

Déjà vécu is not déjà vu: An ability view

Denis Perrin^a, Chris Moulin^b, and André Sant'Anna^c

^aCentre for Philosophy of Memory, Institut de Philosophie de Grenoble, Université Grenoble Alpes, Bâtiment CTL, CS 40700, 38058 Grenoble, CEDEX 9, France. Corresponding author: denis.perrin@univ-grenoble-alpes.fr; ^bLaboratoire de Psychologie et NeuroCognition, Université Grenoble Alpes, 1251 avenue Centrale, Domaine Universitaire de St Martin d'Hères, 38040 Grenoble, France; ^cDepartment of Philosophy and Philosophy-Neuroscience-Psychology Program, Washington University in St. Louis, Saint Louis, MO, USA.¹

Abstract. This paper tackles the issue of the variety of déjà experiences. On the standard view in the neuropsychological literature, they should all be defined by means of a psychological criterion, on which they are experiences triggered by a perceived item and consist of a conscious clash between a first-order feeling of familiarity about the item and a second-order evaluation that assesses the first-order feeling as erroneous. The paper dismisses the standard view and contends there are two types of déjà experiences, labelled déjà vu and déjà vécu respectively. But it also takes issue with the rare proponents of a distinct déjà vécu type. Contrary to their achievement view, it argues that recollection is not involved in déjà vécu experiences as an actual mental state or a component thereof. On our own ability view, déjà vécu involves the feeling that one *could* recollect past occurrences of a currently lived episode of experience.

Keywords: déjà vu; déjà vécu; metacognition; episodic recollection; feeling of familiarity; episodic feeling of knowing.

1. Introduction

¹ André Sant'Anna is currently a Humboldt Postdoctoral Researcher in the Cologne Center for Contemporary Epistemology and the Kantian Tradition (CONCEPT) at the University of Cologne, Germany.

Déjà experiences² are ordinary memory-related phenomena that have long intrigued both writers and psychologists. That such is the case is made clear by how these experiences are typically reported. Consider two such reports as illustration:

“Frequently I relate this to seeing people in the street. I will 'Recognise them,' rack my brain trying to remember where and expect them to greet me as we pass.”

“It was usually for just a few seconds when EVERYTHING in those few seconds felt like it had happened before, usually during a conversation.”³

However ordinary those experience might be,⁴ how many types of déjà experiences there are is still a matter of debate. And even for those who claim that two forms of déjà experiences—*déjà vu* and *déjà vécu*—should be distinguished, how exactly they should be contrasted is still a matter of debate too.

On the standard view of déjà experiences in the neuropsychological literature,⁵ they should all be defined in terms of a psychological criterion, according to which they are experiences

² Many authors use *déjà vu* as a generic term. Since we will argue that *déjà vécu* should be distinguished from *déjà vu* eventually (sections 3 and 4), we prefer using the more neutral expression *déjà experiences* as a generic term, and keep *déjà vu* to refer to a type of déjà experiences. Note that *déjà experiences* also happens to be used as a generic term in the literature.

³ Illman, PhD thesis (2012, unpublished). Note that a methodological guide in this paper has been to draw as faithfully as possible on scientifically collected subjective reports, i.e., experimentally controlled by questionnaire and carried out on large panels of subjects. Our main sources have been N. Illman’s PhD data (2012, unpublished), C. Moulin’s data (unpublished), the reports issued from the IDEA questionnaire (Sno et al., 1994) used in many experiments and scattered in a number of published studies devoted to déjà experiences, and Bernard-Leroy’s (1898) own collection of reports. We are well aware that the subjective report method raises concerns (see Brown, 2003, p. 21 sq. for instance). Yet so far, arguably, this method is the best we have to capture the psychological dimension of déjà experiences.

⁴ Estimates of the occurrence of déjà experiences range from ‘about 60%’ of the population (Brown, 2003) to 84% (Fortier and Moulin, 2015), and people seem to experience them less than once a month on average.

⁵ Despite being both a very common mnemonic phenomenon and having been an intensively studied one for years in neurocognitive psychology, déjà experiences are an almost unexplored territory in philosophy. The rare exceptions are Bergson, 1908, and Micali, 2018. Gerrans, 2014, Bortolotti, 2010, de Sousa, 2009, and Price, 1969

triggered by an item perceived⁶ and consist in the conscious clash between a first-order feeling of familiarity which is about the item perceived and a second-order evaluation that assesses the first-order feeling as erroneous. In this paper, we criticize the standard view and argue there are two types of *déjà* experiences: *déjà vu* and *déjà vécu*. In addition, we offer a new conceptualization of *déjà vécu* experiences, which have been relatively neglected and poorly understood so far. Contrary to the *achievement view* endorsed by those in the literature who distinguish between *déjà vu* and *déjà vécu*, we argue that recollection, understood as an actual mental state or a component of *déjà vécu*, is not involved in those experiences. According to our own *ability view*, *déjà vécu* involves the feeling that one *could* recollect past occurrences of a lived episode of experience. In summary, the ability view we introduce and develop in this paper offers a novel account of the different types of *déjà* experiences there are.

One important clarification we would like to make from the start is that we recognize that our proposal is, in many respects, still schematic. To a large extent, this is because discussions about the nature of *déjà* experiences are still incipient in the contemporary literature. When compared to other forms of memory errors, not much has been said about *déjà* experiences, and while psychologists are becoming increasingly interested in the subject, it continues to be a largely neglected topic in philosophy. Given this fact and the fact that our approach spans these two disciplines, much of what we do below is to navigate through uncharted territories at the intersection of these two areas. As such, many questions and concerns will arise in the course of our discussion that we will not be able to address in a satisfactory manner. We do, of course, respond to those that are about our main line of argument, but we hope that, given

too touch upon the topic, but only in a brief way. One of the goals of this paper is to fill the gap and introduce *déjà* experiences to the thriving field of the philosophy of memory.

⁶ Whilst the *déjà vu* literature has largely side-stepped debates about which particular modality triggers *déjà* experiences, it is nonetheless clear that they are not uniquely visual in nature, since they are experiences in people who are congenitally blind (e.g., O'Connor and Moulin, 2006). Based on contemporary memory theory, whilst memory circuitry exists separately in the two hemispheres, we would not expect *déjà* experiences to differ along the lines of the gross sensory modalities (e.g., sight, touch, hearing, and so on, see Moulin, 2018).

the current state of the art, the questions and concerns that are not explicitly or fully addressed can serve as motivation for future research in the area.

With that in mind, here is how we proceed. Building on a critical discussion of the extant characterizations given in the psychological literature, we start by clarifying what a satisfactory definition of déjà experiences should look like. Against the standard view, we argue that the definition in terms of a psychological criterion is not sufficient and must be supplemented by an epistemic criterion (section 2). This matters not only because it allows us to situate the phenomenon in relation to which the issue of variety arises, but also because it provides an adequate account of how déjà experiences are distinguished from other types of memory errors (we consider this issue in more detail in section 4). Second, we argue that some déjà experiences—the so-called *déjà vécu* experiences—are not familiarity-based, but recollection-based. Though the existing arguments given in support to this distinction will be found inconclusive, an argument from the difference of the representational content of familiarity and *déjà vécu* will do the job just fine (section 3). Our approach is thus aligned with the rare proposals that postulate the existence of a distinct, recollection-based *déjà vécu* type, but, in contrast to those proposals, we disagree with their elaboration of the view. We show that their achievement view, on which recollection is involved in *déjà vécu* as an actual state or a component thereof, runs into undesirable consequences. According to our own ability view, when we have *déjà vécu* experiences, we experience *episodic feelings of knowing* as being erroneous—that is, that we *could* recollect past occurrences of the ongoing episode of experience (section 4).

2. The need for two criteria

With a view to clarifying the phenomenon in relation to which the issue of variety arises, we start by clarifying the main definitional components of déjà experiences. Although neuropsychologists do not clearly distinguish between them, they are engaged in two different projects when they try to define déjà experiences. The main one is to characterise déjà experiences from a *psychological* point of view, the other is to characterise them from an *epistemic* point of view. In this section, we show that these two projects deliver incoherent definitions of the phenomenon. We then introduce an alternative definition that accommodates both the psychological and the epistemic aspects of déjà experiences.

The standard view and the psychological criterion

Neuropsychologists strive mostly to characterise déjà experiences as a type of conscious state experienced by subjects. This is the *psychological* project.⁷ This project has given rise to the standard view of déjà experiences in the empirical literature, which is illustrated by Neppe's influential characterization on which a déjà experience is "any subjectively inappropriate impression of familiarity of a present experience with an undefined past" (1983, p. 3). Endorsing this characterization, Martin and colleagues say that a déjà experience is "a phenomenological impression of familiarity for the current visual environment (...) with a sense that it should in fact not feel familiar." (2012, p. 2981). In the same vein, O'Connor and colleagues have recently ascertained that it "can be described as having two critical components: an intense feeling of familiarity, and a certainty that the current moment is novel." (2021, p. 835) On the standard view, then, a déjà experience must be defined by the following psychological criterion:

⁷ Let us insist that by *psychological* we mean the *conscious* features of a mental state, including both phenomenal (e.g., metacognitive feelings) and non-phenomenal (e.g., beliefs) elements.

- a first-order feeling of familiarity is triggered by an item when it is experienced,
- a second-order judgement or feeling evaluates the first-order feeling as erroneous.

The first tier is clearly phenomenal⁸, since it is made of a feeling—e.g., as when one arrives at a new place and one has the gut feeling that one has been at this very same place before. The second tier can be affective and/or doxastic. For instance, in addition to having the gut feeling that one has been at this very same place before, one has either the felt certainty or the belief that one’s first-order feeling is inappropriate (Brown, 2004, p. 12-15). Note that even when the second tier is doxastic (e.g., one has the explicit and internally justified belief of not having ever been at the place that elicits one’s feeling of familiarity), it can induce phenomenal alterations to the effect that it makes the first-order feeling appear as erroneous. Believing that a feeling is erroneous often alters the very experience of this feeling.⁹

This definition has significant virtues, to be sure. Firstly, the second-order tier makes déjà experiences distinct from cases that also involve erroneous feelings of familiarity, namely, false recognition. In typical empirical demonstrations of false recognition, due to existence of a link between a word and the topic of a word list seen by a subject S during a study phase, S falsely recognizes the word during the test phase. But while S has an erroneous feeling that they have encountered the word before, they are not aware of the erroneousness of it (Roediger & McDermott, 1995). As the standard view rightly makes it clear, what is distinctive of déjà experiences is that subjects are aware that the feeling of familiarity they have is erroneous. Secondly, the psychological definition provides a smooth explanation—at least at first sight—of another feature of déjà experiences, namely, their weirdness. When people undergo a déjà

⁸ In this paper, *phenomenal* and *phenomenological* refer to what it is like to entertain a certain mental state.

⁹ Others have made the same point. See Matthen, 2010, p. 10 for instance, who argues that a changing belief can alter the feeling that seeing a certain person triggers in a subject.

experience, they very often report that their experience is unsettling to the effect that the first-order feeling of familiarity appears with a “compelling sense of inappropriateness.” (Martin et al., 2012, p. 2982) A natural explanation of this weirdness feature is precisely that while it is experienced, the first-order feeling is consciously evaluated as erroneous, i.e., as an occurring feeling that should not occur. The two-tiered psychological definition gives us just that. Thirdly, the psychological definition also receives empirical support. The empirical literature has it by and large that familiarity is a metacognitive feeling.¹⁰ As such, it has a motivating function with regard to our cognitive behaviour. This explains why, when something feels familiar, a search for the recollection of specific details is launched, the failure of which leads to evaluating the feeling of familiarity as erroneous. So goes the metacognition-based account proposed by the recollection rejection hypothesis (Martin et al., 2012; Bradzil et al., 2012).

These virtues notwithstanding, the standard view suffers from serious flaws. We will argue against its exclusive appeal to a psychological criterion in the remainder of this section. We will argue against its exclusive appeal to a feeling of familiarity as the first-order feeling in déjà experiences in the next section.

Problems with the psychological criterion

As it turns out, the psychological criterion is both too wide and too narrow, meaning that it is neither sufficient nor necessary for an experience to qualify as a déjà experience. Let us explain.

On the one hand, the psychological criterion is *too wide*, hence not sufficient. Consider again the aforementioned case of false recognition. But suppose now that the experimenter explains to S that she has falsely recognized the word. Thus, S becomes aware that her feeling of familiarity is erroneous—call that Case 1. However, false recognition acknowledged as such

¹⁰ For more on metacognition, see section 4.

is not a déjà experience, a straightforward argument being that subjects do not confuse these two experiences. So, arguably there is more to the psychological aspect of déjà experiences than the clash of the two tiers. Specifically, as we will say,¹¹ for the weirdness feature of déjà experiences to occur, it is also required that the clash opposes evaluations generated simultaneously by one and the same cognitive system and that the truth of the first-order feeling appears impossible to the subject. Furthermore, suppose S has a conversation with S' at a bar and this situation feels familiar to her. S has forgotten that she has had a very similar conversation with S' at this very same bar before, the reason for which the current situation feels familiar to her. Also suppose that S has defeaters to the contrary, e.g., S rightly believes that S' doesn't like bars and S falsely believes accordingly that they cannot ever have had a conversation at a bar together. As a result, S (falsely) evaluates her (correct) first-order feeling of familiarity as erroneous—call that Case 2. However, a correct feeling of familiarity of which one becomes aware of as erroneous is not a déjà experience, a straightforward argument being that déjà experiences are supposed to involve objectively erroneous familiarity, a point that has been repeatedly made in the empirical literature. So, there is more to déjà experiences than their psychological aspect. As we argue below, meeting a psychological criterion is insufficient for an experience to qualify as a déjà experience and must be supplemented by yet another criterion.

On the other hand, the psychological criterion is *too narrow*, hence not necessary. Take the real world cases that psychologists categorise as pathological cases of déjà experiences. For instance, patient AKP suffered from a persistent anosognosic form of déjà experience—call that Case 3. He “exhibited striking behaviour in everyday life, withdrawing from almost all novel activities, complaining that [he] had experienced them before, and [his] beliefs were resistant to reasoning from their carers or contrary evidence.” (Moulin, 2018, p. 111-112) As

¹¹ See section 3 for our account of the weirdness feature.

Moulin and colleagues note about such pathological subjects: “for the general population, déjà vu and vécu are experienced with strong sensations of feeling like it has happened before, but knowing that it has not (Brown, 2003). In contrast, our patients are *anosognosic for their inappropriate sensations*.” (Moulin et al., 2005, our emphasis) If such pathological cases are to be categorised as déjà experiences—which we will question eventually—then the psychological criterion is in trouble again. Being anosognosic for AKP’s déjà experiences means that AKP is not conscious of his (persistent) feeling of familiarity as erroneous. He experienced no “subjective inappropriateness”, he had no “sense that it should not in fact feel familiar”, nor any “certainty that the current moment is novel” whatsoever. But then the psychological criterion is not necessary, since an experience can qualify as a déjà experience despite not satisfying it—which implies again that another criterion is required.

Let’s take stock. Case 1 suggests that the psychological aspect of déjà experiences involves more than a clash between a first-order feeling of familiarity and a second-order evaluation of this feeling as erroneous. Cases 2 and 3 suggest that we need more than a psychological criterion for cases involving a correct first-order feeling (Case 2) to be excluded from, and for anosognosic cases (Case 3) to be included amongst déjà experiences. Though it does not solve all the issues we have pointed out, we will now argue that building an epistemic criterion into the definition of déjà experiences improves it significantly.

The epistemic criterion

Echoing many authors in empirical studies, both Brown and Moulin are clear in their respective monographs about the objectively erroneous character of the first-order feeling being definitional of déjà experiences. Moulin says: “Déjà vu is the subjective experience of familiarity combined with *the knowledge that this experience is false*. (...) déjà vu is – at its

core – a *memory error*” (2018, p. 1 & 5 our emphasis). In the same vein, Brown characterises déjà experience as involving “the diametrical opposition of *one’s objective (new)* and subjective (old) evaluations of a personal experience.” (2004, p. 9 our emphasis). To undergo a déjà experience, subjects must not merely experience the first-order feeling as “subjectively inappropriate”; they must evaluate it *truly* as erroneous. Thus, in parallel to the psychological project to characterise déjà experiences from the first-person perspective, there is also an *epistemic* project¹² in the literature, which posits that the objectively erroneous character of the first-order feeling is intrinsic to déjà experiences. One could object at this stage by saying that there are many experiences that subjects report as instances of déjà experiences, but which involve no objectively erroneous feeling of familiarity. For instance, because one has actually perceived a scene in the past, such a scene could feel familiar to one when they perceive it again. At the same time, though, one could be uncertain about the source of the familiarity one feels and report having a déjà experience as a consequence. Despite the interest of such a wide notion of déjà experience—in particular, it reflects the common usage of the “*déjà vu*” expression (Brown, 2004, p. 16-17)—it does not reflect the type of memory errors that the empirical literature wants to explain when it attempts to account for déjà experiences.¹³ We will thus endorse this more restricted and scientifically-grounded concept in what follows.

Though an epistemic criterion is certainly required to address the problems raised by the standard view—in particular, to set aside Case 2—and to get a satisfactory account of déjà experiences, the extant literature is unclear both about what it means exactly and how it should be combined with the psychological criterion. As we discuss in more detail below, a major consequence of this is that it implies that there is no coherent definition of déjà experiences.

¹² Though *epistemic* usually involves the notion of a justification of beliefs, since knowledge is standardly defined as a justified true belief, here we will use it in a more restricted sense that only refers to the truth-value of a belief.

¹³ As a reviewer rightly points out, there are exceptions to this claim (see for instance, Moulin, 2018, p. 42). But they are only exceptions, due (we think) to the lack of coherence of the definition of déjà experiences that transpires from the empirical literature.

For now, though, let us focus on refining the epistemic criterion. We propose that for a subject to undergo a déjà experience, the first-order feeling must satisfy the following objective erroneousness conditions:

- being inaccurate (inaccuracy condition)
- being due to a malfunctioning cognitive system (unreliability condition)¹⁴.

With a view to vindicating the need for the epistemic criterion, we now elaborate on its empirical and conceptual virtues.

A first virtue of the criterion is its ability to accommodate the diversity of aetiologies of déjà experiences that are empirically documented.¹⁵ If déjà experiences involve an objectively erroneous first-order feeling, then one key question is what the causes of this erroneousness are. It is, as a matter of fact, well-known that many different causes underpin such experiences.¹⁶ Some are neurological, like temporal lobe seizures due to a momentary synchronization of cortical structures in the brain. Others are cognitive, like the structural similarity of an externally perceived scene with another one perceived in the past. Saying that the first-order feeling of familiarity must be objectively erroneous allows us to make these diverse aetiologies fall under the single concept of déjà experience, since in all of them the first-order feeling is erroneous in some way or another. When the first-order feeling is caused by a temporal lobe seizure, for instance, it mistakenly suggests that a perceived scene (as an example) has already been perceived in the past, and when it is caused by structural similarity,

¹⁴ By *unreliable*, we mean the property of a system that has a certain function to tend to not fulfil this function. For instance, on this definition, a memory system that tends to issue erroneous memories is unreliable. Note that on the same definition, a system can be *temporarily* unreliable, provided its way of working is such that should it last, the system would tend to not fulfil its function.

¹⁵ Our focus here will be on memory-based accounts, but there are also perception-based accounts of déjà experiences that have been proposed on the basis of empirical findings. For discussion of these accounts, see Brown (2004, chap. 15) and Moulin (2018, p. 56).

¹⁶ For overviews of these diverse aetiologies, see Brown, 2003, p. 402-407, 2004, chap. 12-15, and Moulin, 2018, chap. 5.

it mistakenly suggests that such particular conversation (again as an example) has already been lived through before. Moreover, the involvement of two conditions—inaccuracy and unreliability—gives us the conceptual space necessary to do justice to the differences between the aetiologies, since the conditions can be taken conjunctively or disjunctively. A feeling of familiarity can be inaccurate but reliable. For instance, one has dreamed of a conversation and kept a trace of it. However, while having a similar actual conversation, one has a *déjà* experience as if the conversation had actually happened (misfamiliarity). Alternatively, a feeling of familiarity can be accurate but issued by an unreliable cognitive system. For instance, one has had a conversation with someone at a certain time in a certain place, but every trace of it has been erased from one's mind. However, having a new similar conversation is accompanied by a *déjà* experience just due to an internal glitch in the brain (lucky familiarity). A feeling of familiarity can also be inaccurate and issued by an unreliable cognitive system. For instance, persistent *déjà* experiences are generally due to unreliable cognitive systems and involve inaccurate feelings of familiarity (strongly erroneous familiarity).

The epistemic criterion has also definitional virtues with regard to the very concept of a *déjà* experience. On the one hand, assuming that *déjà* experiences are memory errors, the question arises as to what type of errors they are. By positing as a necessary condition that the first-order feeling be objectively erroneous, the epistemic criterion sets aside Case 2 as a non-genuine case of *déjà* experience. As we will elaborate on later in the paper,¹⁷ *déjà* experiences are metacognitive errors, that is, erroneous evaluations of the epistemic status of a given mental state, e.g., of the visual perception of someone in the street. The erroneousness condition secures just that. On the other hand, the epistemic criterion includes pathological anosognosic cases amongst genuine *déjà* experiences. Assuming that the epistemic criterion is sufficient to

¹⁷ See section 4, the epistemic implications of the ability view.

define déjà experiences, cases like AKP could be categorised as cases of déjà experiences, since they satisfy the erroneousness condition—AKP’s first-order feelings of familiarity are erroneous—as well as the unreliability condition—AKP’s memory system malfunctions.

Despite these virtues, specifying the exact role of the epistemic criterion in the definition of déjà experiences is problematic. We can put this in the form of a dilemma. Either, and this is the first horn of the dilemma, one says that the epistemic criterion is sufficient, as we have just done. This has the virtue of including pathological cases amongst genuine déjà experiences. But it also has the undesirable consequences, on the one hand, to render the psychological criterion unnecessary, while the concept of déjà experience is intended (amongst other things) to capture a psychological reality, as well as, on the other hand, to neglect the knowledge subjects are supposed to have of the erroneousness of the first-order feeling. Or, and this is the second horn of the dilemma, one says that the epistemic criterion is not sufficient. This has the virtue of doing justice to the necessity of the psychological criterion. But it also has the (at least at first sight) undesirable consequence of categorising pathological cases as non-genuine déjà experiences, contrary to what psychologists usually do.

Where are we left? A first conclusion is that the extant literature is incoherent. More specifically, because it fails to distinguish between the psychological and epistemic projects, it does not give proper attention to their relationship. A second conclusion is that given its virtues, the claim that the epistemic criterion is a necessary one should be endorsed, and we will do so in what follows. But given its consequence for the psychological criterion, the sufficiency claim about the epistemic criterion is problematic and should be resisted. This suggests that pathological cases are at best degraded cases of déjà experiences, but not genuine ones, a proposal we offer to the empirical literature. Overall, our conclusion is that the epistemic and the psychological criteria are individually necessary and jointly sufficient to define déjà experiences.

We have thereby paved the way for distinguishing two types of déjà experiences—since they can differ psychologically by involving different first-order feelings—as well as for introducing déjà experiences amongst memory errors—since they have characteristic epistemic features. To distinguish types of déjà experiences, we consider in the next section another problematic aspect of the standard view, namely its exclusive appeal to the feeling of familiarity and its subsequent claim that there is just one type of déjà experience.

3. The need for two types

Now that we have clarified the phenomenon with which we are concerned., We proceed to argue in this section for the distinction between two types of déjà experiences, namely déjà vu and déjà vécu experiences. Specifically, we discuss the standard view's exclusive appeal to a feeling of familiarity as the first-order feeling of déjà experiences when it specifies the psychological component of déjà experiences, against which we build an argument from the representational content.

The diversity of déjà experiences

As we said, the standard view is a familiarity-based account of déjà experiences. According to it, in all déjà experiences the first-order feeling is a feeling of familiarity. But this is controversial. To feed the intuition that different types of déjà experiences should be kept separate, take a closer look at the reports we used by way of initial illustrations of déjà experiences:

(i) “Frequently I relate this to seeing people in the street. I will 'Recognise them,' rack my brain trying to remember where and expect them to greet me as we pass.”

(ii) “It was usually for just a few seconds when EVERYTHING in those few seconds felt like it had happened before, usually during a conversation.”¹⁸

On second thought, they are neatly different. Report (i) is about persons (“people”) within an episode of experience, whereas report (ii) is about a whole episode of experience (“everything”). Moreover, while in report (i) something feels familiar to the subject, in report (ii) the subject has the impression of reliving an episode of experience. Elaborating on this contrast, we will claim that despite being correct for type (i) *déjà vu* experiences, a familiarity-based account is wrong when it comes to type (ii) *déjà vu* experiences, namely *déjà vécu* experiences.¹⁹ To vindicate our claim, we start by discussing two arguments that have been used by the proponents of the view that *déjà vécu* is a distinct type in the neuropsychological literature.

Unpromising arguments for the distinction

The existing critics of the familiarity-based account draw mainly on the difference between familiarity and recollection as it is elaborated by dual-process approaches to memory (Mandler, 2008; Yonelinas, 2002). First, they emphasize the phenomenal difference there is between type (i) and type (ii) experiences. For instance, Moulin and colleagues argue that different “states of

¹⁸ Illman, PhD thesis (2012, unpublished).

¹⁹ Bergson (1919) is the one philosopher who has vindicated a distinct *déjà vécu* type of *déjà vu* experiences. However interesting, his own elaboration of this idea relies on heavy metaphysical assumptions about the nature and the functioning of the mind. Explaining why we do not endorse those assumptions and why we disagree with Bergson eventually would take us too far afield here.

awareness driven by familiarity and recollection” are involved in each of them (2005, p. 1363, see also Rajaram, 1993; Gardiner et al., 1998, 2002). By this they mean that the mere feeling of having already encountered a currently perceived item is the first-order feeling in type (i) experiences, and that the sensation of recollecting past encounters of the currently perceived item is the first-order feeling in type (ii) experiences.²⁰ A first argument for the distinction is thus phenomenological.

The same critics also reason that since *déjà* experiences are memory-related phenomena and since they exhibit diversity—as illustrated by reports (i) and (ii)—it is likely that the diversity of those experiences falls in line with the diversity of the forms of memory documented by the science of memory. As Moulin puts it: “if *déjà vu* is a glitch in the memory system, or any cognitive system, it should respect the delineated cognitive processes according to biologically real domains.” (2018, p. 43) Moreover—so goes the argument—*déjà* experiences bring into play recognition memory specifically, i.e., our ability to make decisions with regard to the “new/old” character of an encountered stimulus. Now neurocognitive psychology has taught us for decades that recognition memory exhibits two main forms, precisely familiarity-based and recollection-based recognition memory, with different areas activated in the temporal lobe, namely the parahippocampus and the hippocampus respectively (e.g., Aggleton & Brown, 1999)²¹. Drawing on these premises, proponents of two types of *déjà* experiences conclude that type (i) reports are about familiarity-based recognition memory, while type (ii) reports are about recollection-based recognition memory. Here is Moulin again: “The primary reasoning behind the existence of two forms of *déjà vu* was based on the logic that either familiarity or

²⁰ Let us note that the notion of a ‘sensation of recollection’ as it is used in the literature is pretty vague. We come back to this notion in section 4. The idea that recollective phenomenality instead of familiarity is involved in *déjà vécu* should suffice at this stage of our argument.

²¹ Note that whilst the existence of these two recognition-memory-decision-making processes is not in doubt in the literature, considerable debate exists about whether they are separable and independent, separable but sequential, or simply lie along a continuum and reflect one underlying process. Moreover, the extent to which they represent distinct networks in the temporal lobe is also in discussion. For reviews and empirical work representative of this issue, see Bastin et al., 2019; Dunn, 2004; Delay & Wixted, 2021; Moulin et al., 2013; Simons et al., 2022.

recollection can contribute to recognition memory—and hence both should probably contribute to false recognition or illusions of recognition.” (2018, p. 46) Overall, a second argument for the distinction thus appeals to the diversity of the neurocognitive forms of recognition memory documented by the science of memory.

On closer examination, however, the two arguments under consideration fall short of showing that the diversity of *déjà* experiences implies that different forms of recognition memory are brought into play and provide them with different first-order feelings. On the one hand, as Moulin observes, one can account for the aforementioned phenomenal difference in terms of various degrees of intensity of the feeling of familiarity: “*déjà-vu* and *déjà-vécu* lie on a continuum whereby strong feelings of familiarity lead to sensations of recollection and the retrieval of specifics.” (2018, p. 46) In other words, cases of *déjà* experiences that involve sensations of recollection can be explained in terms of a first-order feeling of familiarity whose intensity is such that it triggers sensations of recollection, and hence not in terms of a sensation of recollection as the first-order feeling. For instance, seeing a person in the street can trigger the recollection of past shared experiences precisely because this person feels very familiar. The involvement of recollection does not, therefore, preclude familiarity from being the first-order feeling, but quite the contrary.

On the other hand, the well-documented existence of different forms of recognition memory does not imply that it is mirrored in the diversity of *déjà* experiences. It is perfectly possible that while there are two main forms of recognition memory, all *déjà* experiences have as their first-order feeling a feeling provided by just one out of these two forms. In other words, however reasonable the demand that the diversity of *déjà* experiences be modelled on what the science of memory teaches us, it does not follow from this that this diversity is more than a variation of degrees and that *déjà* experiences bring into play more than one form of recognition memory. So, neither the argument from the phenomenology of *déjà* experiences nor the

argument from the distinct neurocognitive forms of recognition memory are likely to succeed. The following argument is intended to make a more efficient case for the distinction.

An argument from the representational content

As an initial step in our own argument for distinguishing between two types of déjà experiences, we observe that feelings, like many other mental states, very often have a representational content (Arango-Munoz, 2014; Matthen, 2010), and that their specific phenomenality depends on this content (Tye, 2002). A feeling represents a thing as being a certain way and feels the way it does due to the way it represents this thing as being.²² Arguably, a feeling of pain represents a certain part of the body as being damaged, for instance, or a feeling of fear represents something in the subject's environment as being a threat to the subject's integrity. Likewise, a feeling of familiarity represents an item as having already been encountered by the subject who experiences the feeling. Many theorists from neurocognitive psychology implicitly endorse such a representationalist stand. For instance, Whittlesea and Williams describe the feeling of familiarity as "the subjective feeling of having encountered a stimulus on some previous occasion" (1998, p. 142), and Gardiner and colleagues describe it as "a sense of previous encounters" with an item (2002, p. 84). Assuming representationalism about the feeling of familiarity, we contend that parsing more precisely the way such a feeling represents a subject's past reveals that for a number of déjà experiences, the feeling of familiarity is not the first-order feeling involved in them, which implies that they are distinct

²² Representationalism about feelings is controversial, obviously. Here we make the minimal claim that feelings have some relatively simple representational content and that their phenomenality is linked to this content. We do not claim that feelings can have any complex content, nor that their phenomenality is exhausted by their content.

experiences. If this is correct, then we must make room for a distinct, not familiarity-based type of *déjà* experiences.²³

Before going any further towards parsing the content of the feeling of familiarity, two remarks are in order. The first is about why we assign the content we do to the feeling of familiarity. In what follows we will ground our analysis of the representational contents of the feelings involved in *déjà vu* and *déjà vécu* experiences on the reports provided by subjects. We will thus adopt as our methodology a semantic ascent from the contents of reports to the contents of feelings and consider the content of reports as faithful to the content of the reported feelings. This could be discussed, obviously. But until better methodology is available, we will resort to this one. To practice the semantic ascent, we will need some notional tools.

This leads us to our second remark. We propose to distinguish between:

- an *item* encountered in an episode of experience, e.g., a person, an object, a piece of music, a place etc.
- an *episode of experience*, i.e., a moment of conscious existence in its globality, e.g., the encountering of X ph-ing an object at a certain location at a certain time with the sensory modalities in play to perceive that.

²³ One could object at this stage that the involvement of a first-order feeling distinct from a feeling of familiarity in a *déjà* experience is not sufficient to justify the distinction of a different *type* of *déjà* experience. We reply that given that the first-order feeling is key to the phenomenality of such experiences, which is in turn part of the defining psychological criterion of the latter (section 2), it seems reasonable to say that a feeling of a category different from a feeling of familiarity yields a *déjà* experience of a category different from a familiarity-involving *déjà* experience. This is what we intend to capture as we speak about different *types*. One could also object that other, maybe more relevant parameters can justify the distinction between different types of *déjà* experiences. For instance, if *déjà vu* and *déjà vécu* involve a feeling of familiarity alike but are subserved by different neural networks and mechanisms, this difference seems sufficient to justify speaking about two types of *déjà* experiences. To this concern, we reply first that due to the fact that *déjà* experiences are experiences, if the phenomenality of two of them are different, this gives a strong reason to say they belong in distinct types. Second, the claim that different types of neural networks and mechanisms underlie *déjà vu* and *déjà vécu* respectively is still a matter of debate in the empirical literature. Of course, familiarity and recollection are different in this respect. But there is a serious lack of evidence as it comes to *déjà vu* and *déjà vécu*. Thus, a neural network and mechanisms criterion is still missing.

- an *occurrence* of an episode of experience, i.e., the instantiation of an episode of experience, assuming that it is conceivable that an episode has different instantiations.²⁴

Let's apply these notions to the feeling of familiarity as it is reported in example (i) above, and unpack the way in which it represents the subject's past. As one encounters an item which feels familiar to them:

- one is conscious that one has encountered the currently perceived item (e.g., a person) on a (possibly multiple) past episode(s) of experience that is (are) distinct from the present one—call this the *plurality feature*.
- one is conscious that there has (or have) been a previous episode(s) of experience of the currently perceived item, but one is not conscious of any specific particular such episode in a direct way (e.g., 'where' one has met a person in the past is undetermined)—call this the *generality feature*.²⁵
- one is conscious that the item is identical with an item perceived in the past (e.g., one is conscious of seeing the same person as the one they have already seen in the past)—call this the *item-identity feature*.

As a result, the way a feeling of familiarity represents a subject's past is given by:

(FRP) A currently perceived item *i* feels to S as something of which there has (have) been a previous episode(s) of experience in S's personal past distinct from the current one on which S has encountered this very same item *i*.

²⁴ We say more on this notion of instantiation below, same section.

²⁵ *Generality* is the logical notion here. It refers to thoughts involving quantified variables, by contrast with thoughts that involve individual constants, or so-called singular thoughts. Specifically, type (i) reports involve existential quantification.

(FRP) is a necessary component of the feeling of familiarity. By straightforward implication, if a feeling—in particular, the first-order feeling of a déjà experience—does not have (FRP) as its content, then it cannot be a feeling of familiarity. Now, the reports found in the empirical literature strongly suggest that in a number of déjà experiences, the first-order feeling does not have (FRP) as its content. Consider type (ii) reports now, such as the following: “I just had this strong feeling that I had been through the very same thing before.”, or: “it felt like that situation had happened once before and I was for an instant re-living it.”²⁶ plausible way of unpacking the representation of the subject’s past by the feeling of reliving involved in such experiences is as follows: when one undergoes a certain episode of experience which feels like an episode one has already lived before:

- one is conscious that the ongoing episode of experience is one particular (instead of plural) episode of which one has lived other (possibly multiple) occurrences in the past—call this the *particularity feature*.
- one is conscious in a direct (instead of general) way that one has lived other occurrences of *this* particular ongoing episode—call this the *singularity feature*.
- one is conscious that the ongoing episode of experience is identical with an episode one has lived in one’s personal past—call this the *episode-identity feature*.

Based on this characterization, we have the following description of how a feeling of reliving represents a subject’s past:²⁷

²⁶ Moulin, unpublished data.

²⁷ With a view to distinguishing RRP from the characteristic feeling of episodic recollection, one could introduce RRP’s that applies to mentally represented episodes of experience and involve only one occurrence of such an episode. As one is episodically recollecting an episode of experience, indeed, the occurrence of which one is conscious is represented as the very past occurrence to which one’s current mental state refers:

(RRP’) An internally represented episode of experience *e* feels to S such that the occurrence of *e* of which S is currently conscious is the very same (identical) as the occurrence of *e* in S’s past.

(RRP) An ongoing episode of experience *e* feels to S such that there has (have) been a previous occurrence(s) in S's past distinct from the current one, on which S has lived this very same episode *e*.

(RRP) differs from (FRP) in terms of the three criteria we have distinguished (plurality/particularity, generality/singularity, item-identity/episode-identity). This is sufficient, we claim, for the first-order feeling involved in the experiences just reported to *not* be a feeling of familiarity. Therefore, type (i) and type (ii) reports are reports of two distinct types of déjà experiences. We conclude that the familiarity-based account, and by implication the standard view, is mistaken.²⁸

The weirdness feature

So far, we have only alluded to a core phenomenal feature of déjà experiences, namely their weirdness feature.²⁹ Subjects very often report how “weird”, “uncanny”, or “unsettling” such experiences are. As we said above, déjà experiences are different from acknowledged false recognition (Case 1) in this respect. But how do they differ exactly? We propose two explanatory elements. First, in déjà experiences, the clashing evaluations are issued by one and the same cognitive system at the same time. By contrast, the (false) feeling of familiarity and the evaluation that it is false are issued by distinct subjects in Case 1. Therefore, déjà

²⁸ A potential objection at this stage is that some cases of déjà experience do not clearly belong in déjà vu or déjà vécu. For instance, as one arrives at a new place and undergoes a déjà experience, one could happen to have difficulty saying whether the place feels familiar to them or whether one has the feeling of reliving the episode of visiting the place. Our reply is that our distinction is about types of déjà experiences and that it does not exclude the possibility that some cases mingle both types.

²⁹ The first-order feelings of familiarity in déjà vu and reliving in déjà vécu, together with the weirdness features are the most often reported phenomenal features of déjà experiences. There are also other, much less often reported features, like precience, derealization or dissociation. For reasons of space and because these features are much less researched, we will not engage with them here.

experiences present a situation in which a cognitive system contradicts itself and is aware of this. Since arguably the weirdness feature stems from the clash of the two evaluations, that this clash involves self-contradiction can contribute to explain the weirdness feature. Second, the truth of the first-order feeling appears impossible due to the identity component of both (FRP) and (RRP), while there is no apparent impossibility that the falsely recognized word was in the initial list. Let's be more precise about this second element.

Consider *déjà vécu* experiences.³⁰ One might wonder whether the notion of 'identity' in (RRP) refers to *qualitative* or *numerical* identity. Do *déjà vécu* experiences involve the feeling that the same type of episode of experience is occurring (qualitative identity), or do they involve the feeling that the same token past episode of experience is occurring again (numerical identity)? Arguing for the first option, Price contends: "Listening to a conversation or seeing a street accident, one may have the feeling 'all this has happened before'. It is as if one had seen or heard it all already. Now, of course, numerically the same event cannot happen twice, nor does one feel as if it had." He then proceeds to conclude: "The sameness referred to in 'all this has happened before' is *sameness of quality*, not *numerical sameness*. What one feels is that one has experienced an event exactly like this before; and yet on reflection one is convinced that one cannot have done so." (1969, p. 81 our emphasis)³¹ One can question Price's argument concerning the impossibility of a token episode of experience to occur again. *Déjà vécu* experiences are not experiences of things that seem to be metaphysically possible, but quite the contrary. While in acknowledged false recognition the dismissed feeling of familiarity does not bear the mark of metaphysical impossibility, *déjà vécu* experiences come with a compelling

³⁰ The weirdness feature in *déjà vu* experiences is liable to the same impossibility-based account. E.g., that a monument feels familiar can seem weird because we have the correct bedrock belief that we *cannot* have ever seen it.

³¹ Thanks to [redacted for review] for pointing this excerpt out to us.

sense that their first-order feeling cannot be true. Arguably this can contribute to explaining why they exhibit the weirdness feature.

Price could object that these replies should not lead us to dismiss qualitative identity. After all, that exactly the same type of episode of experience occurs again has its own measure of *prima facie* metaphysical impossibility, which can be sufficient to endow a first-order feeling of recollection with weirdness. Granted, we say, and this suggests that the evaluation of impossibility from which the weirdness feature stems can have various sources. For instance, one can find it completely impossible to have visited a location in a remote part of Argentina. This might trigger in one a feeling of having already been there before because one has the bedrock belief that one has never left Europe. But one can also produce the same evaluation of impossibility because the reoccurrence of a numerically or a qualitatively identical episode of experience appears metaphysically impossible to her. (RRP) is intended to cover this variety, in particular both numerical and qualitative identity. Indeed, when we say that an occurrence is an ‘instantiation’ of an episode of experience, this is intended to possibly mean both a token- and a type-reoccurrence of the episode. Our conclusion, thus, is that numerical identity should not be dropped for the sake of metaphysical plausibility, since the metaphysical implausibility of the reoccurrence of one and the same episode of experience provides a smooth explanation of why déjà vécu experiences are experienced as weird. But this does not exclude other sources for weirdness, like qualitative identity.

Let us take stock. Drawing on the argument from the representational content, we have said that déjà vécu is a distinct, not-familiarity-based type of déjà experience. In the next section, we will critically discuss the only existing account of a distinct déjà vécu type in the literature. While we will agree with this account that déjà vécu experiences are recollection-based rather than familiarity-related, the way this idea is elaborated will be found problematic. We will

attempt to correct this situation by promoting a new recollection-based account of déjà vécu experiences.

4. The ability view of déjà-vécu

In this section a new account of the déjà vécu experience is introduced and vindicated. First, we discuss *the achievement view* according to which déjà vécu experiences involve an *actual*—hence the ‘achievement’ label—recollective state or some component thereof. Building on the flaws of the achievement view, we then proceed to promote *the ability view*, according to which the first-order feeling in déjà vécu experiences is the feeling one *could*—hence the ‘ability’ label—recollect other occurrences of the ongoing episode of experience.³² We also discuss some key phenomenological and epistemological implications of the ability view. In doing so, it will not be our goal to provide a comprehensive discussion of the relevant topics, but only to point out ways in which the ability view can contribute to some ongoing debates.

Rebutting the achievement view about déjà vécu

As noted above, though in the minority, some authors have argued for a distinct déjà vécu type of déjà experiences (Funkhouser, 1995; Moulin et al., 2005; O’Connor and Moulin, 2010; Illman et al., 2012). We interpret them as making two claims. First, déjà vécu is distinct from déjà vu to the extent that it is *recollection*-based instead of familiarity-based. Appealing to the aforementioned distinction between two forms of recognition memory, they claim that déjà vécu brings into play recollective processes. Their arguments include both reports by subjects

³² Since we distinguish and contrast an achievement view and an ability view about déjà vécu experiences, one might wonder whether the same options apply to déjà vu experiences, as an anonymous reviewer rightly points out. Despite the interest of this suggestion, in this paper we will remain neutral on this.

undergoing déjà vécu that describe sensations of reliving a past episode of experience similar to the sensations characteristic of episodic recollection, and neurocognitive observations that subjects suffering from persistent déjà-vécu exhibit a disrupted neural mechanism for recollection (O'Connor et al., 2010). Second, déjà-vécu is recollection-based to the effect that it involves an *actual* state of recollection or some component thereof. The proponents of a distinct déjà vécu type take it for granted, for instance, that such experiences involve occurring auto-noetic feelings of the type found in actual recollections. Though we endorse the first claim in line with our criticism of the familiarity-based account and to make room for the robustness of the empirical arguments used by the achievement view, we will rebut the second one.

More precisely, judging from the statements made by the proponents of a distinct déjà vécu, what they mean by “recollection” refers, conjunctively or disjunctively, to two components of an internal state of episodic recollection, namely the retrieved specifics of a past episode—the *content* of the memory—e.g. a bar, some people around, or the discussion that formed a conversation episode, and the auto-noetic mode of consciousness of remembering—the *phenomenology* of the memory—sometimes described as an experience of mental time travel (Tulving, 1985).³³ But on closer inspection, none of these components of recollection provide a promising building block for an account of déjà vécu.

Consider content. A first problem is that the specifics included in the content of a recollective state (e.g., the bar, some people around, or the discussion in our previous example) are not feelings. Yet the recollection-related distinctive feature of déjà vécu experiences is their first-order *feeling* of reliving an episode already lived in the past. Recollected content is thus an unpromising candidate to account for déjà vécu. Most importantly, if recollective content were present in déjà vécu experiences, we should expect that such experiences exhibit a certain

³³ O'Connor and Moulin mention both components when they say: “In this experience [déjà vécu], instead of a vague feeling of familiarity for some materials, the experient senses a more complete sensation of retrieval of the information, including *contextual details*, a *sense of mental time travel*, and the sensation that he or she knows what will happen next.” (2010, p. 3 our emphasis; see also O'Connor et al., 2010, p. 1-4)

duality of content. Subjects would be conscious at once of an external perceptual content and its internal recollective duplicate. But nothing in subjects' reports supports such a duality.³⁴ Subjects say that they experience the ongoing perceptual content as something they have already lived before, and not that they are conscious of their perceptual content plus its recollective duplicate. However, the proponent of the achievement view could reply that there is empirical evidence supporting the claim that, at least sometimes, *déjà vécu* experiences do involve actual recollective content. Such would be the case in pathological forms of *déjà vécu*, where the illusion of reliving a past episode of experience is very often accompanied by the retrieval of specifics of the past occurrence of the episode, the so-called *recollective confabulation* (Moulin, 2013; 2018).³⁵ Moulin notes that patients like AKP “were prone to spontaneously generate confabulated material to justify their feelings of repetition. Moreover, these justifications seemed to be ‘memory-like’ in their nature. As an example, AKP (Moulin et al., 2005) justified having read the newspaper before by telling his wife that he had got up before she was awake and had read the newspaper as it was unloaded at the newsagents, before returning back to bed.” (2018, p. 112) But this reply falls short, because although recollective confabulation involves actual recollection, this actual recollection comes *in addition to* the anosognosic feeling of having already lived the current episode of experience and as a justification of this feeling. It is thus no intrinsic part of it.

Consider phenomenology in turn. This seems to be the component of recollection favoured by the achievement view, since its proponents talk preferentially about a “sensation of recollection” or a “recollective experience” to characterize the contribution of recollection to

³⁴ Subjects sometimes report a certain duality in their *déjà vécu* experience, to be sure (see Bernard-Leroy, 1898, observation 50, n°32, p. 185-186). But it is a duality in the relation of the subject to her own experience, with the subject feeling herself split into a merely observing subject and an acting one, not the duality of content we have just evoked.

³⁵ “Recollective confabulation (RC) is encountered as a conviction that a present moment is a repetition of one experienced previously, combined with the retrieval of confabulated specifics to support that assertion.” (2013, p. 1)

déjà vécu.³⁶ We see two options here. On the one hand, it could be that such sensations of recollection are supposed to apply to recollective content. But we have just shown that it is unlikely that such content occurs in déjà experiences. Thus, if we are right, there is no recollective content to which sensations of recollection could apply. On the other hand, it could be that sensations of recollection are supposed to apply to the content of the ongoing perceptual experience of the subject who undergoes a déjà vécu experience. But suppose this is right. Subjects would become conscious of their ongoing perceptual episode of experience as a past episode they are reliving. For instance, they would become conscious of the bar where they stand and the people who surround them as parts of a past episode they are reliving, i.e., by mentally harking back to the past. Subjects would thus experience déjà vécu as a hyper-immersive recollective experience, i.e., just as if they were engaging in literal time travel. It is such a characterization that some proponents of the achievement view seem to endorse when they say that déjà-vécu “can be thought of as (...) *reproducing the present as if it is contextual information from the past.*” (Moulin, 2018, p. 47 our emphasis), or: “we hypothesize that the basis for déjà-vécu is *recollective experience of the present moment.*” (Moulin et al., 2005, p. 1364 our emphasis)³⁷ But a straightforward reply is, again, that subjective reports do not mention any such conflation of the current and perceptual character of their ongoing experience with a past and recollective one.

Taken together, these flaws tell strongly against the achievement view which, we claim, ultimately fails to provide a satisfactory account of how recollection is involved in déjà vécu experiences. As we will now say, this failure is due to the fact that the achievement view mistakenly assumes that if recollection is involved in déjà vécu experiences, it must be so as an *actual* mental state.

³⁶ Moulin talks about “feelings of mental time travel” (2018, p. 47) and Moulin and colleagues talk about “feeling of pastness” and “feeling of the self in the past” (2005, p. 1364).

³⁷ See also Bergson when he says: “It is a recollection of the present moment in that actual moment itself. (...) It is a *memory of the present moment.*” (1919, p. 167)

Introducing the ability view

Since, as we observed, there is no duality of content in déjà vécu experiences, we cannot become conscious of the past occurrence of the current episode of experience in the same way that we become conscious of the current occurrence, namely as a directly accessed and presented occurrence. But it is still the case that we are conscious of it, for should it not be so, the feeling of having already lived the current episode would hardly be possible. So, how is it that we are conscious of the past occurrence(s) in déjà vécu experiences?

Consider the following reports (our emphasis): “I experienced déjà-vu about two weeks ago when I was sitting with my mother. I somehow realised that I had experienced it but *I couldn't find out when it happened.*” “Having a déjà-vu *feels different from directly remembering something* – it feels more *like a vague recollection, a feeling that you know something.*” “I felt like the situation had happened before. *I tried to think of a time something similar could have happened.*”³⁸ A striking common feature of these reports is that they all gesture towards an unsuccessful attempt to remember something accompanied by the notion that there is something to be remembered. Drawing on what these reports suggest, we propose—contrary to the achievement view’s actuality assumption—that recollection is involved in déjà vécu experiences as a mental state subjects feel they *could* have but fail to have in the moment. If we are right, the recollection-related first-order feeling in déjà vécu is the feeling one *could* episodically remember (an)other past occurrence(s) of the ongoing episode of experience. We call this view *the ability view*.³⁹

³⁸ Moulin, unpublished data. Interestingly, Freud gestures towards the same idea as he describes déjà vécu experiences (see Freud, 1901, pp. 265-266)

³⁹ The suggested view has some antecedents in the recent empirical literature. O'Connor and colleagues observe that: “AKP, in justifying his decision that he had previously encountered a word earlier (in fact he had not been presented with the word) reported that he was certain he had seen the word earlier, but *could not remember* the study phase in which he had been presented with it.” (O'Connor et al., 2010 et al., p. 9 our emphasis). And at

The ability view has obvious conceptual virtues for it escapes the shortcomings that plague the achievement view. Indeed, building a feeling that one could recollect past occurrences of an episode of experience into *déjà vécu* provides, well, a *feeling*, just as required by the first-order tier of *déjà vécu* experiences. Moreover, it implies no duality of content since recollection is thereby not involved as an actual mental state. Last, the feeling in question can apply to the current perceptual content without implying pseudo-hallucination, since a perceptual content of which one feels they could recollect other occurrences of is not a perceptual content felt as recollected. Most importantly, the ability view has also empirical virtues. As a first empirical virtue, it falls neatly in line with the reports of *déjà vécu* experiences, both with the fact that subjects rarely mention actual states of recollection and with their claim that they feel that they could recollect past instances of the ongoing episode of experience despite their failure to do so in the moment. We have already dwelt on this virtue, however, so we will not say more about it. As a second chief empirical virtue, neurocognitive psychology happens to have documented the existence of a specific epistemic feeling whose content is precisely that one has the ability to episodically recollect a past moment of one's experience despite one's failure to do it in the moment. This is the so-called *episodic feeling of knowing* (EFOK, henceforth).

EFOK belongs in the family of metacognitive feelings of knowing.⁴⁰ A metacognitive evaluation is an evaluation of a cognitive achievement or a cognitive ability of a subject. For instance, one can evaluate as correct the result of a complex calculation one has mentally made because one knows one has already done many similar calculations during an intense training in mathematics and one is able to summon various rules that justify the result. While such evaluations can come under the form of an explicit, conceptually articulated, slow and

some point, Moulin says: "(...) sometimes with *déjà vu* we feel like we *may be able to retrieve* some specifics of the current 'repeated' situation." (Moulin, 2018, p. 45 our emphasis) But these fleeting suggestions have not been taken seriously so far.

⁴⁰ Note that most of empirical accounts consider nowadays that the first-order feeling in *déjà* experiences is metacognitive (O'Connor et al., 2021). We thus consider it as a virtue if our own account complies with this stand.

controlled process, as in the previous example, it can also come under the form of an implicit, largely non-conceptual, fast and automatic process, the upshot of which is a feeling (Koriat, 2007; Proust, 2007; Arango-Muñoz, 2011). After making the calculation, one can, for instance, simply feel confident about it due to having a metacognitive feeling of confidence. Similarly, feelings of knowing are metacognitive evaluations of some of a subject's cognitive abilities. For instance, when one feels one knows the answer to a geography question despite one's failure to provide the answer in the moment, one can experience an affective positive evaluation of one's cognitive ability relative to the question. More precisely, one has a semantic feeling of knowing because it evaluates a knowledge tapping into semantic memory. But feelings of knowing can also be *episodic* (Souchay et al., 2000, 2007, 2009; Schacter, 1983). For instance, in an EFOK experiment, subjects study cue-target word pairs before a cued-recall phase, during which they either recall the target when given the cue, or if recall fails, report their probability (an EFOK) that they *could* episodically recognise⁴¹ the cued words as they studied them in the initial list, in particular the ones for which they had provided no answer (Souchay et al., 2007). To sum up, the feeling of having the ability to episodically recollect past experiences despite failing to do so in the moment is a metacognitive feeling, and, critically, such a feeling is generally predictive of subsequent successful recognition.

Arguing for the ability view

⁴¹ The earlier and more basic explorations of the EFOK were neutral as to whether the EFOK was based on recollection or familiarity, and indeed, the final recognition test in the FOK paradigm can be solved by either recollection or familiarity, as is common in all standard recognition memory tests. Naturally, any feeling of familiarity with a cue word in this task is likely to be diagnostic, since it will be related to the trace strength of any paired item in memory, and indeed cue-familiarity accounts of the EFOK exist. However, it is also clear that the EFOK is also based on "... a variety of partial clues and activations, such as fragments of the target, semantic and episodic attributes, and so on." (Koriat & Levy-Sadot, 2001). More specifically, several authors have found an empirical relationship between the quality of the EFOK during unsuccessful retrieval and the amount of recollection (measured as the subjective experience of remembering) at test (Souchay et al., 2007; Hicks & Marsh, 2002).

In essence, our proposal is that the episodic feeling of knowing forms the first-order feeling of déjà vécu experiences.⁴² When one feels one has the ability to recollect other occurrences of one's current episode of experience, but one cannot perform a mental act that is in conformity with one's having this ability (EFOK), one's current episode is experienced as an episode one has already lived (déjà vécu). By positing an EFOK as the first-order feeling in déjà vécu, the ability view implies that (RRP) is part of the content of this feeling as desired. For when one feels one could recollect a past occurrence of an episode of experience *e*, by straightforward implication one feels that there has (have) been previous occurrence(s) in S's past on which S has lived this very same (identical) episode *e*. If there was not apparently such an occurrence, in other words, there would be nothing one could have the feeling of being able to recollect. Thus, if our proposal is right, the feeling of possessing the ability to recollect other occurrences of the episode is the basis of the feeling of the recurrence and the reliving of this episode, which in turn is the first-order tier of a déjà vécu experience. But there is a difficulty at this stage.

As an opponent of the ability view could point out, while an EFOK implies (RRP), the converse is not true. (RRP) can be the way a déjà vécu experience represents the subject's past while the subject does not feel she could—or even feels she could not—recollect past occurrences of her ongoing episode of experience at any point. In other words, one can believe there has (have) been past occurrence(s) of one's ongoing episode of experience *e* while not feeling that one has retained any episodic memory of *e*. Three replies can be offered in response to this concern, we think. First, like we saw, at least some reports are explicit about the experience involving a feeling that one has the ability to recollect (e.g. “it feels more *like a*

⁴² It should be emphasized that the notion of EFOK captures first and foremost an experimental construct, that is a subjective experience produced and observed within a specific experimental setup. So, for the psychologists who use this notion, it is an open question whether EFOKs are also ecological realities (Souchay, p.c.). The ability view, if it is correct, provides a reason to think they are, since it claims that the ecological experience of déjà-vécu involves just such EFOKs.

vague recollection, a feeling that you know something”). Second, EFOK is an episodic-recollection-related metacognitive feeling that is experimentally captured and documented. Therefore, it satisfies important criteria that any candidate to the status of the first-order feeling of déjà vécu experience must meet. Moreover, given EFOK implies (RRP), it has explanatory power. This suggests an EFOK-based account as a serious contender. Third, it is worth noting that episodic recollection is one of our privileged means to decide whether a certain episode of experience has occurred in the past. For instance, if one wishes to know whether one of their colleagues has given a talk in a conference, one is likely to rack one’s memory to get the answer. Thus, our consciousness of past episodes of experience is intimately intertwined with our ability to recollect such episodes. In sum, it should come as no surprise that the feeling of recurrence in déjà vécu is based on the feeling of an ability to recollect.

To summarize, a déjà vécu experience consists of a first-order EFOK instead of a feeling of familiarity, and this EFOK is rightly experienced as erroneous due to the fact that it is assessed as impossible that the ongoing episode of experience be identical with a past one. So is our final proposal.

Phenomenological and epistemic implications of the ability view

Beyond its conceptual and empirical virtues, the ability view has also interesting implications for the study of memory more broadly considered. We consider some of those implications below. As we mentioned before, our goal here is not to provide a comprehensive discussion of the relevant topics, but only to point out ways in which the ability view can contribute to some ongoing debates.

A first implication we consider is phenomenological in nature and has already been alluded to when we discussed the achievement view. Recently, mnemonic phenomenology has

garnered the attention of both psychologists (Tulving, 1985; Gardiner, 2001; O'Connor et al., 2008; Klein, 2015) and philosophers (Dokic, 2014; Fernández, 2019; Perrin et al., 2020; Rosen and Barkasi, 2021; Perrin and Sant'Anna, 2022). In addition to the central question of the phenomenology of episodic recollection, it also raises the question of how many types of memory-related experiences there are. Now, as we said, *déjà vécu* experiences are memory-related experiences. This raises the question of *which* type of memory-related experiences they are. On the achievement view, they consist of experiences of current episodes of experience as the end-term of an apparently literal time travel. Like we said, some propose to account for *déjà vécu* as an apparent recollection of the present (Bergson, 1919; Moulin et al., 2005). But if the ability view is correct, *déjà vécu* does not involve the feeling of an apparently literal time travel into the present, it involves the feeling of a potential mental time travel into the past. Thus, the varieties of memory-related experiences do not include the experience of episodically remembering the present.

The ability view has also interesting epistemic implications. Recently, the topic of memory errors has garnered the attention of philosophers of memory (for an overview, see Michaelian, 2021). The resulting debate has tackled the issue of how to define and categorize memory errors. Now, as we said in section 2, *déjà vécu* experiences, understood as *déjà* experiences more generally, are memory errors in the sense that their first-order feeling is erroneous, which has led us to build the epistemic criterion into their definition. This raises the question of whether they consist in a distinct family of errors that have not been identified by existing classifications. We think that they do, and that this requires expanding the memory error debate in two different directions, both of which have been neglected thus far.

First, only erroneous actual states of recollection are considered in the debate as it stands. But since, on the ability view, they involve an erroneous EFOK, *déjà vécu* experiences involve the mistaken character of an *apparently potential* recollection. Given the erroneous character

of the EFOK, the recollection that the subject feels as having the ability to carry out is thus inaccurate and/or due to an unreliable memory system. In line with the epistemic criterion, a potential recollection could have these features. Thus, *déjà vécu* experiences suggest an extension of the debate with regard to modality, namely that it is important to take into account that we can have right or wrong *apparently potential* memories. Second, and most importantly, only two levels in memory states have been considered so far. Interestingly, Michaelian (2020) has proposed to add a metacognitive level to the object-level of a memory, with both these levels being possibly (in)accurate and (un)reliable. For instance, when one accurately relearns an episode from one's own past from someone else, forgets the source of one's resulting knowledge, and has the impression of remembering the event because of one's own past experience, one's memory can be reliable and accurate at the object level, while being reliable but inaccurate at the metacognitive level. In this case, the subject is mistaken about the source to which she attributes her memory, while everything is in order at the object level of her memory.⁴³ But on the ability view, *déjà vécu* experiences involve more than two levels. In addition to the object-level of the potential recollection and the metacognitive level of the EFOK, the meta-metacognitive level of the evaluation of the EFOK as inappropriate is required, with *meta-metacognition* referring to the capacity of a cognitive system to evaluate its own metacognitive achievements and abilities.⁴⁴ For instance, to distinguish between cases of false recognition and of acknowledged false recognition (Case 1 above), one needs to distinguish between a reliable but inaccurate meta-metacognitive evaluation and a reliable and accurate meta-metacognitive evaluation, with the metacognitive level being reliable and inaccurate in both cases. More to the point, compare now the anosognosic case of AKP (Case 3 above) with the case of someone having a genuine *déjà vécu*. If our account is correct, both

⁴³ Michaelian, 2021, p. 17

⁴⁴ For more about meta-metacognition, see Dunlosky et al., 2005; Buratti and Allwood, 2012, 2013.

subjects entertain an erroneous EFOK, with possibly the metacognitive level being in both cases inaccurate and unreliable. But the two subjects clearly differ when it comes to their evaluations of the first level of their respective states, namely the meta-metacognitive evaluations. AKP issues an inaccurate evaluation due to an unreliable system, while the subject having a genuine *déjà vécu* issues an accurate meta-metacognitive evaluation due to a reliable system. To contrast the two cases under consideration, therefore, one needs to make room for the possibility of meta-metacognitive errors. Thus, *déjà vécu* experiences require also an extension of the debate with regard to the number of levels in which errors can occur. And more generally, we conclude, *déjà vécu* experiences consist in a whole family of memory errors still to be explored.

5. Conclusion

In this paper, first we have shown that despite the standard view's claim to the contrary, *déjà* experiences cannot be defined simply as familiarity-based experiences. On the one hand, we have argued that appealing exclusively to a psychological criterion is mistaken and that an epistemic criterion is also required. On the other hand, we have argued that appealing exclusively to the feeling of familiarity as the first-order feeling of *déjà* experiences is mistaken and that there are good reasons to distinguish between two types of *déjà* experiences, the so-called *déjà vu* and *déjà vécu* experiences. Second, we have shown that however correct are the advocates of a distinct *déjà vécu* type, both their arguments for, and their elaboration of this claim in the terms of the achievement view raises serious concerns and should be resisted. Alternatively, conceptualizing recollection in *déjà vécu* as a potential recollection one feels one could carry out gets around the difficulties that plague the achievement view. It also receives strong empirical support from the fact that it can build the empirically well-documented

episodic feeling of knowing into déjà vécu as their first-order feeling and predict thereby much more faithfully what subjective reports say.

References

Aggleton, J. P., & Brown, M. W. (1999). Episodic memory, amnesia and the hippocampal-anterior thalamic axis. *Behavioral and Brain Sciences*, 22, 425–498.

Arango-Munoz, S. (2011). Two levels of metacognition. *Philosophia*, 39(1), 71-82.

Arango-Munoz, S. (2014). The nature of epistemic feelings. *Philosophical Psychology*, 27(2), 187-211.

Bastin, C., Besson, G., Simon, J., Delhay, E., Geurten, M., Willems, S., Salmon, E. (2019). An integrative memory model of recollection and familiarity to understand memory deficits. *Behavioral and Brain Sciences*, 42, 281: 1–60. doi:10.1017/S0140525X19000621

Bergson, H. (1919). Le souvenir du present et la fausse reconnaissance (1908). In H. Bergson, *L'énergie spirituelle. Essais et conférences*. Félix Alcan.

Bernard-Leroy, E. (1898). *L'illusion de la fausse reconnaissance*. Félix Alcan.

Bortolotti, L. (2010). *Delusions and Other Irrational Beliefs*. Oxford University Press.

Brázdil, M., Mareček, R., Urbanek, T., Kašparek, T., Mikl, M., Rektor, I., & Zeman, A.

(2012). Unveiling the mystery of déjà vu: The structural anatomy of déjà vu. *Cortex*, 48, 1240–1243.

Brown, A. S. (2003). A review of the Déjà Vu Experience. *Psychological Bulletin*, 129(3), 394-413.

Brown, A. S. (2004). *The déjà vu experience*. Psychology Press.

Buratti, S. and Allwood, C. M. (2012). The accuracy of meta-metacognitive judgments: regulating the realism of confidence. *Cognitive Processes*, 13: 243-253.

Buratti, S. and Allwood, C. M., and Kleintman, S. (2013). First- and second-order metacognitive judgments of semantic memory reports: The influence of personality traits and cognitive styles. *Metacognition Learning*, 8: 79-102.

Delay, C. G., & Wixted, J. T. (2021). Discrete-state versus continuous models of the confidence-accuracy relationship in recognition memory. *Psychonomic Bulletin & Review*, 28(2), 556-56.

De Sousa, R. (2009). Epistemic feelings. *Mind & Matter*, 7(2), 139-161.

Dokic, J. (2014). Feeling the past: A two-tiered account of episodic memory. *Review of Philosophy and Psychology*, 5(3), 413-426.

Dunlosky, J., Serra, M. J., Matvey, G. & Rawson, K. A. (2005) Second-Order Judgments About Judgments of Learning. *The Journal of General Psychology*, 132:4, 335-346.

Dunn, J. C. (2004). Remember–Know: A Matter of Confidence. *Psychological Review*, 111(2), 524-542.

Fernández, J. (2019). *Memory: A self-referential account*. Oxford University Press.

Fortier, J., & Moulin, C. J. A. (2015). What’s French for déjà vu? Descriptions of déjà vu in native French and English speakers. *Consciousness and Cognition*, 36, 12– 18.

Freud, S. (1960). The Psychopathology of Everyday Life (1901). In S. Freud, *Complete Psychological Works*, standard ed., vol 6. Hogarth Press.

Funkhouser, A. (1995). Three Types of Déjà vu,” *Mental Science Network*, vol. 57,20–22.

Gardiner, J. M., Ramponi, C., & Richardson-Klavehn, A. (1998). Experiences of Remembering, Knowing, and Guessing. *Consciousness and Cognition*, 7, 1-26.

Gardiner, J. M. (2001). Episodic Memory and Autonoetic Consciousness: A First-Person Approach. *Philosophical Transactions: Biological Sciences*, 356:1413, 1351-1361.

Gardiner, J. M., Ramponi, C., & Richardson-Klavehn, A. (2002). Recognition memory and decision processes: A meta-analysis of remember, know, and guess responses. *Memory*, 10:2, 83-98.

Gardiner, J. M., Ramponi, C. and Richardson-Klavehn, A. (2002). Recognition memory and decision processes: A meta-analysis of remember, know, and guess responses. *Memory*, 10:2, 83-98.

Gerrans, P. (2014). Pathologies of hyperfamiliarity in dreams, delusions and déjà vu. *Frontiers in Psychology*, 5:97, 1-10.

Hicks, J. L., & Marsh, R. L. (2002). On predicting the future states of awareness for recognition of unrecallable items. *Memory & Cognition*, 30(1), 60-66.

Illman, N. A. (2012). *Recognition memory impairments in temporal lobe epilepsy: The contribution of recollection and metacognition*. PhD thesis, University of Leeds.

Illman, N. A., Butler, C. R., Souchay, C., & Moulin, C. J. A. (2012). Déjà experiences in temporal lobe epilepsy. *Epilepsy Research and Treatment*, Article ID 539567.

Klein, S. (2015). Autonoetic consciousness: Reconsidering the role of episodic memory in future-oriented self-projection. *The Quarterly Journal of Experimental Psychology*, 69(2), 381-401.

Koriat, A., & Levy-Sadot, R. (2001). The combined contributions of the cue- familiarity and accessibility heuristics to feelings- of- knowing. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 27, 34– 53.

Koriat, A. (2007). Metacognition and consciousness. In P. D. Zelazo, M. Moscovitch, &

E. Thompson (Eds.), *The Cambridge handbook of consciousness*. Cambridge University Press.

Mandler, G. (2008). Familiarity breeds attempts. *Perspectives on Psychological Science*, 3, 390–399.

Martin, C. B., Mirsattari, S. M., Pruessner, J. C., Pietrantonio, S., Burneo, J. G., Hayman-Abello, B., & Köhler, S. (2012). Déjà vu in unilateral temporal- lobe epilepsy is associated with selective familiarity impairments on experimental tasks of recognition memory. *Neuropsychologia*, 50, 2981–2991.

Matthen, M. (2010). Two Visual Systems and the Feeling of Presence. In Gangopadhyay, N., Madary, M., and Spicer, F. (Eds.). *Perception, Action, and Consciousness: Sensorimotor Dynamics and Two Visual Systems*, Oxford University Press.

Micali, S. (2018). The Anticipation of the Present: Phenomenology of déjà vu. *Journal of the British Society for Phenomenology*, 49:2, 156-170.

Michaelian, K. (2020). Confabulating as unreliable imagining: In Defence of the simulationist account of unsuccessful remembering. *Topoi*, 39(1), 133–148.

Michaelian, K. (2021). Imagining the past reliably and unreliably: towards a virtue theory of memory. *Synthese*, 2021, 1-31.

Moulin, C. J. A., Conway, M. A., Thompson, R. G., James, N., & Jones, R. W. (2005).

Disordered memory awareness: Recollective confabulation in two cases of persistent déjà vécu. *Neuropsychologia*, 43, 1362– 1378.

Moulin, C. J. A., Souchay, C., & Morris, R. G. (2013). The cognitive neuropsychology of recollection. *Cortex*, 9, 1445– 1451.

Moulin, C. J. A. (2013). Disordered recognition memory: Recollective confabulation. *Cortex*, 49, 1541– 1552.

Moulin, C. (2018). *The Cognitive Neuropsychology of Déjà Vu*. Routledge.

Neppe, V. M. (1983). *The psychology of déjà vu: have I been here before?*

Witwatersrand University Press.

O'Connor, A. R., & Moulin, C. J. A. (2006). Normal patterns of déjà experience in a healthy, blind male: Challenging optical pathway delay theory. *Brain and Cognition*, 62, 246– 249.

O'Connor, A. R., Barnier, A. J., & Cox, R. E. (2008). Déjà vu in the laboratory: A behavioral and experiential comparison of posthypnotic amnesia and posthypnotic familiarity. *International Journal of Clinical and Experimental Hypnosis*, 56, 425– 450.

O'Connor, A. R., Lever, C., & Moulin, C. J. A. (2010). Novel insights into false recollection: A model of déjà vécu. *Cognitive Neuropsychiatry*, 15, 118– 144.

O'Connor, A. R., Wells, C. & Moulin, C. J. (2021). Déjà vu and other dissociative states in memory. *Memory*, 29:7, 835-842.

Perrin, D., Michaelian, K., & Sant'Anna, A. (2020). The Phenomenology of Episodic Remembering is an Epistemic Feeling. *Frontiers in Psychology*.
<http://doi.org/10.3389/fpsyg.2020.01531>

Perrin, D., & Sant'Anna, A. (2022). Episodic memory and the feeling of pastness: From intentionalism to metacognition. *Synthese*. Advance online publication,
<https://doi.org/10.1007/s11229-022-03567-4>

Price, H. H. (1969). *Thinking and Experience*. Hutchinson & Co Publishers Ltd.

Proust, J. (2007). Metacognition and metarepresentation: Is a self-directed theory of mind a precondition for metacognition? *Synthese*, 159(2), 271-295.

Rajaram, S. (1993). Remembering and knowing: Two means of access to the personal past. *Memory & Cognition*. 21 (1), 89-102.

Roediger, H. L., III, & McDermott, K. B. (1995). Creating false memories: Remembering words not presented on lists. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 21, 803– 814.

Rosen, M. G. & Barkasi, M. (2021). What makes a mental state feel like a memory: feelings of pastness and presence. *Estudios de Filosofía*, 64, 95-122.

Schacter D. L. (1983). Feeling of knowing in episodic memory. *J Exp Psychol Learn Mem Cogn* 9: 39-54.

Simons, J.S. Ritchey, M. & Fernyhough, C. (2022). Brain Mechanisms Underlying the Subjective Experience of Remembering. *Annual Review of Psychology*, 73.

Sno, H. N., Schalken, H. F. A., de Jonghe, F., & Koeter, M. W. J. (1994). The inventory for déjà vu experiences assessment. *The Journal of Nervous and Mental Disease*, 182, 27– 33.

Souchay, C., Isingrini, M., & Espagnet, L. (2000). Aging, episodic memory feeling- of knowing, and frontal functioning. *Neuropsychology*, 14, 299– 309.

Souchay, C., Moulin, C. J. A., Clarys, D., Taconnat, L., & Isingrini, M. (2007). Diminished episodic memory awareness in older adults: Evidence from feeling of knowing and recollection. *Consciousness and Cognition*, 16, 769– 784.

Souchay, C., & Moulin, C. J. A. (2009). Memory and consciousness in Alzheimer's disease. *Current Alzheimer Research*, 6, 186– 195.

Tulving, E. (1985). Memory and consciousness. *Canadian Psychologist*, 26, 1– 12.

Tye, M. (2002). Representationalism and the Transparency of Experience. *Noûs*, 36:1, 137-151.

Whittlesea, B. W. A. and Williams, Lisa D. (1998). Why do strangers feel familiar, but friend don't? A discrepancy-attribution account of feelings of familiarity. *Acta Psychologica*, 98, 141-165.

Yonelinas, A. P. (2002). The nature of recollection and familiarity: A review of 30 years of research. *Journal of Memory and Language*, 46, 441– 517.