Christian Quast*

On How Expertise Ascriptions Work

https://doi.org/10.1515/auk-2020-0016

Abstract: Expertise is often ascribed to persons who are considered exceptionally competent in a particular subject matter. In contrast to this traditional approach, the present paper introduces a contextual understanding of expertise ascriptions. More precisely, this paper introduces two different kinds of contextuality by advancing and advocating the thesis that expertise ascriptions are true if and only if their content within their context of use is true against standards in the context of assessment. This means that expertise ascriptions have indexical content and are also assessment-sensitive. On this basis, a definition of expertise will be developed which outlines a series of conditions for what it takes to be an expert.

Keywords: expertise, contextuality, indexicality, assessment sensitivity, rolefunctional account, competence-driven account

1 Introduction

In a recent paper, Alvin I. Goldman (2018) takes the concept of expertise into new directions (cf. Goldman 2001). *First*, he now claims "that there seems to be something right in the idea that some kind of social factor figures in the concept of expertise" (Goldman 2018, 3). Consequently, he explores the nature of expertise "by reference to what experts can do for laypersons by means of their special knowledge or skill" (Goldman 2018, 3). This can be understood as a service-functional approach to expertise, the underlying idea of which is to understand expertise as a support relation between relatively competent agents and their respective clients. *Second*, he also attempts to understand expertise as a 'fluid' concept in which different criteria for expertise can be appropriate in different contexts. It may be necessary to demand a large amount of true beliefs from the expert in some contexts, but

^{*}Corresponding author: Christian Quast, Philosophisches Seminar, Universität Münster, Münster, Germany, e-mail: Christian.Quast@wwu.de

in others their justification or the availability of suitable evidence may also be sufficient.¹

This paper refines and extends the latter idea on the basis of the former. Some arguments against purely competence-driven approaches to expertise are raised (cf. sect. 3) before core tenets of a service-functional account of expertise are introduced (cf. sect. 4). Next, the fluidity of 'expertise' is highlighted (cf. sect. 5), which partly rests on the assumption that expertise ascriptions often have indexical contents (cf. sect. 6). I will then refute some objections to this thesis (cf. sect. 7). The complementary claim that expertise ascriptions like 'e is an expert in d' not only have indexical contents but are also assessment-sensitive will then be developed (cf. sect. 8). Subsequently, this latter claim is traced back to some core features of expertise before two kinds of fluidity are distinguished (cf. sect. 8.3). It is on this basis that the final section develops a series of conditions for being an expert which challenge the ongoing philosophical debate and strengthen a service-functional understanding of expertise at the same time.

2 The Current Debate About Experts and Expertise

This article is based on two core assumptions: The first is that expertise is a constitutively *ascriptive* property. For this reason, one cannot view another an expert on something towards someone if nobody has previously ascribed expertise to her. Understanding the attribution of expertise therefore provides insights into its nature. Accordingly, this paper casually alternates between the issue of giving an account of expertise ascriptions, on the one hand, and exploring the nature of expertise (or experts) on the other. These are simply two sides of the same coin. The second core assumption is that expertise is a multi-digit relation between sufficiently competent agents, relevant laypersons (or clients), and a particular domain. It therefore represents a *relational* property, and experts are those possessing it.

The debate about the nature of expertise is marked by a fundamental controversy. Some claim that expertise is the possession of relative or extraordinary competences. These approaches can be called *competence-driven*. Despite differences

¹ There is an established distinction between subjective experts on the one hand and real experts on the other. According to my understanding, someone is an *real* expert if she is suitably disposed to fulfill a contextually salient service function adequately, whereas she is a *subjective* expert if such a function is merely ascribed to her (cf. Quast 2018a, 19). This article tries to avoid this complication for the present purposes. So, when talking about experts, I am referring to real experts only.

in detail, competence-driven approaches can be considered the basic assumption of the philosophical debate. Others claim that expertise must be understood in terms of the social roles or status that are ascribed to agents, whether or not they are competent to the required degree. In the following, such approaches will be characterized as *role-functional*: "[e]xpertness is an ascribed quality, a badge, which cannot be manufactured and affected by an expert himself, but rather can only be received from another" (Martin 1973, 159).

However, it is precisely the ascriptive character of expertise that is rejected by proponents of the competence-driven approach. Their concern is that expertise would then only be "a matter of [the] degree of acceptance" (Collins/Evans 2007, 3). But those advocating a role-functional approach are not obliged to reduce expertise to a mere status; rather, it seems more promising to relate the expert's function and competence. In this view, one would only be an expert on something in relation to another if she is ascribed a role-function for which she is suitably competent. This mediating position, which has not yet received any attention in philosophy, will be the central premise of the following discussion. Thus, an expert's function and competence have to be related if we are to arrive at a more comprehensive view of expertise.

3 Against Competence-Driven Accounts of Expertise

To motivate this, five arguments against a purely competence-driven understanding of expertise will be presented. The first four arguments specifically address the prevailing epistemological debate about (cognitive) experts, and the final argument is a more general objection to competence-driven accounts.

The competence-driven account is quintessential to the discussion of cognitive expertise in epistemology. Although many attempts have been made to define expertise, the fundamental approach is the same: the existence of cognitive expertise is essentially reduced to the possession of some specific epistemic qualities. Some argue that having *true* beliefs is the crucial property (cf. Coady 2012; Goldman 2001). Others emphasize the importance of *knowledge* (cf. McBain 2007; McGrath 2015; Pappas 1996), *justification* (cf. Goldman 2018; Weinstein 1993), and *understanding* (Croce 2018; Scholz 2018), or the combination of epistemic qualities, like having an understanding of relevant terms and arguments, for example, and delivering

propositional justification (Watson 2018), or arriving at almost certainly known and true propositions (cf. Fricker 2006).²

The occurrence of expertise, however, does not typically require the simple possession of such qualifications but a certain measure of epistemically qualified beliefs. One is considered a cognitive expert only if she possesses the required *quantity* of epistemically *qualified* beliefs. At first glance, this statement might seem unproblematic. On closer inspection, we can see that it is neither evident that epistemically qualified beliefs are always *significant* enough to substantiate an ascription of expertise nor obvious that beliefs (or propositions) are *quantifiable* in the way that is required.

As just mentioned, proponents of competence-driven accounts not only require an expert to possess specifically qualified beliefs but also call for a certain multitude of them, which might amount to a qualified *contrast* (cf. Coady 2012, 31; Licon 2012, 451) or even an *absolute* threshold (cf. Goldman 2001; Seidel 2014, 208; Watson 2018, 46). In this sense, Goldman claims that a person can be an expert on something only if she meets "some non-comparative threshold of veritistic attainment" (Goldman 2001, 91); in other words, if she holds some substantial amount of true beliefs. Therefore, being an expert is not simply a matter of comparative superiority but requires an absolute threshold of epistemic attainment.

The problem, however, is that this requirement conflicts with the individualizability and countability of beliefs, which is a general problem of quantifiability. To illustrate this problem, one could ask whether the possession of an epistemically qualified belief depends on the possession of other beliefs or is independent of them (cf. Latus 2000, 30 f.). Does my belief that water is H_2O imply my having basic information about hydrogen and oxygen or even about their bonding properties? Does this belief therefore imply the possession of a multiude of related beliefs or does it rather count as only a single belief? Is it possible to have a belief p ('this is water') without also having other beliefs such as q ('this is drinkable') or r ('this is composed of hydrogen and oxygen'), both of which are implied by p? Because it is difficult to answer straightforwardly, it suggests that epistemically qualified beliefs can only be quantified approximately. Under these conditions the above claims for

² Recently, Goldman 2018 modified his purely veritistic account of expertise in light of earlier critique (cf. Scholz 2009; Goldman 2009). In contrast to his former truth-requiring approach, he now proposes a weaker truth-linked account to expertise, which allows in principle for the incorporation of epistemic properties like being justified and having evidence besides having true beliefs. For Goldman, this newly stressed flexibility can be traced back to a conceptual fluidity, so it would be "fully appropriate for an analysis of it to have a comparable amount of vagueness" (Goldman 2018, 6).

qualified differences or absolute thresholds of epistemic attainment seem hard to sustain.

Defenders might retort that while it may be problematic to individualize or count individual beliefs, our ability to make comparative judgments remains unaffected. We make comparative judgments readily, such as 'e possesses significantly more epistemically qualified beliefs than c.' And nothing else is required to assess a claim to cognitive expertise. To put it differently, because expertise ascriptions rest on coarsely grained comparative judgments, they can plausibly circumvent the problem of individualization.

Even if this reply were compelling, a second objection arises concerning the quantifiability of epistemically qualified beliefs. After all, it is one thing to count beliefs and another to argue for a general threshold of epistemic attainment. The quest for such a requirement is undoubtedly highly intuitive, for it tries to avoid unnecessary trivializations in expertise ascriptions. The problem is that the determination of a threshold seems arbitrary. For example, should we only consider individuals in the top percentile of an activity to be experts? And why these in particular? Is it not rather obvious that expertise ascriptions are far too context-dependent to vote for a single definitive threshold? Some people are called experts when they exceed most others in a particular domain, but some expertise ascriptions are more local in nature. In the first sense, Stephen Hawking could be considered an expert on black holes; in the second sense, my ten-year-old son could be considered an expert on the proceedings of the Star Wars film series (cf. Mieg 2006, 745). In view of the broad range of expertise ascriptions, it seems futile to argue for a definite threshold of expertise. This is not only an epistemic problem about identifying the threshold, but the broad range of expertise ascriptions suggests that there is plausibly no such nonarbitrary threshold for being a cognitive expert.

In addition to both problems of *quantifiability*, there are two further problems addressing the possible shortage of *significance* of epistemically qualified beliefs. For even if epistemically qualified beliefs are distinctively identifiable and thus countable, they can still be of different weight for the expertise in question, which brings us to the *third* objection. To illustrate this point, it has to be taken into account that two equally qualified beliefs can have very different informational content (cf. Schmitt 2000, 272): it is better for an expert economist to know the exact reason for the subprime mortgage crisis than to know that it can ultimately be traced back to the measures taken by the Clinton administration in 1995 to push the so-called *Community Reinvestment Act* of 1977. After all, the exact reason is probably much more complex and substantial than the latter belief. It is therefore insufficient to attribute expertise based solely on a certain number of epistemically qualified beliefs, for the content of the beliefs in question is also significant. What is more, two equally qualified beliefs might have different content as well as relevance.

If an eyewitness claims in court, for example, that she saw the defendant near the scene of the crime shortly after it was committed, this knowledge is more relevant than the knowledge that the defendant had already been to the same spot several years ago. Although this should not be controversial (cf. Goldman 1999, 89–95), competence-driven approaches encounter serious difficulties when trying to explain cognitive expertise solely on the basis of the epistemic qualifications of the beliefs in question.

Admittedly, to advocate this approach one can willingly add a relevance criterion to the account. Someone would then be a cognitive expert on something for someone else if she exceeds a distinctive threshold of relevant epistemically qualified beliefs. But this criterion leads us far away from the original idea, which was to define expertise solely on the basis of epistemically qualified beliefs. Moreover, such a position would still be confronted with the problems of sufficient quantifiability, which were discussed above. As if this were not enough, adherents of even this improved position would still have to deal with another problem of the possible shortage of significance of certain epistemic qualifications.

The *fourth* objection is essentially that the emphasis on beliefs that are epistemically qualified in a certain way is misleading and susceptible to a multitude of counterexamples. For independently of which epistemic qualities are emphasized (e.g., truth, justification, knowledge, understanding, etc.), the use of *expertise*³ is too versatile to be captured by specific epistemic qualifications. A certain qualification which seems appropriate in one context may be too permissive in another and too restrictive in yet another. This is because the appropriateness of an expertise ascription often depends on contextual factors such as aspects of pragmatic encroachment. For example, a Burgundy wine lover believes strongly that a Pinot Noir from the district of Gevrey-Chambertin tastes firmer and darker than comparable wines from Chambolle-Musigny. It should be further assumed that these beliefs are true and were formed using reliable methods such as attending a few entry-level tastings and reading introductory literature on the topic. The wine lover is therefore suitably disposed to serve as an expert for the particular matter when compared to the vast number of novices at ordinary wine tastings. However, such an expert status can quickly become questionable in other contexts. Now imagine that the same person is asked to take part in an expert interview in connection with an oenological study concerning the specific terroir of Burgundy districts. Among

³ Some guiding remarks may be useful here. A word in quotation marks ('expertise') designates, as usual, the word as a word. If not otherwise contextually apparent (by phrases like 'the notion/explication/ascription of expertise') an italicized and bolded term (*expertise*) refers to the concept expressed by that word, while the word set in regular print (expertise) designates the respective phenomenon.

other things, this study aims to identify more precisely the sensory differences between the wines of Gevrey-Chambertin and Chambolle-Musigny. To serve as an expert in this ambitious context likely requires more robust sources of information than before. Now the expert's knowledge should be based on a rather extensive experience (a large number of blind tastings as well as a large and representative tasting experience of different vintages), which would produce a complex understanding of the relevant districts. On the other hand, some contexts are also more generous. Take, for example, a conversation between friends in which the wine lover is explaining that a Pinot Noir from Gevrey-Chambertin usually tastes firmer and darker than comparable wines from Chambolle-Musigny. Under such conditions, it may even be enough for the testifier to only possess true beliefs to justify an ascription of expert status. This applies particularly if the recipient (or client) is a complete layperson and just wants to be introduced to the topic. If this is true, the epistemic qualities required for becoming a cognitive expert always hinge on contextual factors. Sometimes having true beliefs is enough, sometimes a good proportion of knowledge is required, and sometimes only a general understanding of the subject matter is sufficient.

For the foregoing reasons, it appears unpromising to define (cognitive) expertise by means of specific epistemic qualities, whether or not the beliefs in question are highly relevant. For epistemically qualified beliefs proved to be neither sufficiently *quantifiable* nor are specific epistemic qualifications always *significant* (enough) for every single instance of expertise qualification.

But my rejection of *specific* epistemic qualities as the defining feature of cognitive expertise neither undermines the approach of characterizing experts on the basis of epistemic qualities more generally nor does it automatically call other varieties of competence-driven accounts into question. After all, one could simply characterize cognitive experts as persons who possess not only the right epistemic qualities, but also a sufficient number of relevant beliefs. But then a fifth objection arises, which affects the competence-driven account more generally. What is the right epistemic quality and what is a sufficient number? What is required is a compelling criterion for when an epistemic quality is right, and we need to know the number of pertaining beliefs or competences necessary for sufficiency. Without such a criterion, the concept of expertise put forward seems hollow. And just claiming that these are simply context-dependent properties would not be very informative in the absence of further conditions providing a more detailed understanding of the respective contexts. This is the problem of criterion, which eventually leads to a service-functional understanding of experts. Without a compelling solution to this problem, the decision concerning whether a person has the right epistemic qualities or competences to the right extent seems largely vacuous. Conflicts about the validity of an ascription of expertise would then have no basis on which they can be objectively resolved. As a result, the expert status would become completely irrelevant.

I would therefore like to suggest that the requested criterion can be found within the *functional* context of an expertise ascription. This means that a person only has the right epistemic qualities and a sufficient number of relevant beliefs if she is able to fulfill an ascribed service-function on that very basis. If, on the contrary, she is unable to fulfill the role attributed to her, she should not be considered an expert in that matter. This can be regarded as a minimum threshold for being an expert. Moreover, this solution fits well to related considerations within epistemology. Thomas Grundmann, for instance, explains in similar contexts:

The circumstances that are relevant for the evaluation of the reliability of a process are determined by the [...] *function* of this process. (Grundmann 2008, 271, my translation and italics).

If this is applied to the 'process' of expertise, then someone possesses the right epistemic qualities and the sufficient number of relevant beliefs for being a (cognitive) expert only if she is able to act *reliably* within the functional context of her expertise. And, conversely, the scope of these functional abilities can also determine the extent of an expert's domain.

From my point of view, this is a very fundamental pattern of evaluation, which not only affects the abovementioned subjects, but the nature of dispositions more generally. But such a discussion is beyond the scope of this work. Rather, following my justification of a functional approach to expertise, I would like to explain my service-functional understanding of expertise in more detail.

4 The Service-Functional Framework to Expertise

However, this paper goes beyond the epistemic qualities approach and conceptualizes experts in terms of contextual considerations. Based on the common idea that the noun 'expert' refers to persons who possess 'special knowledge *or* skill,'4 this approach provides a more general concept which includes both cognitive and practical experts. This is achieved within a service-functional framework, where expertise is a support relation between properly disposed agents and their relevant

⁴ See, 'expert, n.' in OED Online, October 6, 2020.

clients. Thus, expertise can be characterized in dispositional⁵ terms as "an ability to help other people (especially laypersons) get answers to difficult questions or execute difficult tasks" (Goldman 2018, 3). Although a full account of such an approach is not possible within the confines of this paper, I will introduce some basic assumptions in what follows.

A role-functional account of expertise escapes the challenges faced by competence-driven accounts (cf. sect. 3). Its underlying idea is that someone can only be an expert if she is set to play a certain service role in a restricted domain of activities (cf. Quast 2018b, 399 f.). This position has been substantiated by the previous discussion; it is also confirmed by the ordinary and scientific usage of *expertise*. Agnew, Ford and Hayes (1997, 2), for example, consider expertise "a role that some are selected to play on the basis of all sorts of criteria, epistemic and otherwise", while Martin (1973, 159) claims that "[e]xpertness is an ascribed quality, a badge, which cannot be manufactured and affected by an expert himself, but rather can only be received from another." At the same time, in everyday language it is often held that someone functions in an expert's *role* or has *served* as an expert for a particular period of time (cf. Quast 2018b, 399). This strongly supports the claim for a service-functional approach to expertise.

However, it is important to emphasize that I do not strive to define expertise exhaustively in role-functional terms. There is rather a close interrelation between the role-functional and the dispositional dimensions of expertise ascription (in contrast to a mere juxtaposition of both). Since expertise is best understood as a "disposition to serve" (cf. Quast 2018b, 412; Quast 2019, 20 ff.), it can always be conceptualized in two equivalent ways. Someone is a (real) expert

if she is set to fulfill a service *function* adequately, one for which she is suitably disposed,

or

if she is suitably *disposed* to adequately fulfill a relevant service function.

Both claims are equivalent and express the thesis that expertise is a disposition to serve. It is also important to note that on this basis a solution to the problem of the criterion could be presented.

⁵ In this paper, a competence is understood as a special kind of disposition. As such, competencies are subject to both trigger- and manifestation-conditions and can be suitably characterized by trigger-manifestation conditionals.

On closer consideration, such a disposition (to serve) comprises not only *primary* dispositions (e.g., technical skills, knowledge, or understanding of a contextually relevant subject matter) but also *secondary* dispositions to socially exercise the primary dispositions (e.g., performative abilities, mediation competences, communication skills, trust-building abilities, etc.) (cf. Quast 2018b, 406 ff.). Secondary dispositions are basically capacities which put primary dispositions to work in social environments.

It is a remarkable feature of the service-functional account that it turns expertise into an ascriptive property. Thus, expertise is "something that we delineate by operating with a concept which we create in answer to certain needs" (Craig 1990, 3). But this does not mean that nothing else is required for someone to obtain expertise; rather, as explained above, being an expert requires the fulfillment of two fundamental conditions, neither of which may remain unfulfilled:

(1) the *ascription* of a service function

and

(2) the *presence* of corresponding dispositions to fulfill it.

The property of expertise can therefore be considered a hybrid,⁶ which has two obvious consequences: One is not an expert on anything for anyone unless she has already been ascribed an expert (i.e., has expert status). And an expert must be suitably disposed to fulfill her ascribed service function, otherwise she lacks (real) expertise.

But not everyone who is suitably disposed to fulfill an ascribed service function automatically qualifies as an expert in the most robust sense of the term. Rather, it seems natural to distinguish two possibilities here. An expertise is *de dicto* if it is grounded in dispositions concerning the respective opinions on the matter in question. In this sense, someone can be an expert on non-existent objects such as a conspiracy or even the Holy Grail. And an expertise is *de re* when it is based on dispositions concerning the matter itself. In effect, we can safely assume that there is a large number of *de dicto* experts on the 9/11 conspiracy as well as the

⁶ Such hybrids, like screwdriver, vegetable peeler, light switch, and driveway, for example, are widespread and just like expertise often include functional requirements by definition. In other words, something cannot be a screwdriver unless someone has previously attributed it the function to loosen and tighten screws. Although the object may seem disposed to fulfill this function, it could also be used to hurt others or plant seeds.

Holy Grail, even if this is entirely involuntary and undermines their own claims to having *de re* expertise, of course.

The remaining sections provide satisfying conditions for the possession of expertise (cf. sect. 9). More exactly, they examine what and how much of it it takes to be an expert. This can be done without denying the diverse uses of 'expertise' in ordinary and scientific discourse (cf. sect. 5–8). However, it will not be assumed that there is only one useful way to employ this term; instead, I forge a concept of expertise that reflects its operative use in ordinary and scientific language, while taking also new directions at the same time.

5 The Fluidity of Expertise Ascriptions

It is often argued that the notion of expertise is used in many different ways (cf. Scholz 2018), and even stressed that there "are almost as many definitions of 'expert' as there are researchers who study them" (Shanteau 1992, 255). Thus, when exploring the notion of expertise, we are undoubtedly confronted with some measure of fluidity. This leads Goldman to present the following thesis:

[I]t is plausible that 'expert' is such a fluid term that different criteria for it are used in different contexts. (Goldman 2018, 5)

However, this can be granted without giving up the goal of a unitary definition of expertise right away. 'Expertise' may be used fluidly for different reasons: It could be argued that this fluidity is based on a comparable disorder at the conceptual level. Or, we might find that the diverse usage of 'expertise' has a common conceptual ground. The challenge consists in arguing for one of the two routes.

The former route has a couple of adherents. Amongst them are Goldman (2018), Oliver R. Scholz (2018), and Zoltan P. Majdik and William M. Keith (2011, 289):

'Expertise' as a concept cannot be reconciled by only one shared principle. As a consequence, it is not comprehensible in a conceptual definition, but only in its varied uses and enactments. We suggest, in other words, that there is not—even deep down on a conceptual level—one kind of expertise, but kinds of expertise that resonate with kinds of problems.

But it is highly questionable whether a disparity in *using* 'expertise' is evidence enough to argue for an underlying *conceptual* disunity or is rather begging the question at hand. By contrast, I will argue for the more constructive latter route, which assumes that there is a common conceptual ground for our seemingly fluid use of 'expertise'. More exactly, I will construe predicates like 'is an expert' or 'has expertise' as not only displaying indexical features but also assessment-sensitive

ones. In what follows, both theses will be developed in more detail. They will help elucidate the fluid usage of expertise and answer the question of what it takes to be an expert.

6 The Indexicality of Expertise Ascriptions

Though some details require further explanation, a preliminary characterization of experts can be introduced:

(EXPERT) Against a given context of use cu, someone is an expert e of a certain degree for a client c within a domain d if and only if she is an authority in d and competent enough to reliably fulfill a difficult service-function for c in d accurately for which she is particularly responsible.⁷

The bottom line of this characterization is that expertise must be understood as a multi-place relation or function, that is, as F(e,c,d)|cu for short. Against this backdrop, I want to put forward the thesis that utterances of the form:

(1) *'e* is an expert'

should not be understood as simply expressing the proposition:

(2) e is an expert,

but rather as propositions of the following kind:

(3) e is an expert against a relevant client in a particular domain within a given context of use.

⁷ However, in order to avoid any unnecessary misunderstandings some short explanations are in order. Firstly, the context of *use* is a specific situation for which the pertaining concept is *ascribed*. This can be largely determined by the service-functional relation between an expert, her client and a pertaining domain. Secondly, one could be concerned that defining an expert in terms of *authority* makes the definition circular. However, these concerns are unfounded. While a moderate conception of authority will be proposed that requires relative competences only (cf. sect. 8.1), I argue for a more demanding conception of expertise. Thirdly, since it is possible to fulfill a task *reliably* without doing it *accurately* enough, it is important to stress this difference here. For example, my son far too often tidies up his room, but does so in a way which is clearly inaccurate according to my individual standards. Fourthly, what it takes to be responsible for some domain will be subject to section 8.2.

This claims that expertise ascriptions are indexical, i.e., can feature more complex and different propositional contents in different contexts of use than is immediately evident. In this respect, 'has expertise' and 'is an expert' are similar to predicates for time designations.

It is important to stress that this is not tantamount to claiming that ordinary ascriptions of expertise are implicitly thought to express the proposition just explicated. This would be highly implausible given the diverse usage of 'expertise' in ordinary and scientific discourse. Indeed, we typically do not consider expertise to be ascribed by predicates like 'expert-against-c-in-d-given-cu', but usually by 'expert-in-d' simpliciter. I do not endeavor to provide a conceptual analysis of expertise, but rather to show that the above characterization not only reflects but also *explains* the ordinary use of the term. Although expertise ascriptions are not short for longer claims that we actually intend to express, assuming such an indexicality nonetheless reflects our ordinary and scientific talk about experts. In other words, my claim is not so much about the *intended* meaning, but rather the operative usage of 'expertise' (cf. Haslanger 2005, 19). It is in this respect that expertise ascriptions resemble time designations. Although we usually say it is '9 o'clock' in contrast to '9 o'clock-CET', for example, time designations in Germany are better understood as being either indexical or true relative to Central European Time standards (cf. MacFarlane 2014, 88). Following this, the indexicalist considers utterances of the form 'It is 9 o'clock' to express the proposition that it is 9 o'clock CET, whereas the relativist considers them to express propositions of the form It is 9 o'clock, which are true or false in Germany only relative to the CET standard. We will return to both points of view in the following.

My suggestion at this point is to treat expertise ascriptions of the form (1) as if they were indexical for expressing multi-place relations like (3), i.e., $F(e,c,d)|_{CU}$, which by no means implies that *expertise* is implicitly used and *thought* to express multi-place relations in line with EXPERT. Rather, my point is that EXPERT largely corresponds to the operative usage of 'expertise', but still needs further specification (see below, $EXPERT^*$).

7 Expertise as a Fluid Phenomenon

That 'expertise' is a fluid term can partly be explained on the basis of the indexicality just introduced. To be precise, my thesis is that ascriptions of expertise often have indexical contents, that is, they need to be complemented to be truthevaluable. This is largely due to the fact that expertise is a contrastive phenomenon, which means it can only be possessed by someone in contrast to another person. Thus, 'expertise-in-d' applies only to persons who are at least more relevantly competent than a relevant contrast class, which I referred to previously as 'clients'. Very often, though, this contrast is not explicit, but invisible on the surface of expert qualifications. For this reason, expertise ascriptions often exhibit indexical content, so that it is up to the recipient to complement these qualifications in line with the most salient context of use.

The contrastiveness of expertise ascriptions is also in line with the semantic observation that 'being an expert' and 'being a layperson' are usually used as a pair of corresponding phrases, implying that the understanding of the former partly depends on the meaning of the latter, and vice versa. This is why we cannot fully grasp what it takes to be an expert if we are not aware of a plausible group of clients. Although this is almost commonsensical, some divergent views can be found in Harry M. Collins and Robert Evans (2007, 13.ff), Arthur L. Caplan (1992, 31), and Rocky K. Webb (2015), as well as in a tentative suggestion in the slipstream of Goldman's fluidity thesis:

For a high enough absolute threshold of true belief (and a comparably high threshold of error avoidance) one might say that everyone who meets this condition is automatically an expert, even if they don't exceed most other people in the relevant domain. (Goldman 2018, 5)

In this passage, Goldman considers abandoning a relational condition of epistemic attainment in favor of an absolute threshold for being an expert.⁸

If this is true, then doubts would be cast on my thesis that expertise ascriptions often have indexical contents. For my claim largely rests upon an expert's opposition to her relevant contrast class such as a group of laypersons or clients. It is therefore expedient to consider the case against essential contrastiveness more closely.

The main argument against the essential contrastiveness is that an expert would run the danger of losing her status if changes in the social environment occur. This strikes some proponents of the debate as highly counterintuitive (cf. Collins/Evans 2007; Webb 2015). Webb, for example, argues in a series of thought experiments that an expert's status cannot possibly be based in simple Cambridge changes,9 understood as the kind of change which is not based on an expert's intrinsic properties:

⁸ The same is implicitly presupposed by Collins and Evans' talk about 'ubiquitous expertise', which is an expertise "such as natural language-speaking, which every member of a society must possess in order to live in it" (Collins/Evans 2007, 13).

⁹ The term is coined by Peter Geach (1969, 71 f.). A simple example of such a change is the following: Imagine that Tom has a hip measurement of 116 cm, while Jim's is only 82 cm. After a couple of years, Tom's hip measurement stays the same but Jim's increases to 119 cm. As a result,

A situation we can imagine is an intellectual expert from current times travelling via a time machine to prehistoric times. In this prehistoric time, any intellectual expert that has travelled back would not have any peers or contemporaries. However, the absence of peers or contemporaries does not clearly diminish the time-travelling scientists claim to intellectual expertise. [Furthermore...], would a scientist who had been locked in a laboratory for the past two decades, completely cut off from all ongoing research around him (but left to his or her own devices to research) be necessarily cut off from his or her status as an intellectual expert? What if that lone research scientist had made some major discovery: for example, a cure for cancer? (Webb 2015, 67)

According to Webb, these "Cambridge changes utilised in the thought experiments above demonstrate that intellectual expertise is not necessarily social in nature, i.e. cannot depend upon the existence of either others or peers, our awareness of their existence, or indeed, knowledge about their views" (Webb 2015, 67). However, the intuitions Webb correctly appeals to are that the time traveler would still be highly competent, and the lone scientist's cure for cancer would still be a tremendous achievement. But these intuitions can be granted without understanding *expertise* non-comparatively.

One reason is simply that *competences* are not the same as *expertise* in the service-functional framework. Despite the widespread tendency to identify expertise with the possession of a sizable amount of competences, this practice is still highly questionable (cf. sect. 3). I have argued elsewhere against such a reductionism on semantic, linguistic, and deontic grounds (cf. Quast 2018b). Instead, expertise should be considered a disposition to serve. If this proves to be correct, the above examples fail to prove that expertise is not determined by social contrast, for the possession of ordinary competences differs from the possession of expertise, which represents a disposition to serve. This becomes even more evident when *expertise* is conceived in the indexicalist framework introduced in section 6. According to this proposal, expertise ascriptions of the form 'The time-traveler e is an expert in d' are best understood as expressing the multi-place relation F(e,c,d)|cu. Assuming this to be correct, the above expertise ascription is truthevaluable only in specific contexts of use. At least two of these contexts deserve closer consideration.

In the first case, the time traveler is *stranded* in prehistoric times due to a cosmic coincidence. Because there is no prospect of her return, it seems irrelevant (or pointless) to ascribe expertise in this context, even if such a proposition would be truth-evaluable. For if there is no contrast class close by for the time traveler to serve as an expert, then there is no point in being an expert after all. Although

Tom initially has a larger hip size than Jim, but then loses this property without a change in his intrinsic properties.

one could principally ascribe expertise to the time traveler in relation to, say, contemporaries of her own time, this contrast group lacks relevance (or is masked) in the absence of functional proximity. And if there is no relevant contrast class (or client) in proximity, an expertise ascription seems pointless. For the time traveler is, in other words, functionally isolated.

In the second case, however, the ascriber knows that the time traveler possesses a perfectly *reliable* time machine which allows her to go back and forth in time at her convenience. Under these circumstances, the above ascription of expertise is highly relevant. This is because the time traveler can go back and forth in time like others change locations. Thus, in the plethora of different times there will always be a large variety of relevant contrast classes towards which she can be functionally engaged. This ultimately claims that a context of use is only suitable for ascribing expertise if there is ample prospect of interaction between the expert and her client, that is, if the expert is not functionally isolated.

As a result, sentences like 'The time traveler e is an expert in d' are only truth-evaluable in relation to some contrast classes or clients which may have different relevance in different contexts of use. This is why 'The time-traveler e is an expert in d' is not a truth-evaluable proposition if the context of use is unknown. Rather, it is then semantically incomplete. It is important to stress, however, that even fully truth-evaluable ascriptions of expertise can have different relevance depending on the varying functional proximity of different contrast classes. Depending on the corresponding details of the traveler's case, the ascription of her expertise could therefore be *relevant*, *masked* (i.e., not-relevant), or even *pointless* (i.e., irrelevant). This is why Webb's thought experiments eventually fail to undermine the argument that a necessary precondition of expertise is having a relevant contrast class. ¹⁰

In addition, it is even possible for a given expertise ascription to be truth-evaluable in more than one context of use. In most scenarios, however, one context of use and claim to expertise is more relevant (or salient) in comparison to another. An example can illustrate this point (cf. Seidel 2014, 208). Whenever I see my childhood friends, they greet me, 'Here's our philosophy expert.' But this never occurs at philosophy conferences. This can be explained by linguistic pragmatics, more precisely, by the Gricean maxim of relation (cf. Grice 1975, 47), which can be understood as the request to express oneself only in *relevant* ways. In application, this means that at the moment of utterance an indexical ascription of expertise

¹⁰ A different reasoning applies to the expert status of the lone scientist. She can still be considered an expert, since the given scenario neither defeats the prior ascription of a service function nor undermines her corresponding dispositions, which were proved when she found a cure for cancer. Rather, her 'hermitism' is freely chosen and can end at any time, so relevant contrast classes are functionally nearby.

needs to be complemented with reference to the most relevant contrast class. Otherwise, the ascriber would have violated the maxim of relation. As a result, the above statement usually appears relevant enough amongst friends but often not amongst colleagues. This example demonstrates that the semantics of indexical expert qualifications can be complemented pragmatically.

To apply the terminology introduced here, both ascriptions of expertise are *valid* since both represent truth-evaluable propositions, but only the latter remains *relevant* in both contexts of use. This is because my status as an expert at the conference is downward compatible, i.e., it implies that I am an expert for the vast majority of people including my childhood friends. But my being an expert relative to my childhood friends is not upward compatible in the same manner. However, it is important to stress that although my expertise in philosophy in comparison to my childhood friends is not relevant at the conference, it is also not revoked but only masked. I am still an expert in comparison to them, but it would be misleading to simply claim expertise in philosophy at the conference without clarifying the context of use. Which one of the several contexts is to be emphasized as relevant (or salient) within a given situation depends primarily on the functional point of an expert qualification as well as on the practical interests at hand. I will address this in the following section.

As a result, phrases like "ubiquitous expertise" (Collins/Evans 2007, 13), or the claim that "everyone could in principle simultaneously qualify as an intellectual expert on everything" (cf. Webb 2015, 157), are highly misleading, if not even self-contradictory. For expertise implies that someone can only be an expert for something in contrast to someone in a suitable functional proximity. This is why, in opposition to Webb, Cambridge changes should be considered part and parcel of expert qualification. That this is not self-evident in every single case can be explained by the indexical use of expertise ascriptions, a fact that could lead us to accept the fluidity thesis stressed by Goldman, which was the starting point of this paper. Although ascribers of expertise can indeed "generate comparison classes on the fly" (Goldman 2018, 5), the preceding discussion also revealed that underlying this fluidity are service-functional constraints. The assignment of an expert's contrast class is therefore not arbitrary but it needs to have functional proximity to the given context of utterance.

8 The Assessment Sensitivity of Expertise Ascriptions

So far, we have seen that an expert's service function is linked to the context of an expertise ascription, i.e., its context of use. We have also seen that not only the contrast class but also the expert's domain can be restricted by this function (cf. sect. 3). This is how the content of an expertise ascription like 'e is an expert' is specified within the present context of use, that is, with regard to the social function and practical interests at hand. The ascriber therefore always determines which contrast class underlies an expertise ascription and on what matter the expertise is.

However, the indexicality of expertise ascriptions is not the only source of fluidity in using 'expertise', for expertise ascriptions also display assessment-sensitive features. Contrary to the indexicality thesis, this does not represent a claim about the ideal *content* of expertise ascriptions, but rather one about their relative *truth*. The framework on which this thesis is based is largely adopted from John MacFarlane's (2014) seminal work and will be applied to expertise ascriptions in due course.

The basic idea of assessment sensitivity is that the content of certain utterances, beliefs, or ascriptions is not true or false simpliciter, but only with reference to some standards of assessment. This can be understood as a local relativism about truth. An example may clarify the point in question: The idea is that utterances of the form 'Gevrey-Chambertin taste better than Chambolle-Musigny' simply express the proposition *Gevrey-Chambertin taste better than Chambolle-Musigny*, not *According to my standard of taste*, *Gevrey-Chambertin taste better than Chambolle-Musigny*. The crucial point of this distinction, however, is that propositions of the former kind are true only if assessed from some specific standard of assessment, and wrong from another. This pattern can be easily applied to expertise ascriptions. Hence, utterances of the form

(4) 'e is an expert (against a relevant client in a particular domain within a given context of use).'

do not express the proposition

(5) According to my standard of expertise ascription, e is an expert (against a relevant client in a particular domain within a given context of use).

but rather propositions like

(6) e is an expert (against a relevant client in a particular domain within a given context of use).

The philosophically noteworthy point, however, is that these propositions are true or false only in relation to the given standard of expert qualification, which depends on the context of assessment (ca for short).11

To motivate this claim, notice that *EXPERT* introduces a concept of expertise which makes use of a series of normative conditions requiring further explanation; to wit (1) authority, (2) difficulty, (3) reliability, (4) accuracy, (5) responsibility, and (6) competence enough (cf. sect. 6). But this is not the place to give detailed accounts of all these features; only the requirements that the expert be an authority and responsible should be discussed by way of example (cf. sect. 8.1 and 8.2), because, on closer inspection, we can see that authority directly corresponds to the dispositional dimension of expertise ascription and that an expert's responsibility is concerned with the role-functional dimension (cf. sect. 4). That these two normative features could be integral parts of expertise was recently discussed by Seidel (2019).

When evaluating ascriptions of expertise, one is always confronted with the issue of separating two crucial steps. We have to first inquire into the full content of an expert ascription before properly assessing that claim. This is especially important with regard to normative features like authority and responsibility, since they can only be judged on the basis of both, that is, on the context of use and context of assessment. This implies, on the one hand, that the required amount of authority, for example, depends on the point of an expertise ascription in the particular context of use, that is, on the underlying service function. As a rule of thumb: The more demanding the client's needs, the more comprehensive the requirements are for being an authority and therefore for being an expert. On the other hand, this still leaves plenty of room for disagreement in ascribing expertise, which is due to the assessment sensitivity of expertise ascriptions. More precisely, two different ascribers may agree on the agent's relevant service function and the underlying practical interests yet still disagree on whether the agent possesses expert status because the ascribed expert can appear relevantly authoritative when assessed from one context but not from another.

The following two sections will now take a closer look at this claim and explore the standards for being an authority and for being responsible, respectively.

¹¹ Very generally, the context of assessment is a situation in which the use of a sentence is evaluated.

8.1 Expertise and Authority

A plausible minimum condition for being an authority on some matter simply is being more relevantly competent than a contextually relevant contrast class (cf. de George 1985, 22; Goldman 1999, 268). In this vein, Neil Martin¹² is clearly an authority on Pinot Noir because he is much more competent in that matter than, say, a salient group of wine enthusiasts or the vast majority. But does my uncle's experience with Pinot Noir, which slightly exceeds the experience of average wine drinkers, also justify an ascription of authority? Is someone to be considered an authority who is only a wee bit more competent than her relevant contrast class? Or, do answers to these questions not always depend to some degree on the underlying contexts? This position will be defended in what follows. To support this claim, consider that after a conversation about wine and winemaking on Christmas Eve my uncle finally contends:

(7) 'Wow, it seems to me that you have recently become a true authority on Pinot Noir.'

To find out whether this is true or not, two steps are essential. First, we need to complement the above sentence to get a truth-evaluable proposition, which is determined by the context of use. Second, after the indexicality is eliminated we are in the position to ask whether the statement should be considered true or false. This is essentially on the basis of the context of assessment. However, it is important to note that from the ascriber's viewpoint both contexts originally coincide. That is, at the moment of ascription the ascriber's context of assessment is in line with the context of use. But this does not change the fact that every ascription may subsequently be subject to the judgement of others, which is where *faulty* and *faultless* disagreements can come to the fore.

When assessing authority ascriptions there are basically two reasons for disagreement which are relevant here. On the one hand, the assessor could make a wrong assumption about the underlying context of use, which could lead to an inappropriate assumption about the standards of assessment to be applied. That is to say, we have to consider objective criteria for the evaluation of assessment standards. To be more precise, the appropriateness of these standards should depend on the functional context of an expertise ascription, that is, on its given context of use. On the other hand, two assessors may have different practical interests, personal preferences, or be subjected to different risks when assessing an ascription of authority. This is to claim that some criteria for the evaluation of

¹² A professional wine taster and journalist who has reviewed wines for various publications.

assessment standards are more subjective in nature. While it can be argued that a disagreement in the first case is faulty and can be largely resolved, it appears more fundamental and even faultless in the second.13

To exemplify, think about the above example again. Utterance (7) in its given context of use (a normal conversation with the family on Christmas Day) is best understood as expressing the following proposition. According to my uncle, it seems that

(8) in contrast to him (or to our family, an interested laity, etc.) I have recently become a true authority on Pinot Noir.

In fact, my authority on Pinot Noir is usually not disputed by my family. However, this only applies to more modest contexts of ascription, that is, to situations where almost nothing is at stake. Thus, (8) is true relative to the relaxed standard of assessment salient on Christmas Day.

Now, imagine that my uncle receives an unexpected offer shortly thereafter. An acquaintance calls him on New Year's Eve to offer him a bottle of the very rare 1985 La Tâche, which is produced by the famous Domaine de la Romanée-Conti. Since this is one of the most valuable wines in the world, the context for an authority ascription is now more demanding and the standards of assessment rise accordingly. In these circumstances, my ascribed authority on Pinot Noir does not appear particularly relevant. There is too much at stake to simply count on my non-professional estimation. To apply the terminology introduced previously, the financial risk creates more restrictive standards, thereby *masking* the prior ascription of authority. Although my uncle still considers me an authority on Pinot Noir within more modest contexts, he contacts a reputable auction house for a price estimate. Or, put differently, relative to his salient standard on Christmas Day, (8) seems true to him, while relative to his salient standard on New Year's Eve, (8) seems *false*. As a result, my uncle considers me an authority on Pinot Noir in the first case, but not in the second. For higher risks create higher standards. Although there can be no single fixed threshold at which someone should be considered an authority on a particular matter, this does not change the fact that insisting on my authority on Pinot Noir on New Year's Eve obviously represents a case of faulty disagreement.

However, disagreements can be *faultless* too. If we take a closer look, we can imagine, for example, that I have some experience with buying and selling old

¹³ It should be noted that the previously emphasized *reality* of expertise ascriptions is one thing, but their relative truth in the face of subjective standards of assessment is quite another (cf. sect. 4 and fn. 1). Both are thus perfectly compatible with each other.

and expensive wines, and that my uncle is deeply distrustful. For this reason, he distrusts my estimation despite my being properly disposed to be considered an authority on this matter. He simply sets exceptionally high standards for being an authority and thus considers (8) to be *false* on New Year's Eve contrary to my own view. Accordingly, he turns to Sotheby's Auction House, and later explains to me in a private conversation that this was nothing personal, he simply felt that the matter was out of my league.

Should the disagreement between us be considered faulty or faultless? I would like to advocate the latter. Because our disagreement was essentially due to different standards of assessment, which mainly resulted from my uncle's notorious distrust, it reflects different individual preferences. It is therefore possible without contradiction for an authority ascription in the same context of use to be true when assessed from one viewpoint but false from another. The standards for being an authority are simply not fully *definite*. ¹⁴

Against this backdrop, we can now return to the question of different minimum thresholds for being an authority, which was the point of departure of this section. The forgoing considerations revealed that the varying context dependencies of authority ascriptions neither allow for fixed nor fully definite standards for being an authority. Rather, it is plausible that more modest contexts can allow for weaker standards, whereas more demanding contexts often lead to much stronger standards for the assessment of authority ascriptions.

Provided that authority is such a context-dependent feature of expertise, it therefore stands to reason that expertise ascriptions can partly rest upon *simple* contrasts, sometimes require a threshold of *qualified* difference such as being significantly better positioned in the relevant matter (cf. Coady 2012, 28), and/or sometimes call for an *absolute* threshold of relevant attainment (cf. Goldman 2001, 91; 2018, 5). According to the first standard, being an expert is largely a comparative matter, whereas the other proposal calls for a non-relational or combined threshold. However, if authority really is partly assessment-sensitive, then there is no uniform answer to the question of which threshold generally holds. In opposition, it seems better to reflect on these dynamics and to accept that two persons can *faultlessly* disagree on claims to expertise depending on varying standards for the assessment of authorities. This is how assessment sensitivity can give rise to some fluidity in using 'expertise'.

¹⁴ However, this does not change the fact that some individuals are competent enough that they can be considered authorities over virtually any contrast class and under any plausible standard, that is, in almost every context of use and assessment. In this sense, Neil Martin may be considered an authority on Pinot Noir independently of any contextual specification.

8.2 Expertise and Responsibility

According to EXPERT, having expertise requires not only a suitable amount of authority, but also a certain degree of responsibility, ¹⁵ which is why expertise can also be considered a deontic property. More exactly, the underlying claim is that the character of expertise ascription is dynamic, so that expertise can be retracted even though the subject remains extraordinarily competent, that is, an authority. In other words, the structure of expertise ascription is default and query. Once expertise has been ascribed, it is vulnerable to a later defeat. ¹⁶

The defeasibility of expertise ascriptions is based on an expert's disposition to serve, which comprises two major components: a dispositional component involving primary and secondary competences as well as corresponding attitudes, and a functional component, i.e., the relevant service function within the context of use. It is against this backdrop that experts are expected to behave responsibly in their field, that is, are expected to serve not only in primary ways but in secondary ways as well. To exemplify, consider that experts have to exercise their special dispositions to support others; are required to properly estimate and communicate the scope and limitations of their competences; have to account for their proceedings, etc. For sure, this only applies to appropriate circumstances.¹⁷ Climate scientists are, for instance, not responsible for answering every wild conspiracy belief thrown at them by climate change denialists.

But a previously valid expert status can be defeated if the expert lacks, or does not manifest, primary or secondary dispositions often enough. Imagine, for example, a former football player who for no reason refuses to comment on a match broadcast for which she was hired. Under these conditions, it seems perfectly reasonable to call her former expert status into question. This would amount to a lack of *primary* dispositions. An expert status can also be revoked if there is a lack of *secondary* dispositions. Imagine, for example, a climate scientist who is unwilling to take a stand on a climate report that she wrote on behalf of the government, or neglected to mention that she only specializes in the mitigation of the Gulf Stream. Alternatively, consider an expert witness on the stand who

¹⁵ Some related claims can be found elsewhere (cf. Reiner Grundmann 2017, 26; Hardwig 1994, 92 f.; Wagemans 2011, 330).

¹⁶ The responsibility and defeasibility of expertise ascriptions are complementary properties. For ascriptions of responsibility are always tentative, which makes them vulnerable to a later defeat.

17 This is an important qualification, for it ensures that queries to experts and expert performances are not only fundamentally but also contextually appropriate. The former simply ensures that the pertaining expert is relevantly disposed. For ought implies can. To exemplify the latter, imagine an expert witness who is obliged to account for her claims in court only, in contrast to, say, media representatives after the trial.

refuses to give evidence for her claims, or a member of a commission of experts who refuses regular inquiries when presenting a study. Even if the expert's testimony or report is impeccable, the lacking disposition to account for the claims is prima facie good reason to defeat the prior expert status. However, not every failure to take responsibility necessitates the retraction of an expert's status. This will soon become apparent.

To sum up, this two-stage model of expertise ascription can be sketched in the following way. For someone to be considered an expert, two conditions must be fulfilled: there must be a reasoned ascription of a service function and one must possess the suitable dispositions for its fulfillment. This comprises not only competences to serve, i.e., primary and secondary competences, but also a corresponding willingness to serve under appropriate circumstances. In this first stage of expertise ascription, expert status can be retracted if the expert proves to be *unable* or *unwilling* to give an account of her services when appropriate, for instance. ¹⁸ More precisely, the ascription of expertise is flawed in the former case and is gradually devaluated and possibly defeated in the latter. This is why an expert's status is always provisional, and why the expert needs to prove herself in appropriate circumstances if she is to be considered an expert in the long run. Such an expert behaves responsibly.

However, two aspects need further clarification. First, an expert's one-off misconduct usually needs to be very grave for a formerly valid expertise ascription to be revoked. This can happen through repeated minor misdemeanors as well. Second, like authority, the expert's responsibility is an assessment-sensitive matter of fact. As such, sentences like

(9) 'The expert witness acted responsibly during the court proceedings.'

can be true when assessed from one context of assessment and its standards yet false from another. One might consider two different assessors: a judge who is a layperson in the domain of interest and a scientific research group that specializes in the domain of interest and is attending the trial to complement their studies. It seems natural to assume that the standards for intellectual responsibility may, but need not, differ significantly in both contexts of assessment. As stated, these standards vary according to the practical interests and stakes in the salient context. When ascribing responsibility, it is therefore significant whether one strives for

¹⁸ Note that this is compatible with the common intuition that a lack of competences is often much more damaging to an expert's status than a lack of willingness to give an account of one's performances. This is because a lack of relevant competence is usually much harder to eradicate than a lack of corresponding willingness.

legal relevance or scientific precision, for example. This leaves room for divergent standards and is fertile ground for *faultless* disagreement in both responsibility and expertise ascription. Or, to put it differently, responsibility can be seen as another source of fluidity in ascribing expertise.

8.3 Two Kinds of Fluidity

Thus, not every fluidity in using a term needs to be traced back to a disorder on the conceptual level; rather, such a fluidity can also be based on a unitary definition. By stressing the "variability and fluidness of the concept" (Goldman 2018, 3, my italics), Goldman, however, assumes a conceptual disorder. A similar thought can be found in Majdik and Keith (2011, 281, italics erased): "[E]xpertise emerges as a fluid concept that can only be judged against the particulars of a situation, that necessitate the enactment of an expertise." However, if the foregoing clarifications are approximately correct, this claim is too strong. In the course of this paper, two major sources of disagreement in using 'expertise' were identified, namely, those involving the indexicality of expertise ascriptions and their assessment sensitivity. Both will be briefly summarized here again.

First, when someone utters that another is an expert on some matter, this can be understood as expressing the proposition e is an expert against c in d within cu, that is, the multi-place relation F(e,c,d)|cu. Due to this indexicality, there is often disagreement about the validity of expertise ascriptions based on a misunderstanding of the particular context of use (cf. sect. 7 f.). Imagine, for example, that within a particular context of use you utter 'e is the expert in d' to express the claim that e can and is expected to serve as expert for a local contrast class c including yourself in matters of d. This is expressing the proposition that e is our expert in d.19 When a passerby incidentally overhears the utterance, though, she strongly rejects your expertise ascription because she mistakenly assumes the ascription involves a more demanding function. Her misunderstanding of your claim thus represents a case of *faulty* disagreement. This is how the indexicality of expertise ascriptions gives rise to misunderstandings when the underlying context

¹⁹ However, such expert claims are sometimes put into question on the basis of maximalist intuitions concerning expertise, that is, presupposing that having expertise implies being competent enough to serve a vast majority of unqualified persons (of the entire world or throughout all times, cultures, social networks, non-human beings, etc.?). Without going into details, I want to repudiate this claim on the basis of a functional account to expertise according to which the relevant contrast class is always determined by an underlying function at hand (cf. sect. 4).

of use is unknown. However, this by no means leads to the conceptual fluidity at stake here, because *EXPERT* already incorporates this indexicality.

In addition to indexicality, the assessment sensitivity of expertise ascriptions was highlighted. This characteristic was traced back to normative features of *EXPERT*, especially to authority and responsibility. Both features were identified as sources of *faultless* disagreement, which made the assessment of expertise ascriptions partly a case of individual standards, practical interests, and personal stakes. This is why expertise ascriptions of the form F(e,c,d)|cu are not true or false simpliciter, but relative to the standards set by the context of assessment. This leads to the following improvement of *EXPERT*:

(*EXPERT**) Against a given context of use cu, someone is an expert e of a certain degree for a client c within a domain d as assessed from the context of assessment ca if and only if according to the standards of ca and at the moment of assessment e is undefeatedly disposed to reliably and creditably fulfill difficult service functions in d for e accurately for which she is particularly responsible. e0

Thus, expertise ascriptions are better understood as expressing the multi-place relation that against cu, e is an expert for e in e as assessed from e, or even shorter e, an expert in e is an expert in e are true if and only if their content in e is true against the standards within ca at the moment of assessment (cf. MacFarlane 2014, 67). And since the standards of e can vary across the assessor's interests and stakes, there is plenty of room for e faultless disagreement in ascribing expertise. The measures for the occurrence of expertise are thus strongly context-dependent, without expertise, however, becoming a purely subjective or relative phenomenon. This is particularly evident since being an expert requires suitable dispositions to fulfill a contextually ascribed service function.

We eventually arrived at a conception of expertise which not only explains the occurrence of *faulty* disagreement in terms of indexicality, but also makes room for *faultless* disagreement in terms of the assessment sensitivity of expertise

²⁰ Again, some short explanations are in order. Firstly, being undefeatedly *disposed* to fulfill a particular service function is a leaner and hopefully more elegant formulation for a more complex matter (cf. Quast 2021). Among other things, it implies being an *authority* and being particularly *responsible* for the matter in question. Therefore, an expert's being undefeatedly disposed implies that she is not only more relevantly competent than a salient group of clients (cf. sect. 8.1), but also that her ascribed status has not yet been defeated (cf. sect. 8.2). Secondly, the expert's *creditability* was added covertly as an important condition, which, however, cannot be explained in more detail here. It is merely stated that the purpose of this condition is to avoid agential luck and thus to substantiate the claim that expertise represents an honorific term (cf. Quast 2018a).

ascriptions. As a result, *EXPERT** does not provide a fully distinctive definition. In the case of ordinary language terms such as expertise, however, this should not be considered a vice, but a virtue. For this reason, *EXPERT** can be appropriate, though not fully distinctive, because the ordinary use of 'expertise' requires some amount of flexibility.

With regard to the primary aim of this paper, it is important to point out that the assessment sensitivity of expertise ascriptions still allows for some fluidity in using 'expertise' as opposed to a conceptual flexibility. Though grounded on a conceptual level, divergent expertise ascriptions can rest upon the same basis (i.e. *EXPERT**). Majdik and Keith's (2011, 289) courageous claim that "even deep down on a conceptual level" there is no plausible unitary notion of expertise is therefore an overstatement.

9 What Does it Take to Be an Expert?

We found that objective and subjective constraints underlie the occurrence of expertise. The *objective* constraint is determined by the service function an expert is thought to fulfill within a certain context of use. This can be called function-use indexicality. The *subjective* constraint, in turn, depends on the individual standards within the context of assessment. This can be called standards-assessment sensitivity. The former is a claim about the ideal *content* of expertise ascriptions, and the latter is a claim about their relative *truth*. This result sheds new light on the ongoing debate about the proper requirements for being an expert. This debate will be taken up here in conclusion.

If my considerations are correct, then highlighting some amount of epistemic qualifications to conceptualize (cognitive) expertise is highly questionable. There are by far too many usages of 'expertise' in ordinary and scientific discourse to be united under such a requirement (cf. sect. 3). Rather, it seems plausible that those qualities for being an expert are only accidental and often change across diverse service functions, interests, stakes, and standards of assessment. On this basis it was convincingly shown that the threshold problem for expertise cannot have a *fixed* and fully *definite* answer. Instead, it was demonstrated that the threshold problem can be settled within a service-functional framework, according to which someone is an expert for some client within a certain domain only if she is undefeatedly disposed to reliably fulfill difficult service functions in her domain accurately for which she is particularly responsible. Thus, although we were unable to identify any fixed and fully definite margins, a couple of relational and context-depended

requirements for being an expert have resulted from this discussion. The first basic requirement for being an expert is contrastive, i.e., the condition of *authority*:

(*CA*) *e* is (significantly) more competent in *d* than *c*.

This comparative threshold reflects the well-established linguistic finding that 'being an expert' and 'being a layperson' are usually treated as a contrastive pair of phrases, thus the meaning of the former partly depends on the meaning of the latter, and vice versa.

Another requirement for being an expert is functional, more precisely, a *service-functional* condition:

(CSF) e is competent enough to reliably fulfill a contextually relevant service function within d accurately, that is, in accordance with the client's pertinent needs.

This represents a non-comparative threshold for having expertise and corresponds to my service-functional understanding, which was endorsed in sections 3 and 4. Within this paper, I have put this functionality in contextualist terms.

This leads to the third and final condition to be highlighted here. This is a deontic condition for experts or more precisely the condition of *lacking defeat* according to which:

(*CLD*) *e* is non-defeatedly disposed to solve difficult problems in *d* for *c* creditably for which she is particularly responsible under the current context of assessment, that is, from a set of standards therein.

This is a non-absolute threshold for being an expert which allows for faultless disagreement and presents the main source of fluidity in using 'expertise'. The present paper tried to motivate this constraint on the basis of the assessment sensitivity of expertise ascriptions. As a result, we arrived at a series of thresholds for being an expert which take Goldman's fluidity claim seriously without lacking obligatory conditions for the ascription of expertise.

However, one could argue that this understanding of expertise requires a considerable amount of conceptual theory and has complications. This should not be denied. The key question might be whether my solution to the underlying threshold problem is ultimately worth this complexity. In conclusion, I would therefore like to stress two important points here. On the one hand, it is useful to recall that although $EXPERT^*$ is thought to reflect the ordinary and scientific discourse about experts, this is not the same as claiming that competent speakers

usually *intend* to use the term in the characterized way. Rather, it is fully adequate that *EXPERT** just covers the *operational* talk about experts and expertise. The demands on ordinary users of these terms are therefore not increased. On the other hand, the explicated 'grammar' of expertise ascriptions can be considered a generalized version of various extant proposals to *expertise* (exemplarily, just think about the epistemic qualities account, various other competence-driven approaches, or a purely role-functional understanding of expertise). My approach can thus account easily for why these proposals may have seemed plausible to others (cf. fn. 2). Other scholars have proposed some plausible specifications to the account presented here, albeit without explicating particular contexts of use and implicit standards of assessment. It is for this reason that my proposal can be helpful for understanding the interdisciplinary debate about experts and expertise and has a great explanatory value.

10 Conclusion

In the preceding sections the claim was developed and defended that expertise ascriptions of the form 'e is an expert in d' are true if and only if their content in cu is true against the standards within ca at the moment of assessment, or that expertise is the multi-place relation F(e,c,d)|cu|ca. Summarized in a handy definition, someone is an expert at the time and world of cu against the standards of ca if and only if she is undefeatedly disposed to creditably fulfill difficult service functions in d accurately for which she is particularly responsible.

In order to motivate this account, I claimed that a certain fluidity in using 'expertise' is important for understanding the concept. This fluidity was partly attributed to the indexicality of expertise ascriptions. In particular, the contrastiveness of these ascriptions was highlighted and subsequently defended against possible objections. Against this backdrop, the idea of an assessment-sensitive understanding of expertise ascriptions was introduced, the consequence of which was that the truth of claims to authority and responsibility to some extent depend on the prevailing standards of assessment. It turned out that the fluidity of expertise ascriptions is best understood as a fluidity in *using* 'expertise' rather than a *conceptual* fluidity, although its conceptual *grounds* are not denied. I then suggested an improved understanding of *expertise*, laid out in EXPERT*, from which I derived three plausible thresholds of expertise. In this way, this contribution casts a new light on the epistemological debate about the proper requirements for being an expert.

References

Agnew, N./K. Ford/P. Hayes (1997), Expertise in Context: Personally Constructed, Socially Selected, and Reality-Relevant?, in: *International Journal of Expert Systems* 7(1), 65–88

Caplan, A. (1992), Moral Experts and Moral Expertise: Do Either Exist?, in: If I Were a Rich Man Could I Buy a Pancreas and Other Essays on the Ethics of Health Care, Bloomington, 18–39

Coady, D. (2012), What to Believe Now: Applying Epistemology to Contemporary Issues, Chichester Collins, H./R. Evans (2007), Rethinking Expertise, Chicago

Craig, E. (1990), Knowledge and the State of Nature: An Essay in Conceptual Synthesis, Oxford Croce, M. (2018), On What It Takes to Be an Expert, in: The Philosophical Quarterly 69(274), 1–21 de George, R. (1985), The Nature and Limits of Authority, Lawrence

Fricker, E. (2006), Testimony and Epistemic Autonomy, in: Lackey, J./E. Sosa (eds.), *The Epistemology of Testimony*, Oxford, 225–253

Geach, P. (1969), God and the Soul, London

Goldman, A. (1999), Knowledge in a Social World, Oxford

- (2001), Experts: Which Ones Should You Trust?, in: *Philosophy and Phenomenological Research* 63(1), 85–110
- (2009), Replies to Discussants, in: Grazer Philosophische Studien 79(1), 245-88
- (2018), Expertise, in: Topoi 37(1), 3-10

Grice, P. (1975), Logic and Conversation, in: Cole, P./J. Morgan (eds.), *Speech Acts*, New York, 41–58 Grundmann, R. (2017), The Problem of Expertise in Knowledge Societies, in: *Minerva* 55(1), 25–48 Grundmann, T. (2008), *Analytische Einführung in die Erkenntnistheorie*, Berlin

Hardwig, J. (1994), Toward an Ethics of Expertise, in: Wueste, D. (ed.), *Professional Ethics and Social Responsibility*, Lanham, 83–101

Haslanger, S. (2005), What Are We Talking About? The Semantics and Politics of Social Kinds, in: Hypatia 20(4), 10–26

Latus, A. (2000), Our Epistemic Goal, in: Australasian Journal of Philosophy 78(1), 28-39

MacFarlane, J. (2014), Assessment Sensitivity: Relative Truth and Its Applications, Oxford

Majdik, Z./W. Keith (2011), The Problem of Pluralistic Expertise: A Wittgensteinian Approach to the Rhetorical Basis of Expertise, in: *Social Epistemology* 25(3), 275–290

Martin, B. (1973), Experts in Policy Processes: A Contemporary Perspective, in: *Polity* 6(2), 149–173 McGrath, S. (2015), Expertise, in: Audi, R. (ed.), *The Cambridge Dictionary of Philosophy*, 3rd ed., Cambridge, 345–346

Mieg, H. (2006), Social and Sociological Factors in the Development of Expertise, in: Ericsson, A./N. Charness/P. Feltovich/R. Hoffman (eds.), *The Cambridge Handbook of Expertise and Expert Performance*, Cambridge, 743–760

Pappas, G. (1994), Experts, in: Acta Analytica 12, 7–17

Quast, C. (2018a), Expertise: A Practical Explication, in: Topoi 37(1), 11-27

- (2018b), Towards a Balanced Account of Expertise, in: Social Epistemology 32(6), 397-419
- (2019), Objective Expertise and Functionalist Constraints: A Comment on Croce, in: Social Epistemology Review and Reply Collective 8(8), 15–28
- (2021), Was sind Experten? Eine begriffliche Grundlegung, Frankfurt

Schmitt, F. (2000), Veritistic Value, in: Social Epistemology 14(4), 259-280

Scholz, O. (2009), Experts: What They Are and How We Recognize Them: A Discussion of Alvin Goldman's Views, in: *Grazer Philosophische Studien* 79(1), 187–205

- (2018), Symptoms of Expertise: Knowledge, Understanding and Other Cognitive Goods, in: *Topoi* 37(1), 29–37
- Seidel, M. (2014), Throwing the Baby Out with the Water: From Reasonably Scrutinizing Authorities to Rampant Skepticism About Expertise, in: *Informal Logic* 34(2), 192–218
- (2019), Balancing the Normativity of Expertise, in: Social Epistemology Review and Reply Collective 8(7), 34–40
- Shanteau, J. (1992), Competence in Experts: The Role of Task Characteristics, in: *Organizational Behavior and Human Decision Processes* 53(2), 252–266
- Wagemans, J. (2011), The Assessment of Argumentation From Expert Opinion, in: *Argumentation* 25(3), 329–339
- Watson, J. (2018), The Shoulders of Giants: A Case for Non-Veritism About Expert Authority, in: *Topoi* 37(1), 39–53
- Webb, R. (2015), A Theory of Intellectual Expertise, PhD thesis, University of Hull, https://hydra.hull.ac.uk/resources/hull:11675 [30.10.2020]
- Weinstein, B. (1993), What Is an Expert?, in: Theoretical Medicine 14(1), 57-73