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Omissions and expectations: a new approach to the things we failed to do

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Abstract Imagine you and your friend Pierre agreed on meeting each other at a café, but he does not show up. What is the difference between a friend's not showing up meeting? and any other person not coming? In some sense, all people who did not come show the same kind of behaviour, but most people would be willing to say that the absence of a friend who you expected to see is different in kind. In this paper, I will spell out this difference by investigating laypeople's conceptualisation of absences of actions in four experiments. In languages such as German, French, Italian, or Polish, people consider a friend's not coming an omission. Any other person's not coming, in contrast, is not considered an omission at all, but just a mere nothing. This use of the term omission differs from the usage in English, where 'omission' refers to all kinds of absences. In addition, 'omission' is not even an everyday term, but invented by philosophers for the sake of philosophical investigation. In other languages, 'omission' (and its synonyms) is part of an everyday vocabulary. Finally, I will discuss how this folk concept of omission could be made fruitful for philosophical questions.

Keywords Causation by omission · Selection problem · Counterfactual · Blame · Expectation · Norm violation

1 Introduction

Imagine you and your old friend Pierre plan to meet at a café in New York at 4 p.m. You are looking forward to this meeting because you have rarely get a chance to meet

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Pierre since you have college. At 4 p.m., you are at the café, waiting for Pierre to arrive. But he does not show up. After 30 min, you start wondering why Pierre did not come. Did something bad happen to him? Did he forget about the meeting? Is he sick? Perhaps he is angry with you for a reason you are not aware of?

Apart from Pierre, there are plenty of other people who did not show up at the café: Barack Obama, your grandmother, or a three-headed yellow alien. All these people showed the same kind of behaviour: not coming to the café at 4 p.m. But intuitively it seems quite absurd to even think about all these other people's not being at the café. In addition, even though you now start thinking about a three-headed alien—for I made you do so—there seems to be something strikingly different about your friend's omission to come.

In this paper, I will argue for a new way to think about omissions that is grounded in people's reasoning about absent actions, events, and objects: The difference between your friend Pierre's and the alien's not coming is that the former is actually considered an omission, while the latter is not. This is to say that not all absences are actually thought to be omissions. Looking at people's actual use of the concept rather indicates that omissions are absences of actions, objects, or events *we expected*, but that did not occur. Absences of aliens at a café in New York, on the other hand, are not omissions, they are simply nothings. In various languages such as in German, Italian, French, or Polish, people make a distinction between mere not-doings and omissions—in contrast to the English language. I will present four experiments that lend support to this idea. In addition, I will suggest various implications of laypeople's concept of omissions. On the one hand, it is not immediately obvious if what people think to be an omission actually tells us something about what an omission really is. So one question that arises from the empirical results concerns the metaphysics of omissions. On the other hand, one of the main areas in which omissions have been discussed is the metaphysical debate about causation. Philosophers have had intense debates about the causal potency of omissions. I will, therefore, discuss whether the folk concept of omissions can contribute to a philosophical account to causation by omissions.

1.1 Three ways to think about causation by omissions—and a new suggestion

Omissions have played a particularly controversial role in debates about so-called negative causation[1]. Many philosophers have realized that in addition to the things that exist, we sometimes talk about, are sad, angry, happy about, or even afraid of things that do not exist. And sometimes we also make causal claims about the causal effects of something being absent. It is, for instance, quite intuitive to say that your not watering my plants (the absence of an action of you to water my plants) caused their death, or that the absence of vitamin C causes scurvy. But how can things that do not exist ever cause anything? In this section, I will focus on the role of omissions as well

[1] Negative causation refers to a causal relation between two relata, where at least one relatum is a negative event. Negative events are events that did not take place. There are two sub-classes of negative causation: causation by omission and prevention. In the first class, the cause of an effect is something that did not happen, such as Barry's not watering your plants. In the second class, the effect is something that did not take place, for instance the plants' not drying up. In this paper, I will focus on causation by omissions.

as how the term is used in the debate about causation.[2] Even though many different kinds of absences are discussed in the ontological literature on both absences and negative causation, the discussion to follow is concerned with absences of actions. At the end of this paper, I will discuss whether the insights gained for this one particular kind of absences can be applied to other kinds of absences as well.

Many philosophers, and especially those who claimed that causation is a physical process in the world like energy transfer, conservation of momentum etc., find negative causation puzzling. Armstrong, for instance, claims: "Omissions and so forth are not part of the real driving force in nature. Every causal situation develops as it does as a result of the presence of positive factors alone." (Armstrong 1999, p. 177); for similar positions see Beebee (2004) and Moore (2010). Alternative views that are in a better position to account for the causal power of omissions are difference-maker approaches. Advocates of these approaches do not analyse causation in terms of physical processes. Instead, they take a cause to be something that makes a difference to the outcome. One way to spell out this idea is the counterfactual approach, most famously presented by Lewis[3]. A made a difference to B in the sense that B counterfactually depends on A: A caused B if it is true that if A had not happened, B would not have happened.[4] However, looking into counterfactual approaches to causation more carefully leaves us with the *dilemma of causal selection*. How do we know which of all the true counterfactual statements actually describes *the* cause of an effect? If I had watered my plants, they would not have died. However, if Barack Obama had watered my plants, they would not have died either. Does it make sense to say that there are two causes of my plants' death, namely my not watering them and Obama's not watering them?[5]

The dilemma of causal selection has created three opposing views which I will refer to as the *radical optimists*' view (all omissions are causes), the *radical pessimists'* (no omissions are causes), and the *moderate optimists'* view (some omissions are causes) about the causal efficacy of omissions. All of these people rely on the assumption that all the things that did not happen or do not exist are omissions. As I said, I will oppose this view in the rest of this paper. But there is the debate that follows from this assumption:

[2] The examples just given all contain members of different ontological categories as causal relata. This, however, is not a metaphysical commitment, but rather a reflection of ordinary speech. In the following, I will rely on an event-causalistic approach, saying that only events are causal relata. While it is natural to say that Obama caused my plants death, it is not a metaphysically adequate statement. What it expresses is that Obama was part of an event that caused my plants' death. I will avoid such ponderous formulations in this paper.

[3] The arguments presented in the following will not be based on any particular counterfactual account, but rather take as its target the common ground that all these counterfactual approaches share.

[4] Not all philosophers believe that counterfactual approaches can account for causation by omissions as well. One striking difference between events and omissions of events is that they work differently in counterfactual claims. If A and B are both events, the counterfactual claim "If A had not happened, B would not have happened" refers to *two particular events*. If A is, however, an omission, "If A had happened, B would not have happened" refers to what would have happened if an event *type* had happened. For such an argument see Casati and Varzi (2014) and Varzi (2007).

[5] Many authors have already discussed the shortcomings of Lewis's original theory due to its simplicity. However, even though many significant contributions have been made that improved Lewis's account, none of the extensions I am aware of could sufficiently solve the problem of causal selection.

According to radical optimists like David Lewis , *all omissions are causes* (Lewis 1973). This view, however, faces many challenges. For the truth of the counterfactuals, both Obama's and my failure to water the plants are causes of their death. And so is every single person's failure to water them. My plants' death has infinitely many causes. Yet this does not seem to be plausible and leads to what some authors have called "causal promiscuity" (Barros 2013)[6]. Some optimists have tried to solve this issue by arguing that causal selection depends on pragmatic considerations (Driver 2007; Lewis 1973). While it is, in fact, true that Barack Obama's not watering the plants caused them to die, this information is hardly ever relevant to mention. Such a suggestion, however, predicts that people should be willing to accept Obama's causal relevance if the conversational context is set up in the right way. However, this prediction fails in empirical tests. People do not only consider it irrelevant to mention Obama's causal involvement, they explicitly deny its causal power, even when pressed (Livengood and Machery 2007). The fact that people's resistance to mention Obama's failure to water the plants cannot be explained by what they consider relevant actually shows that such judgments are independent of pragmatics and have some deeper roots. People instead believe that there is a causal difference between different people's failure to water your plants and thus make a metaphysical commitment. Thus, if we believe that all omissions are causes, then folk intuitions deviate from such a metaphysical account by being much more selective.

It might be argued that folk intuitions might not be a reliable source of metaphysical truths. This point is well taken, and I am not arguing that folk metaphysics should necessarily affect philosophical metaphysics. However, many philosophers accept that the quality of a metaphysical theory of causation partly depends on how well it can account for everyday intuitions. Consequently, a strong disagreement between philosophical theory and folk intuitions should at least give rise to further questions as to how this disagreement can be explained. Thus, the suggestions I will make in the following will not touch the metaphysical debate about the ontological status of omissions or their causal power directly. Rather I will investigate whether the predictions that are made by various theories about causation by omissions hold against everyday intuitions. I will come back to this debate at the end of this paper and outline a way to make empirical results fruitful for metaphysical debates.

But for now, let us go back to the three positions about causation by omissions. In contrast to the radical optimists, *radical pessimists* about the causal power of omissions have argued that a counterfactual account to causation by omissions is unsatisfactory since it unnecessarily inflates our ontology. Such pessimists *reject causation by omissions all together* to avoid allowing for counterfactual statements that intuitively do not express true causal statements. However, while this position finds support in people's resistance to accept Barack Obama's omission as a cause of the plants' death, it is challenged by the intuition that *I*, however, *did* cause it. In addition, the view that omissions cannot be causes does not only conflict with ordinary intuitions about

[6] Lewis for instance has suggested that causation by omissions opens up an almost infinite number of possible worlds in which the omission is replaced by a relevant outcome-preventing action. All these possible words are given ontological reality. In order to identify 'the' cause of the effect, these possible worlds are than ranked in order of similarity to the actual world.

causation, but also with more sophisticated applications of the term in the sciences and the law. The absence of vitamin C causes scurvy; the lack of oxygen, suffocation; disconnections in the spinal cord, paralysis – or death in the case of beheadings. In the same way, both German and French law, for instance, specify the failure to render assistance in an emergency as punishable since it causally contributes to the victim' death.[7]

Trying to solve this puzzle in a pessimistic manner, Helen Beebee argued that people's way of expressing causal connections is just imprecise and systematically fails to make the Davidsonian distinction between *causal statements* and *causal explanations* (Beebee 2004). According to Davidson (1967), both causal statements and causal explanations are verbal expressions that make use of causal terms. A causal statement relates two events by the connector 'cause' and refers to an actual relation in the world.[8] The truth of such a statement is then dependent on whether there actually was a causal relation between the events picked as causal relata. The truth of a causal explanation, on the other hand, is not determined by the world, but by pragmatics alone. Causal explanations connect two pieces of information with 'because' in order to help us understand how an event or state of affairs came about. And here, it might be much more useful to talk about the things that were absent than about the things that were present. Why was there an explosion? – Because Barry failed to turn off the gas. This is a perfectly informative causal explanation, while not making a true causal statement.

Livengood and Machery put this hypothesis to the empirical test. They presented subjects with a case in which Susan had to climb a rope in gym class. Susan was a very good climber, and she climbed all the way to the rafters. Then people were asked to indicate their agreement with either a causal statement (A caused B) or a causal explanation (B because of A) that connects the omission of the rope to break with Susan's success to climb all the way up. What Livengood and Machery find contradicts Beebee's solution. The folk do in fact draw a distinction between causal claims and causal explanations, and they treat omissions as actual causes, not only as a causal explanans (Livengood and Machery 2007, p. 124). Thus, against the radical pessimists' solution to the problem of selection, the folk do believe that at least some omissions are causes. So again, folk-intuitions are not in line with metaphysical accounts of causation by omissions.

In contrast, *the moderate optimistic position* takes folk intuitions seriously and *claims that the concept of causation is inherently normative*. Which omission we consider to be a cause depends on normative expectations of who or what is a normal would-be preventer of an outcome (McGrath 2005). The claim that expectations or

[7] Jonathan Schaffer provides an intriguing list of cases in which an effect is not caused by the presence of a certain event or entity, but rather by its absence (Schaffer 2012). He argues that radical pessimists do not only commit themselves to rejecting beheadings or suffocations as causes for a person's death, but since all bodily movements are induced by the absence of previously present inhibitors, no action can ever count as a cause of anything.

[8] In the Davidsonian picture, this causal relation is thought to be a physical relation. Davidson himself thus denies that omissions can be causes right from the beginning. He, however, recognizes that people talk as if omissions could be causes. Yet this, so Davidson argues, is inaccurate. Omissions cannot fit into true causal statements, but they can provide perfectly informative causal explanations.

norms figure in conceptual distinctions has found significant support from research in experimental philosophy. Whether a norm is violated affects, for instance, our concepts of freedom (Phillips and Knobe 2009), causation (Alicke 1992; Hitchcock and Knobe 2009), and intentional actions (Knobe 2003), and also which kinds of behaviour we consider an active doing, compared to an allowing (Cushman et al. 2008; Kominsky et al. 2015). Phillips et al. (2015) have investigated the roots of this effect in more detail, arguing that norm violations impact on these concepts via the modification of the relevance of alternative counterfactual scenarios. Gerstenberg (2013) and also Kominsky et al. (2015) demonstrate that both statistical and moral norms render some events, or features of these events, noteworthy. Just recently, Henne and colleagues showed that expectations also impact on the causal selection of omissions as causes (Henne et al. 2016).

1.2 A new way to think about causation by omissions

The three accounts just discussed all start off from a shared assumption about what it means to be an omission. They all agree that omissions are just the events that did not happen, objects that are not there, or actions a person did not perform. A different way to think about causation by omissions is this: Not all the things that are not there, not all the actions that are not performed, or objects that are not there are omissions. A great majority of absences are not omissions at all, but simply nothings. As McGrath as well as Knobe and colleagues argue, expectations impact on what we consider causally and morally relevant. So among all the things that are not there, some of them present themselves as outstanding and recommend themselves as causes, while others never even come to mind—or when was the last time you thought about the omission of a three-headed, yellow alien running around your living room? It seems quite odd to say that there is such an omission. However, you might think about the omission of your TV in the living room if someone had broken into your flat and stolen it. The idea I would like to develop here is to treat norms as the line along which we not only decide which omissions are causes, but also what can count as an *omission* in the first place. People form expectations as to what will or should happen on the basis of these norms, and it is this expectation that makes people call some things omissions. Let us call this idea the *new optimistic approach*.

In German, there is a word that expresses the idea that an agent did not perform an action. The noun for this is ‘Unterlassung’, and there is also a related verb, namely ‘unterlassen’. While the noun is typically translated to ‘omission’ in English, the German term works quite differently. In addition, the English language does not have a corresponding verb. In the following, I am going to argue for the hypothesis that German native speakers will call something an ‘Unterlassung’ (hereafter omission*) if the absence of an action violates an expectation on the agent to perform that very action. If there was no expectation to act in such a way, and the agent did not, German native speakers will deny that this inactivity is best described as an omission*. In the case of my dead plants, it would be appropriate to say that

(1) Barry hat die Pflanzen nicht gegossen
Barry didn’t water the plants

However, a sentence using the noun 'Unterlassung' or the verb 'unterlassen' provides additional information on the character of his not watering the plants. By saying

(2) Barry hat es unterlassen, die Pflanzen zu gießen
Barry omitted* to water the plants

German speakers indicate that there was some kind of expectation that Barry water the plants. At first sight, this formulation seems quite close to the English "Barry *failed* to water the plants", "Barry *refrained*" or "*neglected*" to water them. There are two reasons why these expressions might at best give a rough estimation of what the German concept expresses. First, a failure to do X is not necessary for an omission to X (Clarke 2014). If you try to run a marathon but fail, there is no omission of yours to run a marathon. Also, the German concept is not only applicable to cases of failing to do or refraining from doing something. Imagine a soldier who is given the order to kill an innocent person. Even though there is an expectation on him, it would seem quite odd—at least in a moral sense—to call his not-killing a *failure* to kill. To take a less morally charged scenario, many teenagers try drugs during their adolescence. Even though we can expect 16-year old Tom to try drugs—it is very likely for him to take drugs—it does not make much sense to say that he "failed" or "neglected to try drugs". The German concept of omissions* is applicable to both of these cases.

While this might be a mere idiosyncrasy of the German language without any bearing on metaphysical issues, a close look at several languages reveals similar distinctions, such as in Italian[9], French[10], Polish[11], but also Arabic, and Japanese. Thus, also in the absence of common roots, shared legal systems or cultural similarities, in other languages people seem to distinguish between omissions* and other absences. This common pattern indicates that there might be something idiosyncratic to the English language—the language in which most of the metaphysical arguments on causation by omissions have been developed.

1.3 Expectations and norms

The concept of expectations I will use in this paper is a rather unspecific, commonsensical notion. Expectations, roughly speaking, are mental representations that are future-oriented and entail predictions of what will happen. They are directed at the behaviour of living organisms, inanimate events, but also objects. We can have expectations about whether a friend will be happy to see us after a long time, or about whether our plants will dry up without being watered in two weeks; but also about the weather, or what our favourite piece of cake will taste like. And these expectations are

[9] Compare "Obama non ha annaffiato le piante" and "Barry ha omesso di annaffiare le piante", where the former indicates that Obama did not water the plants, but was not expected to, and the latter expresses the idea that Barry was expected to water the plants.

[10] Same in French: "Obama n'a pas arosé les plantes" in contrast to "Barry a omis d'arroser les plantes".

[11] In Polish: Obama nie podlał kwiatów" in contrast to "Obama zaniechał podlania kwiatów". In addition, it would be fine to say that the soldier omitted to kill ("żołnierz zaniechał zabicia"), and also that Tom omitted to take drugs ("Tomek zaniechał zażywania narkotyków"), for instance if he once tried and then restrained himself from doing so.

sometimes met and sometimes they are not. In this sense, expectations are descriptive (cf. Wallace 1994, p. 20 ff.). However, there is another sense of expectations that has a strong normative component. We do not expect that a notorious liar will tell us the truth, as past experience tells us that they are much more likely to lie. However, we still have the normative expectation that they *should* tell the truth (Hamilton 1978; Wallace 1994). It thus makes sense to distinguish between two readings of expectations: descriptive and prescriptive expectations. According to the first reading, you might be willing to bet money that something will be the case; according to the latter, you might be willing to pay money to make it the case.

For the purposes of empirical research in moral cognition, using the notion of "violations of expectations" has a striking advantage over talking about "norm violations". Norms are a fact of the matter that exist independently of us being aware of them. This concerns both statistical and social norms. We can be ignorant of the average amount of rain per month in Somalia, the proper functioning of the lymphatic vessel, or how to address the Queen of England correctly. McGrath as well as Knobe and colleagues have argued that norm violations trigger certain kinds of judgments, for instance causal ones. While I do believe this approach is correct, it requires certain conditions to be met, such that the person making the judgment is (a) aware of a certain norm, (b) accepts this norm to apply in the given situation, and (c) consequently feels that this norm has been violated. In fact, a Christian, European woman violates plenty of norms that are held in Muslim societies. However, the mere fact that she does so will not influence the moral or causal judgment of a typical Christian, European person because he does not expect a Christian, European woman to conform to Muslim norms.

Norms often lead to expectations, but they are not sufficient for an expectation to arise. Consequently, not every norm violation also entails a violation of expectations. As I see it, only norm violations that lead to violations of expectations will have any impact on people's cognition.[12] It deserves further empirical investigation whether a clear conceptual distinction between descriptive and prescriptive norms and also expectations can actually be maintained. In a recent study, Bear and Knobe (2015) showed that people actually incorporate both kinds of information about what is statistically most likely or descriptively average (descriptive), and what is ideal (prescriptive) into an undifferentiated concept of *normality*. There are some intuitive examples that suggest that expectations of normality (in this undifferentiated sense) are very common. Imagine your husband always takes out the garbage. You never agreed on this being his job nor did he make any promises to take care of the garbage—he just has a habit of doing it. Imagine you go on holidays and you expect your husband to take out the garbage as he has done for the last 15 years. It seems quite natural to blame him for not doing so this time, and it seems equally likely that you will name

[12] Moreover, there is an additional conceptual difference between norms and expectations that will be shown to be relevant to future research. Expectations do not necessarily dependent on norms. We may also form the expectation that Tom will come to our party simply because Tom told us about his intention to come, or because his wife Laura told us. If Tom does not come, however, it still seems sensible to say that Tom's not coming to the party caused my surprise, my anger, my calling him to check if he is ok. What is required is, of course, empirical research investigating whether expectations that are formed in this way actually have the same effect as expectations based on norms.

him as the cause of the unappetizing surprise in your kitchen when you return from your holidays. Examples like this suggest that statistical information can create expectations that are not merely descriptive, but carry normative weight. In addition, what is morally required might be the typical behaviour to observe and thus become statistically likely. Consequently, even though differentiating between the two concepts might be valuable for philosophical purposes, it is not at all obvious people actually hold expectations that can be categorized in this way.

The concept of expectations is particularly useful and might be central when investigating omissions. Some people have argued that omissions parasitically depend on expectations (Varzi 2006). As a hole in a piece of cheese is only a hole with respect to the cheese, an omission is only an omission with respect to what we expect to happen or be in the world. Varzi thus argues that we can only perceive the absence of something by comparing it to expectations. This idea is in line with the suggestion I argue for, namely that expectations guide what we consider an omission. However, it can be argued that what an omission actually *is* at a metaphysical level does not depend on expectations, but on the norms that our expectations actually represent. I will develop some arguments as to how such a view might be spelled out in the general discussion of this paper.

1.4 Outline of the paper

In this paper, will argue for two claims. (1) I have argued that laypeople draw a conceptual distinction between omissions* and mere not-doings. Omissions* are those actions an agent did not perform that he was expected to perform, either morally or statistically. All other not-doings will not be judged to be Omissions*. (2) Building on recent research on the connection between expectations and causal judgments it might be possible that expectations do not only affect causal judgments directly, but also indirectly by changing our conceptual distinctions.

I present two pairs of experiments to test these two hypotheses. Experiment 1 tests the impact of moral expectations on moral and causal judgments with English native speakers and aims to replicate previous findings that expectations affect moral and causal judgments. In Experiment 2, the same vignettes are presented to German native speakers. In addition to the questions asked to American participants, I also ask people to indicate their agreement with describing the agent's inactivity as an 'Unterlassung'. Experiment 2 therefore aims to confirm the effect of expectations for the German language, and also tests whether people draw a conceptual distinction between omissions* and not-doings. In addition, I will test whether people's judgment about omissions* vs. not-doings is an indication for their causal judgment. On the basis of the first two experiments, I will argue that the best explanation for the similarity of response patterns in English and German native speakers is a shared concept of omissions*.

The second pair of experiments tests the impact of statistical expectations on causal judgments. American results are presented first, confirming that causal judgments depend on violations of expectations. Experiment 4 presents the same materials to German participants, again adding a question on the conceptual distinction. I will show that German native speakers make the predicted distinction, and also show

strong similarities in their response patterns with English native speakers. This lends further support to the hypothesis that the conceptual distinction between not-doings and omissions* is shared by native speakers of both languages.

2 Experiment 1

Several studies on English native speakers have indicated that expectations play a pervasive role in moral and non-moral judgments for both actions and omissions (Alicke 1992; Knobe 2009; Kominsky et al. 2015; Phillips et al. 2015). Experiment 1 aims to replicate these results. In addition to expectations, also knowledge and ability have been discussed as crucial pre-conditions of moral responsibility attribution. For instance, in order to be fully accountable for an inaction, the person must have known that there was a causal chain leading to a bad outcome that they might have had prevented (Clarke 2014; Zimmerman 1981). Following the idea that 'ought' implies 'can', a person can only be held responsible for what he failed to do despite his ability to do so. However, these factors have been neglected in the empirical literature so far. Experiment 1 therefore tests the impact of not only expectations, but also of ability to do otherwise and knowledge about the consequences of not acting on participants' moral and causal judgments.

2.1 Methods

215 participants were recruited on Amazon's Mechanical Turk and reimbursed for taking the survey. 12 were excluded for either not having completed the survey or not indicating English as their native language. Thus, results are reported for 203 participants, 65.2% male and a mean age of 31.97 years.

Each participant was randomly assigned to a single scenario and answered five questions. The table below shows two of eight scenarios, namely one scenario in which all three variables had the expression *present*, and one in which all had the expression *absent*. All other scenarios are a combination of the relevant sentences.

Knowledge, ability, expectation	Alice goes on holiday for two weeks. Before leaving, she asks her neighbour Barry to water her plants in the garden during her absence. Barry promises to water them since he knows that otherwise they will dry up. Even though Barry is at home during the two weeks and could water the plants, he does not. When Alice returns from her holidays, her plants are dried up and dead.
No Knowledge, No ability, No expectation	Alice goes on holiday for two weeks. Her neighbour Barry knows about her leaving, but thinks that her plants might be fine if nobody waters them in two weeks. The day after Alice leaves, Barry suddenly leaves town on an urgent business assignment, which keeps him away for longer than he expected. Barry does not water the plants. When Alice returns from her holidays, her plants are dried up and dead.

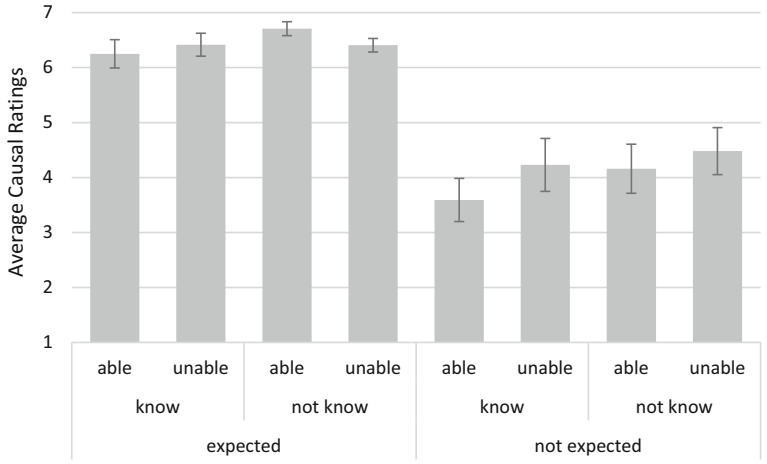

Fig. 1 Mean causal ratings. *Bars* indicate the standard error around the mean

Participants were then asked to indicate their agreement with the following statements:

1. The plants dried up and died because Barry didn't water them.
2. Barry should have watered the plants.
3. Barry knew what the consequences would be if he did not water the plants.
4. Barry had the ability to prevent the outcome.
5. How much blame does Barry deserve for not watering the plants?

The question about causation was always asked first, the question about blame last. The order of the three manipulation checks was counterbalanced. People indicated their agreement to the first four questions on a 7-point Likert scale, with '1' meaning 'completely disagree' and 7 meaning 'completely agree'. Judgments about blameworthiness were give on a 7-point Likert scale, with '1' meaning 'not blame at all' and 7 meaning 'a lot of blame'.

2.2 Results

I applied an ANOVA with participants' causal ratings as the dependent measure and the independent factors *Knowledge, Ability,* and *Expectations.* The analysis revealed a significant main effect for *Expectation*, $F(1,196) = 92.14$, $p < .001$, but no significant main effect for *Knowledge*, $F(1, 196) = 1.70$, $p = .193$, or *Ability*, $F(1,196) = .73$, $p = .396$. No significant two- or three-way interaction was found (Fig. 1).

I also carried out an ANOVA for people's responses to the blame question. The analysis revealed a significant main effect for Expectation, $F(1,196) = 141.92$, $p < .001$, a significant main effect for Knowledge, $F(1,196) = 3.97$, $p = .048$, and none for Ability, $F(1,196) = 1.54$, $p = .216$. No significant two- or three-way interaction was found (Fig. 2).

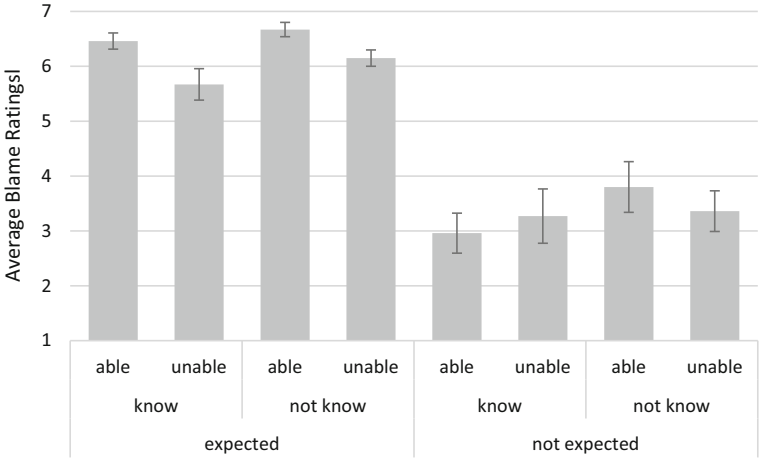

Fig. 2 Mean blame ratings. *Bars* indicate the standard error around the mean

The results show a particularly interesting effect for Knowledge. Knowing that the plants will dry up and die, but not watering them anyway is judged less blameworthy (M = 4.51) than not watering them without this knowledge (M = 5.04).

2.3 Discussion

As predicted and confirming previous studies, participants showed a high sensitivity to expectations. Whether Barry was expected to water the plants due to his previously made promise highly affected both causal and moral evaluations of his behaviour. These results replicate previous studies by Henne et al. (2016) on omissions, and also fit in with a large corpus of studies showing the pervasiveness of expectations for both moral and non-moral judgments (Alicke 2008; Cushman et al. 2008; Hitchcock and Knobe 2009; Knobe 2003; Phillips and Knobe 2009).

What about ability and knowledge, the two other key factors discussed in the philosophical literature? Against philosophical theories, ability played no role in blame or causal attribution. This result is particularly surprising for blame judgments. Many philosophers have argued that blame judgments depend on the agent's ability. For blame implies some sort of obligation, and for there to be an obligation, the agent has to be able to fulfil said obligation (Sinnott-Armstrong 1984; Stern 2004; Vranas 2007). A lack of ability excuses the agent from his obligation, and thus from blame. This effect did not show in the present study. In line with standard philosophical approaches, participants showed sensitivity to Knowledge. Surprisingly though, this sensitivity went in the exact opposite direction from what most philosophers might have predicted. Participants judged an agent who did not water the plants as *more* blameworthy when he *did not know* that the plants would dry up and die. Thus, knowledge did not justify blame, but rather eliminate it. However, the results should be taken with a pinch of salt, and might be explained by people perceiving an agent as culpably ignorant of he does not know that plants will dry up and die if not being watered in two weeks. It

is likely that information about how often plants need to be watered is perceived as either so commonsensical, or at least so easily accessible, that the agent *should* know. If this explanation holds, it does not provide evidence against philosophical theories of blame.

3 Experiment 2

Experiment 2 examines whether German native speakers actually draw the predicted conceptual distinction between omissions* and not-doings, and whether this distinction predicts causal and moral judgments.

3.1 Methods

335 participants were recruited on Facebook. I identified several Facebook groups of first-year college students in philosophy, psychology, sociology, law, and German studies. These groups can only be joined after approval from the group's administrator. After explaining my intention to recruit participants for an empirical study, I was invited to join the group and given permission to post a link, generated on Qualtrics. 57 were excluded for either not having completed the survey or not indicating German as their native language. Thus, results are reported for 282 partipants, 39% male and a mean age of 21.69 years (SD = 6.266).

Each participant was randomly assigned to the German translation of a single scenario of the eight vignettes in German and answered the same five questions, also presented in German.

Knowledge, ability, expectation	Susi fährt für zwei Wochen in den Urlaub. Vor ihrer Abreise bittet sie ihren Nachbarn Thomas während ihrer Abwesenheit ihre Pflanzen im Garten zu gießen. Thomas verspricht, sie zu gießen, da er weiß, dass sie andernfalls vertrocknen. Thomas ist während der zwei Wochen zu Hause. Er gießt die Pflanzen nicht. Als Susi aus dem Urlaub zurückkommt, sind ihre Pflanzen vertrocknet.
No Knowledge, No ability, No expectation	Susi fährt für zwei Wochen in den Urlaub. Ihr Nachbar Thomas weiß von ihren Reiseplänen, denkt aber, dass die Pflanzen in ihrem Garten zwei Wochen ohne Wasser überstehen werden. Am Tag nach Susis Abreise muss Thomas dringend geschäftlich verreisen und ist länger weg als erwartet. Er gießt die Pflanzen nicht. Als Susi aus dem Urlaub zurückkommt, sind ihre Pflanzen vertrocknet.

In addition to the five questions used in Experiment 1, German participants were given an additional question about omissions* before answering the blame question:

> A few days after her return, Susi talks to her friend Zoe about the dead plants and says: "I wonder why Thomas omitted* to water my plants."

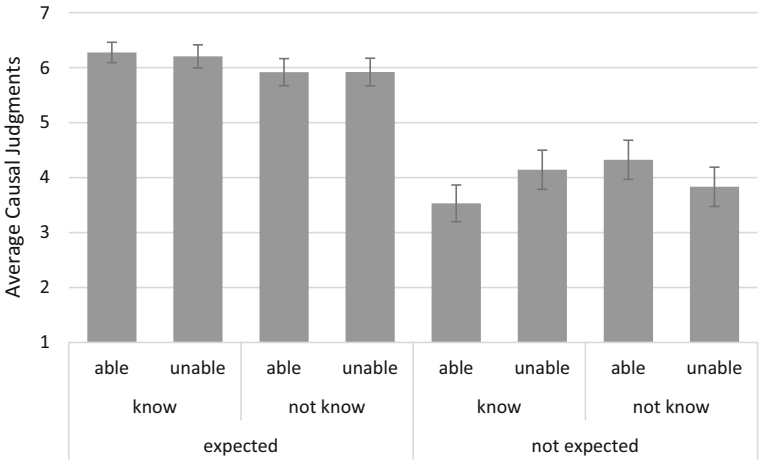

Fig. 3 Mean causal ratings. *Bars* indicate the standard error around the mean

Zoe objects: "Thomas did not really omit* to water my plants. He didn't water them, but that was not really an omission*."
How much do you agree with Susi that Thomas omitted* to water the plants?

Again, participants used a 7-point Likert scale to indicate their agreement, with '1' meaning 'completely disagree' and '7' meaning 'completely agree'. The question about omissions* was asked before the blame question, and not after, in order to avoid blame validation.

3.2 Results

In the following, I will first present the results first that only concern the German experiment. Afterwards I will present the results of the comparison of the German and English experiments.

3.2.1 German results

To assess the impact of Knowledge, Ability, and Expectations, I first applied an ANOVA with participants' causal ratings as the dependent measure. The analysis revealed a significant main effect for Expectation, $F(1,274) = 105.27$, $p < 0.001$, none for Knowledge, $F(1,274) = .04$, $p = .846$., and also none for Ability, $F(1,274) = .00$, $p = .950$. Furthermore, no two- or three-way interaction was found (Fig. 3).

I then carried out an ANOVA for people's responses to the blame question. The analysis revealed a significant main effect for Expectation, $F(1,282) = 42.16$, $p < 0.001$, none for Knowledge, $F(1,270) = .71$, $p = .401$., and also none for Ability, $F(1,270) = .74$, $p = .389$. Furthermore, no two- or three-way interaction was found (Fig. 4).

Finally, I ran an ANOVA for the judgments about omissions*. Again, the analysis revealed a significant main effect for *Expectation*, $F(1,274) = 17.19$, $p < 0.001$, none for *Knowledge*, $F(1,274) = .71$, $p = .401$, and only a marginally significant effect for

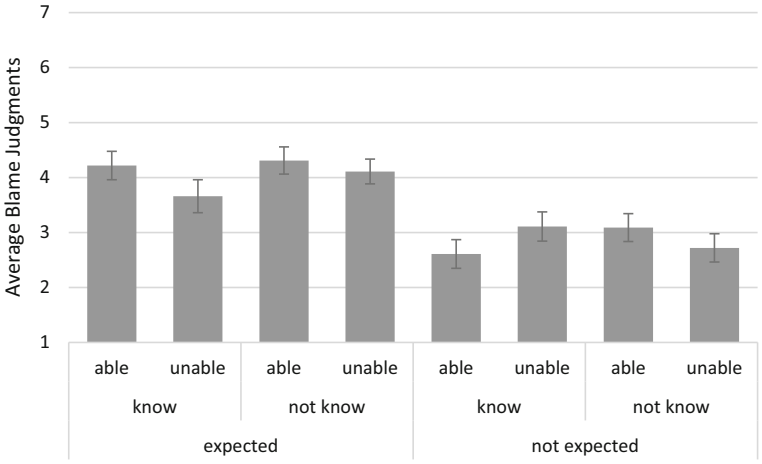

Fig. 4 Mean blame ratings. *Bars* indicate the standard error around the mean

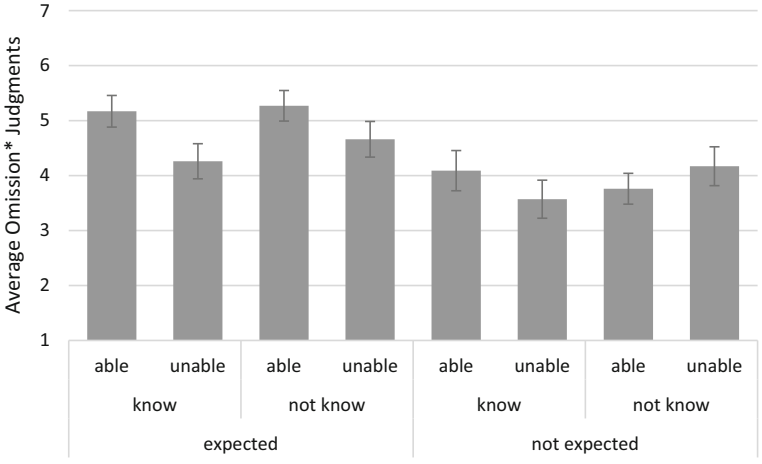

Fig. 5 Mean omission* ratings. *Bars* indicate the standard error around the mean

Ability, F(1,274) =3.244, p = .073. Furthermore, no two- or three-way interaction was found (Fig. 5).

I then used a bootstrap mediational analysis (Preacher and Hayes 2008) to test whether judgments about omissions* mediate the effect of expectations on judgments of causation. Using 1000 resamples, I found that there was a significant indirect effect of expectations on judgments of causation through omissions* (95% CIs [1.51–2.33]).

3.2.2 Comparison of German and American results

To test the prediction that German and English native speakers show the same reactions to manipulations of Knowledge, Ability, and Expectation, I ran a 2 × 2 × 2

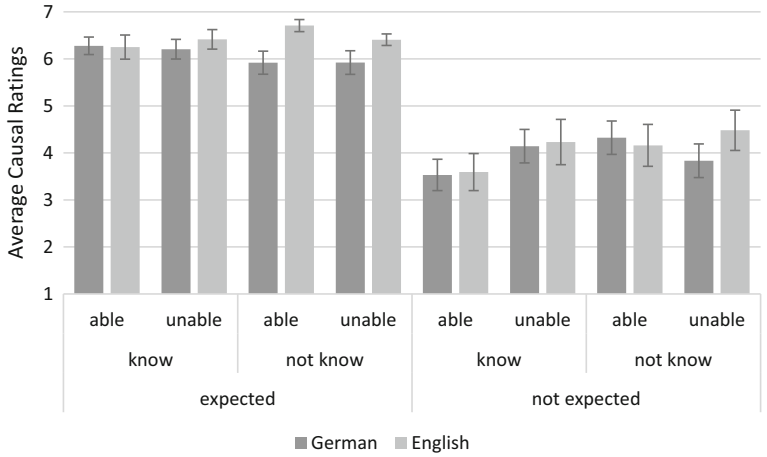

Fig. 6 Comparison of German and American mean causal ratings. *Bars* indicate the standard error around the mean

× 2 ANOVA, adding the independent variable Language. For the dependent variable Cause, the results showed a highly significant main effect for Expectation, $F(1,470) = 194.76$, $p < 0.001$. No other main effect or interaction was significant (Fig. 6).

For the dependent variable Blame, the ANOVA revealed a significant main effect of *Expectations*, $F(1,466) = 185.33$, $p < .001$. In addition, the main effect of *Language* was also significant, $F(1,466) = 83.74$, $p < .001$. The interaction between *Language* and *Expectation* was significant as well, $F(1,466) = 30.72$, $p < .001$. American participants tend to ascribe much more blame than German participants, both in the Expectation and No Expectation condition. However, while this difference is small when no expectations are violated, the difference becomes much bigger in the Expectation condition. Thus, American participants react more strongly to the manipulation of expectations (Fig. 7).

3.3 Discussion

As in the English version of the experiment and previous empirical results (Alicke 1992; Hitchcock and Knobe 2009; Livengood and Machery 2007), participants show a high sensitivity to expectations when making moral and causal judgments. Again, Knowledge and Ability played no role for moral or causal judgments. I hypothesised that German native speakers would draw a conceptual distinction between omissions* and mere not-doings on the basis of information about the normative context of the agent's inactivity (hypothesis (1)). The results confirm this prediction: Expectations had a highly significant influence on whether participants felt that the agent's behaviour was most appropriately described as a mere not-doing or an omission*. If Barry had promised to water the plants, but failed to do so, his inactivity was considered an omission*. In the German literature on omissions*, expectations, as well as ability and knowledge have not only been taken to matter for moral responsibility, but also

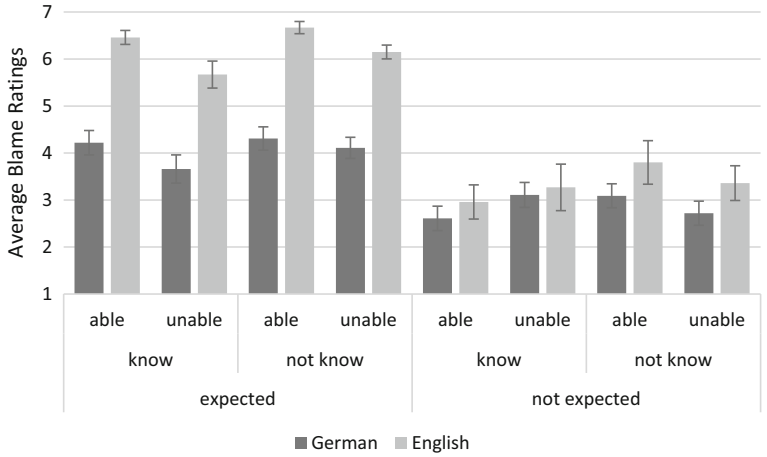

Fig. 7 Comparison of German and American mean blame ratings. *Bars* indicate the standard error around the mean

to identify an inactivity as an omission* (Berger 2004; Birnbacher 2015; Keil 2015; Stoecker 1998). Challenging this view, the agent's ability to perform the action did play a minor role for this conceptual distinction. Even more strikingly, knowledge about the possibility to intervene in a causal chain leading to a bad outcome did not make any difference. Participants were equally likely to call something an omission* when the agent did or did not know what his inactivity would lead to.

A comparison between the results from German and American participants allowed us to test whether German and English native speakers share the same concept of omissions*. The results show that Germans and Americans react to the manipulations of Expectation, Knowledge and Ability in an extremely similar way for both causal and moral judgments. Looking at the response patterns for the causal judgment, there is a negligible difference between languages. For the moral judgments, the response patterns also hardly differ. However, Americans tend to ascribe significantly more blame to Barry when he violated a moral expectation. These results speak to the claim that German and American native speakers share a concept of morally and causally relevant omissions, and in favour of the new optimistic solution.

4 Experiment 3

Both McGrath as well as Knobe and colleagues argue that people's causal judgments are dependent on their normative evaluations. So far, we have looked at one specific type of norms, namely moral norms. If Knobe and McGrath are correct and different types of norms affect the causal judgments in the same way, statistical expectations should provide us with results comparable to those obtained in Experiment 1 and 2. In addition, if expectations in general affect our metaphysics, and if events violating these expectations are considered more real than other not-doings, then this effect should also hold for statistical expectations. However, what might be a robust pattern

of response for one kind of norm, might not hold equally for others. In fact, there are good reasons to assume that moral norms impact on other domains in unique ways. In Experiment 3 and 4, I test whether statistical expectations and moral expectations are on par when it comes to their impact on causal judgments and our folk metaphysics. To test this, subjects were presented with vignettes in which an omission is arguably the cause of an outcome, and is either statistically typical or atypical.

4.1 Method

155 participants were recruited on Amazon's Mechanical Turk and reimbursed for taking the survey. 9 participants were excluded either for not having completed the survey or not indicating English as their native language. Thus, results are reported on 146 partipants, 42.1% male and a mean age of 32.53 years. Each participant was randomly assigned to a single scenario of the four vignettes in English and answered one causal questions.

English	Expectations	No expectations
Gym class	Jemma is a health conscious young woman. For years she's been a member of a fitness center where she does step aerobics every Monday. The fitness trainers and the other course participants know about Jemma's habit and that she takes the step aerobics class every Monday. One Monday, other than usual, Jemma does not take the step aerobics class. For the rest of the week, she feels physically underworked.	Jemma is a health conscious young woman. For years she's been member of a fitness center. However, she has never taken the step aerobics offered there. The fitness trainers and the other course participants know about Jemma's habit and that she never takes the step aerobics class. One Monday, just as usual, Jemma does not take the step aerobics class. For the rest of the week, she feels physically underworked.
Newspaper	Every morning before he goes to work, Steven takes the newspaper out of his mailbox. His neighbour Alice knows about Steven's habit and that he always gets the newspaper. One morning, other than usual, Steven does not take the newspaper out of his mailbox before leaving for work. Alice is worried Steven might be sick and tries to check on him. In the evening, Alice learns that Steven was actually at work.	Every morning when he goes to work, Steven leaves the newspaper in his mailbox. His neighbour Alice knows about Steven's habit and that he never gets the newspaper. One morning, just as usual, Steven does not take the newspaper out of his mailbox before leaving for work. Alice is worried Steven might be sick and tries to check on him. In the evening, Alice learns that Steven was actually at work.

4.2 Results

To assess the impact of expectations and the two different stories I applied a two-way ANOVA with participants' causal ratings as the dependent measure and the independent factors Story (Gym Class/Newspaper) and Expectation. The analysis revealed a significant main effect for Expectation, $F(1,142) = 234.73$, $p < 0.001$, but none

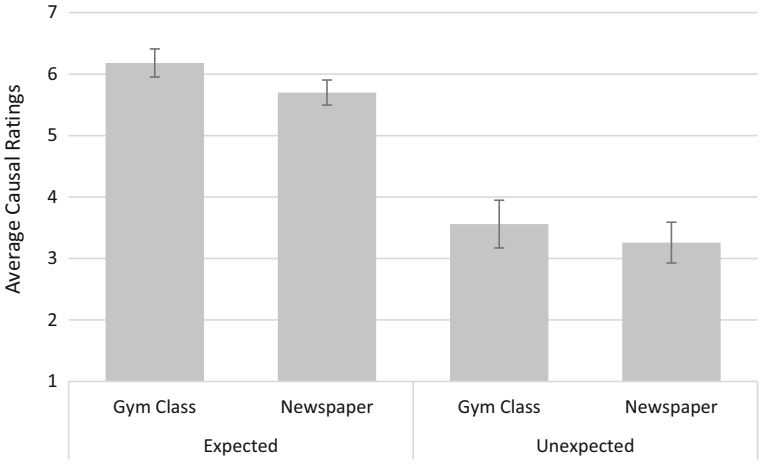

Fig. 8 Mean causal ratings. Bars indicate the standard error around the mean

for Story, F(1,142) = 1.75, p = .189. The two-way interactions were not significant, F(1,142) = .10, p = .757 (Fig. 8).

4.3 Discussion

As suggested by previous studies, statistical expectations had an impact on people's causal judgments. This lends further support to the claim that the folk concept of causation is based on expectations rather than an objective, viewer- and norm-independent description of relationships in the world.

5 Experiment 4

Experiment 4 replicates the study conducted on American participants in Experiment 3. In addition, a question on the conceptual distinction between omissions* and not-doings aims to lend further support to the claim that such a distinction exists, and also predicts people's causal judgments.

5.1 Method

243 participants were again recruited on Facebook in the same way as participants in Experiment 2. A link generated in Qualtrics was published in groups of first-year bachelor students in philosophy, psychology, sociology, and German studies. 36 were excluded for either not having completed the survey or not indicating German as their native language. Thus, results are reported on 205 partipants.

Participants were randomly assigned to one of two stories (*Gym class/Newspaper*) and one of two conditions (*Expectation/No Expectation*). All of them then answered three questions: about how much an outcome was causally linked to the protagonist's

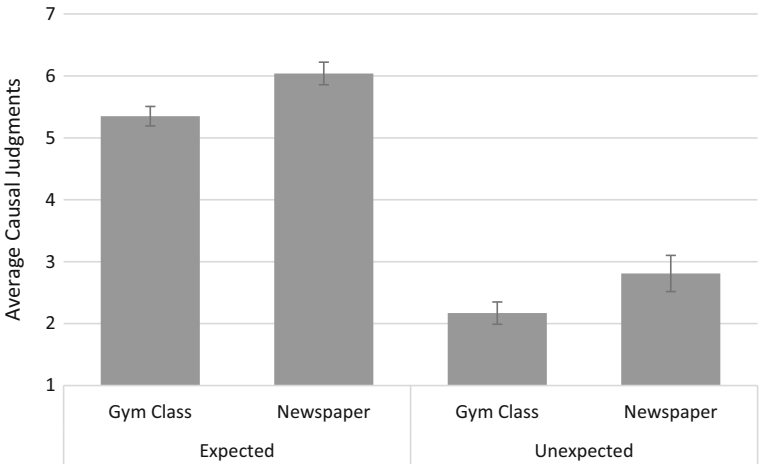

Fig. 9 Mean causal ratings. *Bars* indicate the standard error around the mean

omission, to what extent the protagonist's behaviour was unexpected, and whether the behaviour could be described as an omission (see Appendix).

5.2 Results

5.2.1 German results

To assess the impact of expectations and the two different stories I applied a 2 × 2 ANOVA with participants' causal ratings as the dependent measure and the independent factors Story (Gym Class/Newspaper) and Expectation. The analysis revealed a significant main effect for Expectation, $F(1,201) = 245.93$, $p < 0.001$, and also a significant main effect for Story, $F(1,201) = 10.47$, $p = .001$. The two-way interaction was not significant (Fig. 9).

I carried out a 2 × 3 ANOVA for people's responses to the question on omissions*. The analysis revealed a significant main effect for Expectation, $F(1,201) = 6.251$, $p = 0.013$, but none for Story, $F(1, 201) = 2.79$, $p = .097$. The two-way interaction was not significant (Fig. 10).

I then used a bootstrap mediational analysis (Preacher and Hayes 2008) to test whether judgments about omissions* mediate the effect of expectations on judgments of causation. Using 1000 resamples, I found that there was no significant indirect effect of expectations on judgments of causation through omissions* (95% CIs [−0.02 to .18]).

5.2.2 Comparison of German and American results

To test the prediction that German and English native speakers would show the same reactions to manipulations of statistical Expectations, I ran a 2 × 2 ANOVA, adding the independent variable Language. For the dependent variable Cause, the results showed

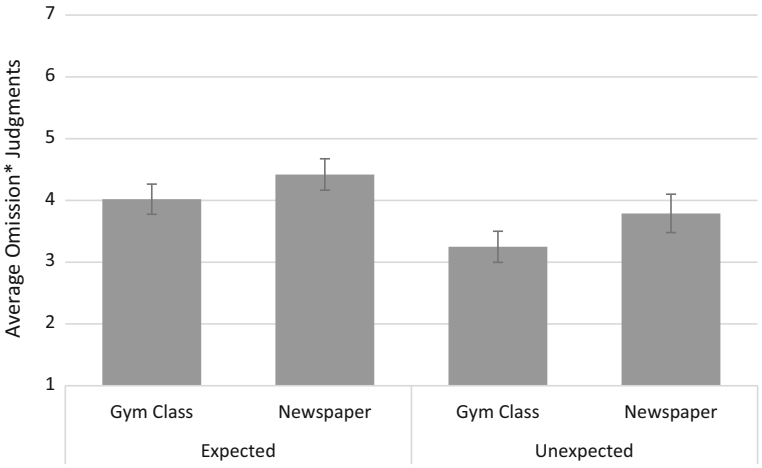

Fig. 10 Mean omission* ratings. *Bars* indicate the standard error around the mean

a highly significant main effect for Expectation, $F(1,343) = 273.46$, $p < 0.001$. There was a statistically significant main effect for Language, $F(1,343) = 11.24$, $p < 0.001$, but none for Story, $F(1,343) = .61$, $p = .436$. There was a significant two-way interaction of Language and Story, $F(1,343) = 9.16$, $p = .003$. Compared to German participants, Americans consistently gave higher causal ratings.

5.3 Discussion

The results of this experiment support Knobe and colleagues' as well as McGrath's claim that expectations have an impact on judgments about causation, such that violating an expectation triggers higher causal ratings. German native speakers make a conceptual distinction between omissions* and mere not-doings when it comes to an agent's deviance from his routine. However, agreement with the claim that the agent omitted* to perform the action in question barely exceeds the neutral midpoint. This indicates that even though acceptance is higher if an expectation is violated, people do not feel such a behaviour to be an omission*.

Contrary to my prediction, judgments about omissions* do not mediate causal judgments. There are three ways to explain these results: For one thing, moral expectations have been shown to have a particularly pervasive influence on both moral and non-moral judgments (Cushman et al. 2008, 2006; Gerstenberg 2013; Phillips and Knobe 2009; Young and Phillips 2011). It is thus possible that only moral expectations have an impact on which events we consider more real and thus more relevant and causally interesting. Consequently, even though both normative and statistical expectations impact on moral and non-moral judgments, this impact is different in kind for normative and statistical expectations respectively. If this explanation holds, further empirical investigation is required to identify the differences between those effects.

Alternatively, the scenarios presented to participants all described situations in which participants' expectations on the agent to act might have been very low. While

most people hold strong normative expectations about keeping promises, internalizing a *statistical* norm by reading a vignette might be more difficult. Thus, even though people consistently answered that Anna and Alice expected the protagonist to act in accordance with his routine, this might not reflect participants' *own* expectations. Finally, the scenarios presented might be too irrelevant to actually trigger the need for conceptual clarity.

6 General discussion

6.1 Omissions and expectations in causal cognition

In this paper, I have presented four experiments to lend support to the hypothesis that laypeople draw a conceptual distinction between absences that are omissions* and those which are not. Many languages, such as German, Italian, French, and Polish seem to have such a distinction depending on the notion of expectations, such that an absence of an action violating an expectation is an omission*, while all other absences are not. I showed that German native speakers use the noun "Unterlassung" or the verb "unterlassen" in just this way. Participants were much more likely to agree with the claim that an agent omitted* to perform an action when he was either morally (Exp. 2) or statistically (Exp. 4) expected to perform that action, compared to when he was not. A comparison between German and American response patterns of eight vignettes provides initial evidence that German and English native speakers share this concept, even if only German has the vocabulary to express it. An analysis of participants' causal judgments in all four experiments showed that expectations also guide causal judgments, such that violating expectations leads to higher causal judgments. Experiment 2 demonstrated that for moral expectations, the conceptual distinction between omissions* and not-doings mediates causal judgments. The results therefore support the *new optimistic view*.

In the following, I will, first, discuss the implications of these experiments for the question of what ontological status laypeople ascribe to omissions; and, second, what role omissions play in causal cognition. In addition to these questions at the level of folk attribution, I will further discuss whether these implications need to be taken into account when philosophers reason about metaphysical issues with causation.

Laypeople consider only a limited set of cases which philosophers take to be omissions as actual omissions. It might be asked whether this conceptual distinction reflects a pragmatic or an ontological distinction. On the one hand, it might be argued that laypeople in fact believe that all absences are omissions, but they take only some of them to be relevant or worth mentioning (pragmatic interpretation). On the other hand, people might not only express their judgment about what is *relevant* or worth mentioning, but about what is actually *in the world* (ontological interpretation). According to the latter view, people say that omissions* are causally potent *because* they are actual things in the world, while mere not-doings are not. Additional empirical research needs to be done in order to properly address these two possibilities. There are, however, some reasons that favour the second option.

First, the German philosophical literature on omissions*, dominated by the moral and legal discourse, is not concerned with whether there is causation by omissions. This question is answered affirmatively by the vast majority of scholars in the German debate. Instead they focus on whether omissions* are a special, action-like kind of events. The question to be answered is what the shared properties of actions and omissions* are. Keil (2015), for instance, argued that among all events some are agent-related events to which both actions and omissions* belong. Laypeople's intuitions seem compatible with this philosophical approach. Second additional evidence for an action-like ontological status is given by how 'omission*' is combined with other words of the German language. Just like actions, omissions* can be intentional or negligent, show malicious or benevolent intent. It is worth mentioning, and speaks in favour of a shared concept across German and English native speakers that a similar discussion shapes the Anglophone literature on acts of omissions (Clarke 2010, 2014; Zimmerman 1981). In German, it is possible to say that someone committed a crime ("Er hat eine Straftat begangen"), and it is equally possible to say that someone committed an omission* ("Er hat eine Unterlassung begangen"). Neither of these formulations is possible for mere not-doings for which the German language does not even have a noun. Thereby, the way in which philosophers and laypeople reason and speak about omissions indicates that they are granted ontological status – at least if we believe that language somehow reflects how we perceive the world.

What do the results of this paper tell us about causal cognition? They shed light on the practice of ascribing causal and moral responsibility and on how people conceptualise various forms of behaviour. The results confirm the view that causal cognition heavily depends on normative considerations (Alicke 1992; Henne et al. 2016; Knobe 2009; Reuter et al. 2014), also for cases of omissions. Consequently, it seems that laypeople do not face the metaphysical dilemma of causal selection. They neither feel a need to say that no absence can be a cause nor that all absences are causes. For an absence to ever count as a potential cause the absence must have been relevant in the sense that it was unexpected to occur, and thus be considered an omission*. Thus, laypeople quite naturally treat all omissions* as (potential) causes, but only a fraction of all absences as omissions*. These results speak in favour of a normative understanding of causation as the moderate optimists have suggested. The new optimist solution I offered in this paper further claims that normative considerations do not only affect causal judgments, but they do so by changing how we think about the absence of an action. This account offers a more nuanced vocabulary that allows to systematically grasp the perceived difference between causally relevant and irrelevant absences of actions, and it is based on how laypeople reason about causality.

6.2 Application to metaphysical issues about negative causation

At the beginning of this paper, I looked at three different positions about negative causation, namely the radical pessimist, the radical optimist and the moderate optimist view. But do the ordinary causal judgments explored in the experiments help us decide between these positions?

Whether this question is answered affirmatively mostly depends on whether you believe that folk intuitions can ever have any bearing on metaphysical issues. If you respond in the negative to this question, then this paper does not contribute anything to the metaphysical debate, neither about omissions nor about causation. In that case, the paper describes how people arrive at their causal judgments, and this cognitive process remains entirely independent of the question of what causation really is and what ontological status omissions have. On the other hand, many philosophers disagree that folk intuitions are entirely irrelevant, and it is often argued that a good theory of causation needs to cover our everyday intuitions.[13] However, believing that folk intuitions matter does not commit oneself to believing that folk intuitions are always correct. Here are some positions philosophers might argue for in light of my experiments.

For one, philosophers might believe that folk intuitions matter for metaphysical issues and that the folk intuitions discussed in this paper are correct. In that case, the results of this paper actually can tell us something about a real ontological distinction. Omissions* might belong to the building blocks of the universe, just like actions. Not-doings, on the other hand, are not. There are two very different lines of arguments to support such a view. Realists may argue that omissions are ontologically real. On such a view, normality is actually in the world and we can spell out which events are normal and which are not without any reference to humans representing these norms. Consequently, the folk's intuitions challenge philosophers to spell out such an objective notion of normality. Some authors in the philosophy of science have presented various ways in which such an objective concept of norms might be developed (Andersen 2012; Bechtel 1986; Bigelow and Pargetter 1987; Krickel 2016). Alternatively, it can be argued that omissions are real, but in a constructivist sense. According to such a view, omissions are ontologically real, because humans think of them as having reality (Tiehen 2015). The relevant difference between omissions* and not-doings then depends on humans representing a norm in form of an expectation as to what will happen. Without anyone forming an expectation, the distinction vanishes.

But what exactly then is the ontological difference between omissions* and not-doings? One possible answer is that omissions* are events, even though negative in kind. Some authors have already argued that a good inventory of the world do not only have to only contain positive events, but also negative ones (Lee 1978; Vermazen 1985; de Swart 1996; Przepiórkowski 1999; Mossel 2009) in order to explain a variety of everyday intuitions. People seem to have no difficulty to judge that just as setting my plants on fire would cause their death (a positive event), so would not watering them

[13] McGrath (2005) and Beebee (2004) are only two of the authors discussed on this paper who take intuitions as a starting point for their metaphysical debate. Also Paul and Hall (2013), Chockler and Halpern (2004), Halpern (2005), and Schaffer (2000, 2012), or Craver (2007, 2014) make a strong case for empirically informed metaphysics. As Paul and Hall (2013, p. 41) say: "We think it is important to take intuitions very seriously, and we will do so throughout this book, paying special attention to places where our intuitions are in tension, since we take intuitions to be important guides to what we think we know about ontological structure, and the existence of said tensions indicate the need for further analysis. But intuitions must be used with care". And, of course, empirically working researchers like Alicke (1992), Henne et al. (2016), Hitchcock and Knobe (2009), Knobe (2009), Livengood and Machery (2007) and Reuter et al. (2014) take intuitions as an important starting point for and touchstone of philosophical argumentation.

(a negative event). In addition, it is also possible to quantify negative events. It seems absolutely sensible to say that Barry failed to water my plants for the third time, or that seven people did not stop at the place of the accident to help the driver. However, many critics of this position argued that not all things that did not happen fulfil these conditions. If philosophers attempt to make a realist case for negative events, the results presented in this paper might give a more nuanced account as to what kinds of things that did not happen can actually count as negative events. Omissions* qualify as negative events as they share a series of relevant features with positive events, other not-happenings do not. As events, omissions* might then qualify as parts of causal networks and inform us about the causal history of an event, just as other positive events are assumed to do (Beebee 2004).

If you agree with one of these two lines of reasoning, then the empirical results discussed in this paper can help refine the moderate optimist's position and to explain in more detail how norms enter causal cognition. Moderate optimists correctly assume that only some things we did not do are causes, while others are not. There is a real, ontologically grounded difference between things we did not do, even though we were expected to do them, and things nobody would have even expected us to do. Moderate optimists, thus, also seem correct in assuming that causation depends on normative considerations. However, the results presented in this paper spell out in much more detail how exactly normative considerations enter causal judgments. In addition to having a direct impact on causal selection and the amount of causal relevance we ascribe, expectations or norms enter the process at an even earlier stage, namely at an ontological level. My results therefore speak against both radical pessimists and optimists, and in favour of normative accounts of causation. While the moderate optimist's solution is supported, the new optimistic approach provides an explanatorily richer understanding of causation by omissions.

However, there are also good reasons to assume that folk intuitions matter, but that the folk are mistaken when they conceptually discriminate omissions* and not-doings. It can be argued that all omissions have the same ontological status and they cannot be distinguished into not-doings and omissions*. If this is so, then the folk is unjustified in a) assuming that omissions* and not-doings differ in their ontological status, and b) that for this difference, omissions* are causally relevant while not-doings are not. However, even if the folk are wrong, the results still help illuminate the intense debate between radical pessimists, radical optimists, and moderate optimists, and they might provide a strong argument against the moderate optimist's position. The moderate optimist's position is driven by the intuition that some things that did not happen really are causes, while others are not. The results presented in this paper are perfectly in line with this assumption. However, assuming that folk intuitions are wrong, we now have an explanation as to why moderate optimists believe that some things we did not do can be causes. Moderate optimists underlie the same ontological fallacy as laypeople and intuitively distinguish omissions* from not-doings. They falsely believe that omissions* are real things in the world and thus adequate candidates for causal relata. Consequently, the moderate optimistic argument about negative causation is based on misguided ontological intuitions. This criticism might serve both radical pessimists and radical optimists as an argument against the moderate optimistic view.

It is on them to develop an argument as to why either all or no absences of actions are causally relevant.

7 Conclusion

In this paper, I have examined how expectations influence what we consider to be an omission in the first place. I have provided new experimental data showing that German native speakers discriminate between omissions* and not-doings depending on whether the agent was supposed to act or not. Such a distinction provides additional evidence for the pervasiveness of expectations in both the moral and the non-moral domains. In addition, I outlined how empirical results might illuminate philosophical disagreements about the metaphysics of omissions and causation by omissions. The results presented in this paper speak in favour of theories that argue that omissions* are special kinds of actions and thus exist just like actions do. In addition, the results also support my optimistic view on causation by omissions, saying (in line with radical optimists) that all omissions are causes, but (in line with the view I suggested) not all actions that do not happen are omissions.

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