevant process type referred to in S1? What does the type, deferring to Susan about US History, amount to? Is it believing whatever she says about US history? Is it believing whatever she says about US history in cases in which she's not drunk? Is it believing whatever she says about US history in cases in which she is sober and not sleep-deprived?, etc. The list goes on. But only one of these is the *relevant* type description for the method referred to by S1. Hence, given that there's one relevant type referred to in S1, and that any good theory of justification will need to capture how the S1-S2 inference confers justification, then any candidate theory of justification will have to invoke relevant process types. Hence, any reasonable candidate theory of justification satisfies PTB. I take this to be the essence of Bishop's argument.

Technically speaking, it is clear that the reflective justification parrying response doesn't apply to *all* theories of justification.<sup>14</sup> Consider phenomenal conservatism, which claims that a belief that p is prima facie justified for S if it seems to S that p is true.<sup>15</sup> Bracketing concerns about ultima facie justification, it is open to a phenomenal conservative to simply claim that the premises of a reflective justification inference don't ground the justification S gets for p in any central way. Rather, the only entity responsible for grounding S's justification is the *seeming that p* which S receives upon completing the inference. This being the case, the phenomenal conservative could deny that the reflective justification parrying responses shows that her view satisfies PTB.

Nevertheless, I think that the reflective justification parrying response applies to a great many views of justification, thus making it quite strong. In addition to being a justification parrying response, I think it also constitutes a strong warrant parrying response. The reflective justification inference pattern also seems to be satisfied in many cases of inferential warrant. Given that any reasonable theory of warrant needs to account for how inference with premises like S1 can confer warrant on a target belief, there's good reason to hold that any reasonable theory of warrant satisfies PTB as well.<sup>16</sup>

<sup>&</sup>lt;sup>14</sup> Thanks to Daniel Immerman for raising this point in discussion.

<sup>&</sup>lt;sup>15</sup> See Huemer (2001: 99) for a similar formulation.

<sup>&</sup>lt;sup>16</sup> Consider once again the phenomenal conservative about justification. While there are many phenomenal conservatives about justification, there seem to be fewer phenomenal conservatives about warrant. So, reflective justification can still get traction as a warrant parrying response for many individuals who are phenomenal conservatives about justification.

#### 2.2 Conee's Rejoinder

Earl Conee demurs. He denies that countenancing reflective justification inferences commits a theory to invoking relevant belief-forming process types. Conee does think that cases of reflective justification give "an evidential role to certain justified beliefs about reliability" (Conee 2013: 760). However, he denies that these justified beliefs attribute reliability to particular *belief*-forming process types.

I'll fill out Conee's account below, but let me flag here that Conee's response implies that Bishop has technically mischaracterized cases of reflective justification. Clearly, S1 does attribute reliability to a particular belief-forming process type. S1 claims that a certain "way" of forming beliefs is reliable. Conee's strategy entails that beliefs like S1 aren't actually playing a role in generating reflective justification.

So, if reliable belief-forming processes aren't constituents of premises in reflective justification inferences, what other epistemic factor *is* involved? Conee claims that reflective justification inferences involve premises which ascribe reliability to *things* like tests (e.g., a thermometer) and testifiers rather than to belief-forming processes.<sup>17</sup> So, instead of S1, Conee thinks that the relevant proposition constitutive of one's reflective justification in SUSAN is

#### S1\* Susan is a reliable testifier about US history.

One might now wonder about the specific nature of the epistemic support that a claim like S1\*, in conjunction with S2, gives to the target proposition p. Conee explains as follows:

The evidential relevance of the reliability propositions to the justification of the target beliefs in the [test and testimony] cases is to give the believers broadly *inductive* evidence for the truth of those beliefs. Nearly enough, each justified reliability proposition asserts that the corresponding believed proposition has a certain contingent property that is shared mostly by truths. Having justification for those propositions that place the target beliefs in contingent classes that contain mostly truths gives the believers routine *inductive* reasons to think that the target beliefs are true. (761 emphasis mine)

So, by Conee's lights, believing S1\* and S2 in the Susan case is a special case of having good *inductive* support for a target proposition p.

### 2.3 Bishop's Parrying Response Defended

I'll grant, for the sake of argument, that Conee's inductive support proposal shows how cases of reflective justification needn't invoke relevant *belief-forming* process types. However, this move doesn't really undermine Bishop's parrying response. This is because the inductive support proposal invokes a kind of reliability that applies to a different sort of process: what I call *information delivery* processes.

To begin, consider the concepts *reliable testifier* and *reliable test*. What are these? What does it take to be a reliable testifier or a reliable test? First, it is important to recognize what testifiers and tests *do*: they communicate/deliver information. In other words, these testifiers or tests

<sup>&</sup>lt;sup>17</sup> 2013: 760

are important constituents in events characterized by some piece of information being delivered. Testifiers and tests can deliver information that's either true or false. As a first pass, a reliable testifier is one that reliably delivers true information. But what does it mean for a testifier to reliably deliver true information? Importantly, the concept reliable testifier is always relativized to a particular set of conditions. For instance, when we say that Susan "is reliable," what we mean is that she's reliable given a very specific characterization of her testimonial acts. For instance, she's reliable with respect to certain sorts of contents she might deliver—namely, contents about US history. Also, she is reliable only in certain circumstances. She's not reliable at answering questions about US history when she's starving, totally dehydrated, just woken up from a deep sleep, being paid to lie to everyone she talks to, about to skydive, having a panic attack, or having just taken large amounts of marijuana. So, the idea that "Susan is reliable" is more precisely framed as "Susan is reliable about a given domain of claims when asked in circumstances of type C." This is what we actually mean when we note Susan's reliability.

The same goes for the concept *reliable thermometer*. With a good thermometer one can buy at the store, no one thinks it is reliable at delivering the correct temperature in temperature ranges above 700 degrees Celsius. Indeed, at those temperatures the thermometer would be melting! It is also the case that a standard mercury based thermometer won't be reliable under conditions of extraordinary air pressure. So again, our idea of a reliable thermometer is more precisely seen as a thermometer that is reliable *for a given domain* of temperatures *under circumstances of type D*. Both the concept of a reliable thermometer and the concept of a reliable testifier share *circumstance* and *domain* qualifications.

Next, consider the metaphysical workings of the reliability measurement that pertains to whether some testifier is reliable. When we evaluate for reliability here, we're invoking a certain sort of *ratio*: the ratio of cases in which the testifier delivers *true* information to those in which she delivers *false* information, across a certain class of cases/situations. The class of (actual or possible) cases, with respect to which a reliability measurement is taken, is called the reference class. For evaluating the reliability of a testifier, the cases constituting the corresponding reference class are comprised of particular information delivery process events, in which that testifier is delivering some piece of information. But our investigation above also reveals that two other important features are held fixed in all the reference class cases corresponding to the reliability measurement of a testifier: a *relevant circumstances* description, and a *relevant domain* description.<sup>18</sup>

Importantly, belief-forming process types share the *same* sort of relationship with corresponding reference classes. Consider once again the case of visually coming to believe *there's a red ball in front of me*. When we're wondering whether S's belief-forming process is reliable, we're only concerned with the ratio of truth to falsehood S would have across a class of possible belief-forming cases (i.e., possible belief-forming events) in which S is forming judgements with *a particular sort of content* in *a particular kind of circumstance*. For instance, in this particular case of visual belief formation, it is irrelevant whether S is competent when it comes to abstract mathematical belief formation, or how accurately S would form visual beliefs while also undergoing brain surgery.

Here, I posit the following relationship between the relevant type and the reference class: all of the event particulars that constitute the reference class for a given token t exemplify t's relevant type. Seeing this is rather straightforward. It doesn't make sense for the reference class for a belief-forming token to include cases that don't exemplify that token's relevant type description, given that the reliability measurement for that token is determined by the ratio

\_

<sup>&</sup>lt;sup>18</sup> The same also holds for reference classes corresponding to tests.

taken across all the particulars that comprise the reference class. Hence, if a theory invokes a reliability measurement taken across some reference class, it follows that the theory thereby invokes a relevant type description that's exemplified by all of the event particulars constituting the reference class.<sup>19</sup> It also follows that a theoretical account of what determines the features held fixed across a token's reference class *suffices* for being an account of what determines a token's relevant type.<sup>20</sup>

As we've seen, *both* the concept of a reliable belief-forming process and the concept of a reliable testifier correspond to respective reference classes of cases in which some content and condition description is held fixed throughout. If my above observation regarding the relationship between relevant process type descriptions and reference class descriptions is right, then it is the case that one is committed to there being relevant process types of some sort if one invokes reliable testifiers. Here, I'll simply call them relevant information delivery process types. Clearly, these relevant process types play a central explanatory role in Conee's account of reflective justification.

This discussion highlights how explicating reliable testimony doesn't seem in any way importantly different or less complex than explicating reliable belief formation. Therefore, Conee's response to Bishop hasn't succeeded in showing how a reasonable candidate epistemic theory might escape satisfying PTB while still accounting for reflective justification.<sup>21</sup>

-

<sup>&</sup>lt;sup>19</sup> Given the characterization of the generality problem according to Feldman (1985) and Conee and Feldman (1998), the problem for the reliabilist is that, although we can know the features of a given token, we don't know how to perform the reliability measurement for that token to determine whether that token confers justification or warrant on the target belief. For the token case of seeing and coming to believe in the presence of a red ball (discussed in the introduction), we don't know whether to perform the reliability measurement with respect to [belief-formation] in general, or with respect to [perceptual belief-formation], or with respect to [visual-belief formation], etc. But the more precise way to formulate this puzzle is in terms of the reference class corresponding to the token: we don't know whether the token's reference class is comprised of particular cases of all sorts of belief formation, or just with particular cases of perceptual belief-formation, or just with cases of visual belief-formation, etc. If we could completely determine the features of a token's reference class, then this would effectively answer the questions Conee and Feldman raise to get the generality problem going. <sup>20</sup> Wallis (1994:251-262), argues that the relevant type and the reference class are distinct, and hence there are actually two questions raised by the generality problem: First, what is the relevant type for a token? Secondly, what is the reference class for measuring reliability for a token? He claims that making progress on the generality problem requires keeping these two questions (and their answers) distinct in our theorizing. Here, however, he doesn't specifically argue why, methodologically, it is important for addressing these two questions separately. As I've articulated above, if one offers an account of the reference class, one thereby also succeeds in offering an account of the relevant type—given that all of the reference class cases share the relevant type description in common.

<sup>21</sup> It is not surprising that Conee's *inductive* support theory of reflective justification invokes rather complicated process type descriptions. Inductive support is a sort of probabilistic support. Probability theory comes out of measure theory. When we consider the probability that some state G will obtain, in some way we're comparing the "measure" of relevant situations in which G obtains with the measure of relevant situations in which G doesn't obtain. But the "relevant situations" here constitute a reference class, without which all talk of probability won't make sense. Since any probabilistic judgment necessarily invokes a reference class, Alan Hajek notes that every theory of probability has *the reference class problem* (2007)—namely, the problem of specifying the reference class for a given probability measurement. Reichenbach (1949) formulates the problem of determining the reference class in terms isomorphic to the generality problem for process reliabilism.

If we are asked to find the probability holding for an individual future event, we must first incorporate the case in a suitable reference class. An individual thing or event may be incorporated in many reference classes, from which different probabilities will result. This ambiguity has been called the *problem of the reference class*. (374)

# 3. Comesaña's Response to the Generality Problem

### 3.1 Comesaña's Head-On Response, and a Simple Parrying Response

The ingredients for a rather simple parrying response to the generality problem objection can be seen in Juan Comesaña's head-on solution to the generality problem. Comesaña claims that any good epistemic theory of justification needs to have an account of doxastic justification, not just propositional justification. The important difference between propositional and doxastic justification is illustrated by the following two sorts of cases. First, S can possess evidence that adequately supports believing a proposition without S's actually believing that proposition. This is a case of having propositional justification without doxastic justification in virtue of never forming the belief. Second, consider someone who possesses good empirical evidence to believe p: a rare species of eagle is currently nested in a particular region of the Andes Mountains. Suppose the agent believes p, but sadly believes p on the basis of flipping a coin rather than on his good evidence. Here, the agent's *belief* is not doxastically justified, even though believing the proposition is propositionally justified for him given his evidence. Most epistemologists agree that in order to have doxastic justification, one must *base* her belief in the evidence she has that sufficiently supports belief that p.

In addition, it is reasonable that a belief B's being based on evidence E at the very least entails that S possesses E and that B was non-deviantly caused by the mental states which represent E. Hence, as Comesaña points out, every epistemic theory needs to posit the following sort of belief-forming process in order to adequately account for doxastic justification: the *basing on evidence* process.

Comesaña continues,

It follows that we have good reasons to believe that any adequate epistemological theory needs to appeal, either implicitly or explicitly, to the notion of a belief's being based on certain evidence. In the next section I will argue that that notion is all we need to solve the generality problem. If this is so, then any adequate epistemological theory is going to have the resources to solve the generality problem. (2006: 33)

Comesaña thinks that the correct answer to the generality problem is revealed once the reliabilist sees *basing on evidence* as the central feature of relevant belief-forming process types.

Given that there will always be some evidence that the belief is based on, the process that generates the belief will always instantiate a case of the type-schema *producing a belief that p based on evidence E.* (2006: 37)

Comesaña claims that this solution to the generality problem "should be accepted not only by Conee and Feldman, but by anyone who thinks that an epistemological theory is incomplete without an appeal to the basing relation" (38).

If Comesaña's head-on solution to the generality problem succeeds, then PTB-based arguments fail. For what it is worth, Comesaña's head-on response raises a simple parrying response to the generality problem objection as well. If Comesaña is right, then *every* candidate epistemological theory invokes the process type *basing belief that p on evidence* E (where p and E here are variables whose specific values change from token to token). If this type *just is* the relevant type that reliabilists invoke in their theory, then every candidate epistemological

theory invokes the same sorts of types invoked by reliabilism. Hence, every candidate epistemological theory satisfies PTB.

### 3.2 Refuting Comesaña's Head-on and Simple Parrying Responses

But there are problems with Comesaña's treatment of the generality problem. First, his headon response falls prey to some compelling objections. To begin, Alex Arnold points out that
typing processes according to the *producing a belief that p based on evidence* E schema delivers
incorrect verdicts for which types are relevant in cases of believing necessary truths (2011:
128). Suppose Goldbach's conjecture is true, and someone comes to believe it by basing the
belief on the claim *lollypops are delicious*. It seems as if this belief would be unjustified, but the
type *producing a belief that Goldbach's conjecture is true based on evidence* E for any E (including *lollypops are delicious*) will yield a reliably formed belief. This is because every metaphysically possible
belief-forming scenario which satisfies this type will be a scenario in which a true belief is
formed. After all, Goldbach's conjecture is true in every possible world/situation, including
the possible situations in which one comes to be believe Goldbach's conjecture on the basis
of some other claim. This means that the reference class corresponding to this type will
manifest a perfect reliability measurement. Hence, believing Goldbach's conjecture on the
basis of *lollypops are delicious* would end up being justified (perhaps maximally so), and this is
clearly the wrong result.

Perhaps there's some patch one *could* make for the view to correct this problem with necessary truths. However, there's an even more problematic feature with Comesaña's treatment of the generality problem, which undermines both his head-on solution, and the simple parrying response one could glean from it. As Jonathan Matheson points out, Comesaña's head-on solution doesn't tell us *which* possible situations/events—that satisfy the description *producing a belief p on the basis of evidence* E—are epistemically relevant for the reliability measurement and belong in the reference class (2015: 467). Does the reference class include *every* possible belief-forming situation characterized by the description *believing p on the basis of* E? It is doubtful that reliabilists would invoke a reference class this broad.

Consider the following example: Someone is walking around in her environment and comes upon a red ball and subsequently gains the evidence E1 of a visual experience representing a red ball in front of her. Suppose that, on the basis of E1, she comes to believe that p1: there is red ball. It is doubtful that that the correct reliability measurement is taken across all possible worlds in which S comes to believe p1 on the basis of E1. Presumably, the reliabilist thinks that certain external factors (from S's environment) are relevant to whether or not S's belief in this case is reliably formed. These external factors might include whether or not there are hidden red lights present in the area that tend to illuminate white objects to look red, whether people have set up red ball facades in the general area of S, whether or not there's a malicious demon in S's environment who likes to deceive agents like S, etc. According to reliabilism, then, there's some description (C) of S's environment that must be held fixed in the reference class in order to determine the intuitively correct reliability measurement. Therefore, the crucial information required for measuring reliability, for a given token, is captured in the following schema instantiated by the token: believing p on the basis of E in circumstances C, not just believing p on the basis of E. But how do we determine how narrowly or broadly to construe C for each token case? Unfortunately, Comesaña doesn't say anything about the circumstances C description that's held fixed across a reference class. This being the case, Matheson helpfully points out that Comesaña's head-on solution to the generality problem is woe-fully incomplete.

Drawing on this shortcoming, we can see that the simple parrying response, raised by Comesaña's head-on response, fails as well. Before explaining why it fails, it is instructive to present Matheson's favored theory of justification: Evidentialism. For our purposes here, it is helpful to see evidentialism as denoting a family of specific views that all analyze justified belief in terms of evidence, evidence possession, evidential support, and basing *rather than* the reliability of belief-forming process types. What differentiates the various specific evidentialist theories are their differing accounts of evidence, evidence possession, and evidential support. As a matter of fact, the most ardent supporters of the generality problem objection against reliabilism are evidentialists, e.g., Conee and Feldman. It is also the case that these evidentialists who defend the generality problem objection, for the most part, formulate their evidentialist theories to be internalist in nature.<sup>22</sup> Technically speaking, not all evidentialist theories are internalist, but for simplicity's sake in this paper, we'll let "evidentialism" denote an internalist family of views.<sup>23</sup>

Against the simple parrying response one could glean from Comesaña's head-on response, Matheson argues,

While evidentialism does claim that a certain belief-forming process is relevant for doxastic justification, evidentialism does not claim that the justification of a belief results in any way from any property of that belief-forming process type. In contrast, evidentialism claims that it is properties of the evidence that are relevant. Since according to evidentialism no property of the belief-forming process—believing P on the basis of E—is relevant to the justificatory status of a belief, the question of which possible worlds are relevant to assessing some property of that belief-forming process type simply does not arise. Since no property of the process type is relevant, no questions surrounding how to evaluate any such property are relevant either. (2015: 467-8)

Matheson is saying that evidentialists *don't* think that S's justification depends at all on a reliability measurement taken across a class of possible belief-forming events in which S bases p on E. Rather, justification is simply determined by an internal relation between E and p itself. It follows from this that evidentialists needn't invoke anything like the *circumstances C* description to hold fixed across a reference class. However, the circumstances C component of the reference class is a crucial theoretical posit that plays a central role in grounding justification and warrant verdicts for the reliabilist. Given that the evidentialist doesn't posit a complex reference class with this *circumstances C* qualification, she lacks a significant explanatory burden that the reliabilist possesses. I take this to be a rather compelling refutation of the simple parrying response one might draw from Comesaña's account.

Nevertheless, I contend that Comesaña's simple parrying response points, in a less straightforward way, to two stronger parrying responses that the reliabilist could make. Here, I'll specifically argue that these parrying responses even apply to reliabilism's main foil in this

<sup>&</sup>lt;sup>22</sup> By internalism about justification, I merely mean the thesis that internal duplicates are also justification duplicates. See Conee and Feldman for a specific defense of this internalist supervenience thesis for their version of evidentialism (2001: 3-5).

<sup>&</sup>lt;sup>23</sup> For examples of externalist evidentialist views, see Arnold (2011: 162-172) and, arguably, Alston (1985) and (1988).

debate: evidentialism. First, Comesaña's arguments highlight the importance of accounting for evidence *possession*. It turns out that explaining this phenomenon generates a strong justification and warrant parrying response. Secondly, there's a certain *kind* of basing that's required for warrant, and explicating this more robust form of basing generates a strong warrant parrying response that is effective against evidentialist theories of warrant.<sup>24</sup>

#### 3.3 Evidence Possession and a Parrying Response

Like Comesaña claims, it is quite plausible that every good theory of justification and warrant will need to account for how one's evidence factors in to whether and how she knows or justifiedly believes some claim. This means that every good epistemic theory needs to have some account of evidence possession. In what follows for this section, for simplicity, I'll only write in terms of justification, but I take the relevant upshots of this discussion of evidence possession to apply equally well to warrant.

To begin, understanding evidence possession requires some idea about what evidence itself is. Some hold that propositions are evidence, and some hold that facts are evidence.<sup>25</sup> On these two views, the account of evidential support is rather straightforward, since intuitively it seems like propositions and facts themselves are the sorts of entities that can stand in evidential support and evidential disconfirmation relations to other claims one may or may not believe. Clearly, it is not the case that every fact or every proposition is automatically possessed by someone as her own evidence. Factual and propositional accounts of evidence typically impose a mental representation requirement on evidence possession: in order for S to possess evidence E (where E is a fact or proposition), S must have a mental state that represents E as being true. Here, these mental states amount to beliefs or representational experiences (like perceptual experiences). Conee and Feldman's particular evidentialist view, called mentalism (M), on the other hand, rejects factual and propositional accounts of evidence. They claim that the representational mental states themselves are the evidence that an agent has.<sup>26</sup> On M, evidential support for some claim p happens in virtue of the representational contents of an agent's mental state evidence standing in supporting relations to p.

Here, I won't engage in arguments about which account of evidence is correct. But for simplicity moving forward, I will write in terms of a propositional view of evidence. One can easily translate what I say below into a mentalist account of evidence in the following way: take sentences of the form "S possesses proposition e as evidence" to actually mean "S possesses the mental state m, which represents content e, as evidence."

So, we can ask the following question: what are the sorts of contentful mental states that can represent the propositions constitutive of one's evidence? There seem to be two reasonable candidates to choose from:

<sup>&</sup>lt;sup>24</sup> By an "evidentialist theory of warrant," I mean a theory that roughly holds that *basing p on good enough evidence E* is a crucial necessary component to having warrant. These views might also posit an additional *anti-luck* condition as well.

<sup>&</sup>lt;sup>25</sup> See Arnold (2011:144-155) for a defense of the claim that facts are evidence. Arnold distinguishes facts from propositions in the following way: facts are what true propositions are about, and facts can be partially concrete (rather than fully abstract) if some of their constituents are concrete. For instance, the fact that *earth revolves around the sun* is partially concrete in virtue of the earth and the sun being concrete objects. See Dougherty (2011) and Williamson (2002) for a defense of the view that evidence is propositional.

<sup>&</sup>lt;sup>26</sup> See Conee and Feldman (2008: 87-88), (2001: 1-5).

Occurrent Thesis (OT)

Moderate Thesis (MT)

Necessarily, S's evidence for p at t can only consist of propositions that S is occurrently representing at t. Necessarily, S's evidence for p at t can consist of propositions that S is representing either occurrently or dispositionally at t.

I think there's good reason to reject OT. Alex Arnold argues that the OT thesis cannot generate the correct justification verdicts on a variety of particular cases. For one, he argues that, intuitively, OT delivers the incorrect result regarding justified belief (and knowledge) while the subject is sleeping (Arnold 2011: 95). Intuitively we know many things while we're asleep. It is not as if our knowledge vanishes when we sleep. But, it is also the case that for large portions of dreamless sleep, we aren't conscious, and hence have geno occurrent mental states. But this means that we have no evidentially supported beliefs while we sleep, and hence have no justification and knowledge at those times. This can't be right. Richard Feldman, who as of 1988, supported OT, responds to this argument by positing a distinction between dispositional knowledge and occurrent knowledge (1988: 263). S dispositionally knows p just in case S would occurrently know p were S to consider p. Here, the process of consideration would bring evidence occurrently to mind (and thus literally bring the evidence back again into S's possession according to OT). One problem Arnold notices with this response to the sleeping case, is that it radically over ascribes dispositional knowledge to agents (2011: 98). There seems to be an important difference between one's dispositional knowledge (knowledge that one has stored dispositionally) and one's dispositions to know things (knowledge one doesn't currently have in any important sense, but instead has a disposition to have once one considers the claim for the first time). For instance, most of the time people have dispositional knowledge of their names, of the towns they grew up in, etc. But most people don't know occurrently or dispositionally—things like no elephants are even numbers, Alpha Centauri isn't made of cheese, the number of blades of grass in Nebraska is either even or odd, etc. This is because most people have never even entertained these rather obvious propositions. They have a disposition to know them, but they don't dispositionally know them already. Feldman's early response to the sleeping case entails that we do in fact dispositionally know all of these obscure truths, and this is rather counter-intuitive.<sup>27</sup>

There's another sort of case which significantly counts against OT. It is the case of rather complex and lengthy inference. Consider cases of calculating a very long math problem in one's head—a problem that involves many discrete steps. Also, consider cases in which one makes a rather complex inference to the best explanation, either in scientific practice, or in everyday life. For these cases of belief formation, the body of evidence on which we base our conclusions tends to be quite expansive. It is very unlikely that, at the moment of forming the belief in the conclusion of these inferences, humans are occurrently representing all of the evidential claims on which they're basing the conclusion. Human ability to occurrently represent (at a single moment) many complicated claims is quite limited. Supposing that basing and forming a belief in the conclusion takes place at time t, it is much more plausible that in cases of lengthy inference, agents call the premise/evidence claims to mind throughout the moments *leading up to* time t. But if this is the correct account of how evidential basing

\_

<sup>&</sup>lt;sup>27</sup> See Audi (1994) for helpful discussion on the distinction between dispositional beliefs and dispositions to believe. It is this distinction here that ultimately grounds the distinction between dispositional knowledge and dispositions to know.

occurs for complex inference, and if complex inferences can confer justification, then OT is false.

Lastly, Arnold raises a case having to do with defeating evidence. Intuitively, our evidence can both epistemize *and defeat* the justification/warrant for beliefs that we have. To use a familiar example from John Pollock, suppose one possesses, dispositionally, a lot of great evidence which supports the claim that some widgets aren't actually red, but are actually white and being irradiated by tricky red light.<sup>28</sup> In addition, suppose S understands and believes—dispositionally—that this is in fact what her stored evidence supports. But in a moment of quick forgetfulness or carelessness, S comes to believe, on the basis of visual experience, that the widget in front of her is red.<sup>29</sup> Intuitively, at this moment, S lacks justification for believing this claim. The reasonable explanation for this is that S isn't responding correctly to *all* of the evidence in her possession. According to her total evidence, her belief is undermined. In other words, her total evidence gives her a defeater for her belief. Although, if OT is true, the justification of the belief at the moment of belief formation wouldn't be undermined, because she wouldn't *have* the undermining evidence (given that it is not occurrent to her). This, however, seems to be the incorrect response to a case like this.

All this to say, there's good reason to accept MT, and allow contents possessed dispositionally to serve as one's evidence.<sup>30</sup> But once one accepts MT, one's epistemic theory takes on an explanatory burden that is very similar to the reliabilist's burden to explain relevant process types. Consider what we typically mean when we say that someone has a disposition to Φ. First, we typically don't mean these dispositions to be unconditional, but rather, to only hold in certain conditions. For instance, when we say that a child is disposed to clean up after herself, we *do not* take this disposition to hold for *every possible circumstance the child could find herself in*. We wouldn't take our claim that a child has such a disposition to be falsified if it turned out that the child *wouldn't* clean up after herself were she to be experiencing excruciating pain or paralysis. Dispositions, as we commonly invoke them, only hold in certain circumstances of type T. Secondly, for the most part, we *don't* take the dispositions we invoke in everyday life to be *infallible*. In other words, saying that the child has a disposition to clean up after

-

<sup>&</sup>lt;sup>28</sup> Pollock (1986)

<sup>&</sup>lt;sup>29</sup> This "quick forgetfulness" is to be distinguished from *complete* forgetfulness. In moments in which we quickly forget things, we still possess the content dispositionally, but for one reason or another there's a failure of retrieval. With complete forgetfulness, it can no longer be said that the agent possesses that content in any important way. Here, it's impossible for the agent to retrieve that content upon reflection.

<sup>&</sup>lt;sup>30</sup> Pinning down exactly what Conee and Feldman think *nowadays* about evidence possession is a bit more difficult. As of 2001, in "Internalism Defended," they describe mentalism as having the following implication: The justificatory status of a person's doxastic attitudes strongly supervenes on the person's occurrent and dispositional mental states, events, and conditions.

This suggests that they are seeing dispositional mental states as candidates for being evidence one has for a target proposition. By 2008, in "Evidence," Conee and Feldman seem to not take a stand on the issue of MT vs. OT. They say that within the broader evidentialist camp, one can distinguish many precise evidentialist theories by their precise views of evidence possession (2008:89). Some of these will hold to OT on one end of the spectrum. On the far other end of the spectrum, some evidentialist theories will hold that mental states buried so deeply within a person—that only the most in-depth psycho-analysis will bring them to consciousness—can still count as *possessed* evidence. And between these two poles, there are (hypothetically) many precise evidentialist theories corresponding to each degree of difficulty in bringing a stored mental state to occurrent awareness. Conee and Feldman don't take a stand here on which one of these precise theories is correct. Here, I might point out that, if there's *not* a special burden for the evidentialist to present a theory of evidence possession, then it is a bit ad hoc, without further explanation, to say that the reliabilist has a burden to present a theory of type relevance.

herself in normal circumstances T doesn't commit us to the claim that *every time* the child finds herself in T, she'll clean up after herself. That seems far too demanding. Rather, when we invoke dispositions to  $\Phi$ , we typically mean something more modest and fallible, like,

In situations of type T, S probably  $\Phi$ s.

It seems as if there are at least two kinds of necessary conditions on dispositionally possessing evidence E for a belief that p. Considering both helps generate a parrying response to the generality problem objection.

Necessarily, S dispositionally has evidence E for her belief that p at t only if

- i. S brings E to occurrent awareness in a sufficiently large percentage of possible futures of type T from moment t.
- ii. S occurrently represents E *as epistemically relevant to p* in a sufficiently large percentage of possible futures of type U from moment t.

Condition (i) serves to accommodate the following intuition: the contents of mental representations that are so far "at the back of our minds" (and perhaps near the point of being absolutely forgotten) aren't candidates for being part of one's evidence. For some evidence E to be part of one's total evidence—that could play some defeating or epistemizing role—E must, in some sense, be within the range of S's broad perspective and reflective grasp. Condition (ii) serves to accommodate the intuition that S doesn't possess E as evidence for p if S lacks any sort disposition to think E is relevant at all to whether p is true. It is simply not enough to be disposed to bring E to conscious awareness quite easily. For instance, suppose Tim knows what a fire is, and knows what smoke is, but lacks any disposition to think that smoke has anything, causally, to do with fire. On an occasion in which Tim possesses, in his memory, the belief that there is smoke in a neighboring room, it would not be the case that he possesses this content, dispositionally, as evidence for the proposition that there's a fire in the other room.<sup>31</sup>

The parrying response to the generality problem objection is generated due to the fact that (i) and (ii) invoke the concepts of cases of type T and cases of type U. What exactly are these? Plausibly, they refer to reference classes of some sort. They probably include cases in which S is considering whether p or considering what could be said in favor or against p, but there's no reason to think that they're limited to cases like this. Also, it is clear that cases in which S is having a seizure, or cases in which S is struggling to breathe, aren't contained in the U class or the T class. Intuitively, S's ability (or lack thereof) to recall E and see E's relevance to p in these wild possible cases doesn't determine whether S possesses E as evidence for p. Other than these general insights regarding U and T, we don't have much an account of U and T. I contend that explicating these reference classes, pertaining to dispositional evidence possession, is importantly similar to explicating the reference classes corresponding to the belief forming processes invoked by process reliabilism.

Given than many theories of warrant and justification will invoke dispositionally possessed evidence in some way, we can conclude that many reasonable candidate theories of warrant or

-

<sup>&</sup>lt;sup>31</sup> See Arnold (2011: 173-177), who suggests and defends a similar agential dispositional account of evidence possession.

justification will satisfy PTB. If this is the case, then we've shown that there's another strong warrant and justification parrying response to the generality problem objection.<sup>32</sup>

### 3.4 Competent Basing and a Warrant Parrying Response

One can also see an additional warrant parrying response upon considering the specific sort of basing that's required for having knowledge. Not just any basing process can generate a warranted belief, as the case below will show. I'll call the sort of basing that's necessary for warrant *competent basing*.

#### **PARTY**

Jim and Sandra are returning to their house after a night of being away, and as they show up in the morning, they are perceptually acquainted with the following pieces of information at time t1. Call this information set A, which they both come to believe on the basis of their perceptual acquaintance with it.

#### Set A

- A1 Windows are broken.
- A2 Red solo cups are strewn across the yard.
- A3 Passed-out people are everywhere (on couches, the yard, floors).
- A4 Half-eaten pizzas are dispersed throughout the house.
- A5 A sound system has been set up.
- A6 It smells like beer.

They also believe (in memory storage) each claim in the following set of information. Call this information set B.

#### Set B

- B1 We desire for our housemates to stop throwing parties.
- B2 Our housemate, Steve, wears nice clothing.
- B3 People in this college town like owning pets.

After coming to believe set A at t1, Jim and Sandra both (individually) are prompted to consider the following question at t2: What happened at our house last night? Upon consideration, both Jim and Sandra form the belief, at t3, that

N There was a wild party at our house last night.

Jim and Sandra form N on the basis of set A. However, Jim and Sandra are peculiar cognitive agents, but for different reasons. Their respective

<sup>&</sup>lt;sup>32</sup> Granted, this parrying response won't apply to some phenomenal conservatives, who might say that one's evidence that justifies a given belief just is a seeming that one occurrently has at the moment of belief formation. Regardless, there are far fewer phenomenal conservatives about warrant, so many more will find the evidence possession warrant parrying response compelling.

peculiarities manifest themselves in the unique ways they each form the belief N on the basis of A.

Jim's case: Jim based N on set A, but only by luck. Modally, looking at Jim's dispositions, at the point of time (t2) at which Jim starts considering what happened at his house last night, Jim would base his answer to the question "What happened at my house last night" on Set B in the vast majority of the nearby (modally) possible futures from t2.

Sandra's case: Sandra bases N on set A, and (unlike Jim) has a stable disposition to base answers to questions like what happened at my house last night on (relevant) sets of data like set A. Although, Sandra adopts N on the basis of Set A only by luck. Modally, looking at Sandra's dispositions at t2, in most nearby possible futures, Sandra forms all sorts of other beliefs (instead of N) about the relevant question on the basis of Set A (e.g., that there was no wild party at our house; that the cleaning service came to our house; that there was a chess tournament at our house; etc.)

Intuitively, both Jim and Sandra *lack* warrant for believing N on the basis of set A.

The problematic nature of Jim's belief formation highlights an important necessary condition on warrant in cases of belief-formation in which the subject bases a belief on other claims she mentally represents.

W1 Necessarily, S has warrant for believing p on the basis of some set of claims represented by S only if it is *not the case* that, given S's dispositions with respect to a reference class F of nearby possible futures, it is sufficiently likely that S bases the belief that p on a set of claims that fails to support p.

Given the example, Jim clearly fails to satisfy W1. With respect to the nearby possible futures at t2, he is disposed such that it is sufficiently likely that he'll base his belief that p on claims that don't support p. His having this modal feature undermines his warrant for p.

The problematic nature of Sandra's belief formation reveals another important necessary condition on warrant for cases of belief formation that involve basing on other claims mentally represented by the subject.

W2 Necessarily, S has warrant for believing p on the basis of some set of claims represented by S only if, given S's dispositions with respect to a reference class G of nearby possible futures, it is sufficiently likely that S *correctly* represents whether the basis set of claims supports p.

Once again, given the details of the case, Sandra fails to have the disposition described in W2. It is reasonable to view W1 and W2 as necessary conditions on *competent basing*—the sort of basing that is required for warrant in cases where agents base their belief on contents that they represent either doxastically or with other representational states. Insofar as any plausible candidate theory of warrant must invoke W1 and W2, it must also invoke reference classes F and G. At the outset, we have no reason to believe explicating F and G will be any easier than explicating the reference classes corresponding to the reliabilist's belief-forming process types. Therefore, there is good reason to believe that many theories of warrant will satisfy PTB.

In response, one might try to deny that an account of competent basing will invoke reference classes F and G. The envisioned response denies that there's actually anything dispositionally important for warrant in cases where the target belief p is based on some set H of claims mentally represented by the agent. Rather than invoking W1 and W2 in our theory of competent basing, we can instead invoke other mental states to play a comparable role. This alternative account holds that, in addition to H actually supporting p and S basing p on H, competent basing requires one to satisfy the following condition as well:

AC Necessarily, S has warrant for believing p on the basis of some set of claims H represented by S only if, at the moment of basing, S occurrently has a seeming or occurrent belief with the content H supports p, and lacks seemings or occurrent beliefs of the form H doesn't support p.

Let's call this response strategy the awareness response.

I contend that many won't find the awareness response persuasive as an alternative account of competent basing. The awareness response entails that Jim and Sandra could both have had warrant in the case above even if everything in the case stayed the same except for adding that, at t3, they each happened to have the seeming *A supports N*. But this is highly counter-intuitive, given the problematic cases of belief formation that occur in the majority of nearby possibilities. Suppose this seeming comes to them on a complete fluke of an event—something like a random shot of gamma radiation hits their brains at *just the right time in just the right place*, generating the seeming at t3.

Granted, phenomenal conservatism and perhaps other epistemic theories allow seemings generated like this, no matter how unlikely it was that they arose, to ground an agent's possessing *justification* at the moment of belief formation. They would read a case like this as one of an agent's acquiring an important piece of evidence just in the nick of time, and then this evidence serves to *justify* the target belief. This is why I am not framing the upshot of PARTY as a powerful justification parrying response. But, I doubt that there are many internalists or externalists *about warrant* who would view the awareness response as salvaging warrant for people with modal profiles like Jim and Sandra in the moments leading up to belief formation. Intuitively, there is a sort of *stable competence* that warrant requires—whether it is a perceptual competence, an intuition-based competence, or a competence in grasping one's evidence and what that evidence supports.<sup>33</sup> But this stability seems to be dispositional in nature, where outcomes in nearby possible worlds play a crucial grounding role in whether the dispositional conditions are satisfied. All this to say, the nature of competent basing still seems to generate a strong warrant parrying response to the generality problem objection.

#### 4. Conclusion

In this paper, I've shown that there are strong justification and warrant parrying responses to the generality problem objection. This being the case, many who would present the generality problem objection as a defeater to process reliabilism do so at the peril of their own epistemic views. In addition, we're left with good reason to think that PTB is a principle that proves too much, and should be abandoned. But if this is the case, then the most plausible versions

<sup>&</sup>lt;sup>33</sup> Many might view the latter as a particular sort of intuition competence.

of the generality problem objection are undermined insofar as they rely on PTB. At this point, the defender of the generality problem is faced with three options. First, she could formulate a compelling version of the generality problem objection that doesn't rely on PTB. Secondly, she could attempt to formulate reasonable and explanatorily powerful theories of warrant and justification that somehow avoid the parrying responses I defend in this paper. Thirdly, she could give up on the generality problem objection. I contend that options one and two are rather daunting, and that many will find option three the most attractive.<sup>34</sup>

## References

Adler, Jonathan and Michael Levin. (2002), "Is the Generality Problem too General?" *Philosophy and Phenomenological Research*. 65.1: 87-97.

Alston, William. (1985), "Concepts of Epistemic Justification." The Monist. 68.1: 57-89.

——— (1988), "An Internalist Externalism." *Synthese*. 74:265-283.

——— (1995), "How to Think about Reliability." *Philosophical Topics*. 23.1: 1-29.

Arnold, Alex. (2011), An Essay on Evidence. PhD. Dissertation. University of Notre Dame.

Audi, Robert. (1994), "Dispositional Beliefs and Dispositions to Believe." Nous. 28.4: 419-434.

Becker, Kelly. (2008), "Epistemic Luck and the Generality Problem." *Philosophical Studies*. 139.3: 353-366.

Beddor, Bob and Alvin Goldman. (2015), "Reliabilist Epistemology", *The Stanford Encyclopedia of Philosophy* (Winter 2015 Edition), Edward N. Zalta (ed.), URL = <a href="http://plato.stanford.edu/archives/win2015/entries/reliabilism/">http://plato.stanford.edu/archives/win2015/entries/reliabilism/</a>>.

Beebe, James R. (2004), "The Generality Problem, Statistical Relevance and the Tri-Level Hypothesis." *Nous.* 38.1: 177-195.

Bishop, Michael A. (2010), "Why the Generality Problem is Everybody's Problem." *Philosophical Studies*. 151:285-298.

Bonjour, Laurence. (1988), The Structure of Empirical Knowledge. Cambridge: Harvard.

Brueckner, Anthony and Christopher T. Buford. (2013), "Becker on Epistemic Luck." *Philosophical Studies*. 163: 171-175.

Conee, Earl. (2013), "The Specificity of the Generality Problem." *Philosophical Studies*. 163:751-762.

<sup>34</sup> Much thanks to Ted Warfield, Daniel Immerman, Mike DePaul, Blake Roeber, and Tom Senor for helpful comments on earlier drafts of this essay.

- Conee, Earl and Richard Feldman. (1985), "Evidentialism." Philosophical Studies. 48:15-34.
- ——— (1998), "The Generality Problem for Reliabilism." *Philosophical Studies*. 89.1:1-29.
- ——— (2001), "Internalism Defended." American Philosophical Quarterly. 38: 1-18.
- ——— (2002), "Typing Problems." *Philosophical and Phenomenological Research*. 65.1:98-105.
- ——— (2008), "Evidence." *Epistemology: New Essays*. Ed. by Quentin Smith. Oxford: OUP. 83-104.
- Comesaña, Juan. (2006), "A Well-Founded Solution to the Generality Problem." *Philosophical Studies*. 129.1: 27-47.
- Dougherty, Trent. (2011), "In Defense of Propositionalism about Evidence." *Evidentialism and its Discontents*. Ed. by Trent Dougherty. Oxford: OUP. 226-232.
- Dutant, Julien and Erik. J. Olsson. (2013), "Is there a Statistical Solution to the Generality Problem?" *Erkenntnis*.78: 1347-1365.
- Feldman, Richard. (1985), "Reliability and Justification." The Monist. 68.2: 159-174.
- ——— (1988), "Having Evidence." *Philosophical Analysis*. Ed. David Austin. Dordrecht: Kluwer Academic. 83-104.
- Goldman, Alvin. (1979), "What is Justified Belief?" *Justification and Knowledge*. Ed. by G.S. Pappas. Dordrecht: D. Reidel Publishing. 1-23.
- ——— (1986), Epistemology and Cognition. Harvard: Harvard University Press.
- Greco, John. (2010), Achieving Knowledge. Cambridge: CUP.
- Hajek, Alan. (2007), "The Reference Class Problem is Your Problem Too." Synthese. 156:563-585.
- Heller, Mark. (1995), "The Simple Solution to the Generality Problem." Nous. 29.4:501-515.
- Huemer, Michael. (2001), Skepticism and the Veil of Perception. Oxford: Rowman and Littlefield.
- Lepock, Christopher. (2009), "How to Make the Generality Problem Work for You." *Acta Analytica*. 24: 275-286.
- Leplin, Jarrett. (2007), "In Defense of Reliabilism." Philosophical Studies. 134: 31-42.
- Matheson, Jonathan D. (2015), "Is there a Well-Founded Solution to the Generality Problem?" *Philosophical Studies*. 172: 459-468.

Plantinga, Alvin. (1993), Warrant and Proper Function. Oxford: OUP.

Pollock, John (1986), Contemporary Theories of Knowledge. Lanham: Rowman and Littlefield.

Reichenbach, H. (1949). The theory of probability. University of California Press.

Schmitt, Frederick F. (1992), Knowledge and Belief. London: Routledge.

Sosa, Ernest. (1991), Knowledge in Perspective. Cambridge: CUP.

Wallis, Charles. (1994), "Truth-Ratios, Process, Task, and Knowledge." Synthese. 98: 243-269.

Williamson, Timothy. (2002), Knowledge and its Limits. Oxford: OUP.